

## Private pharmacies in an integrated approach to HIV/AIDS services

João L Carapinha

The South African National AIDS Council emphasises that success in tackling HIV/AIDS depends on leadership at every level of society, as well as mobilisation and co-operation in all sectors including government, health care workers and civil society (SANAC, 2006). This may be an acknowledgement that South Africa's response to HIV/AIDS has been inadequate to effectively control the epidemic. It points to insufficient dialogue between the government and the private sector, and among health care workers in general. In particular, there has been inadequate attention given to the importance of private pharmacies in an integrated approach to HIV/AIDS services.

In 2006, Member States of the United Nations (which include South Africa) completed a political declaration on HIV/AIDS. In it the commitment was made that efforts would continue to scale-up nationally driven, sustainable and comprehensive responses to achieve broad multisectoral coverage of HIV/ AIDS services (UNAIDS, 2006). The Brazzaville Commitment concluded by African states also calls for innovative ways to mobilise resources for AIDS. These processes depend on building an integrated approach, with the involvement of HIVpositive people, civil society and the private sector. There is therefore a need to investigate the role of private pharmacies in the delivery of HIV/AIDS services. This paper explores this need with the aim of building an integrated approach to meet the challenge of providing HIV and AIDS prevention, care and treatment services.

# The state of the epidemic

In 2007, sub-Saharan Africa contributed 68% of the global burden of adults and children estimated to be living with HIV (Table 1), as well as 68% of the global new infections in children and adults; and 76% of the global total of AIDS deaths (UNAIDS, 2007a). The higher rates of deaths in sub-Saharan Africa compared with the burden of people living with HIV,

and the numbers of new infections suggest that people living with HIV in sub-Saharan Africa live shorter lives compared with those in other regions. In contrast, Western and Central Europe's contribution to the global estimate of adults and children living with HIV is 2.3%, together with 1.2% of all new HIV infections, and 0.6% of the estimated global total of AIDS deaths (UNAIDS, 2007b). These results suggest that people living with HIV in Western and Central Europe live longer, which is comparable with the profile for Latin America. This is mostly due to the provision of antiretrovirals.

South Africa has approximately 5.4 million HIV-positive people, approximately 600 000 of whom are sick with AIDS. In addition, in 2005, 30% of all pregnant women attending public antenatal clinics were HIV positive (Department of Health, 2006a; Dorrington, Johnson, Bradshaw & Daniel, 2006). HIV/ AIDS services are provided at voluntary counselling and testing (VCT) centres distributed throughout the country. The 4 172 VCT centres offer services that include pre-test counselling, testing, post-test counselling, and some provide antiretroviral drugs. During the 2005/2006 financial year over 1.7 million people used these VCT centres. Between April 2005 and March 2006 1.7 million people received pre-test counselling, 1.3 million of whom underwent HIV testing. Approximately 480 000 (37%) of those tested were HIV positive (National Ministry of Health, 2006).

In December 2006 some 2 million people living with HIV were receiving antiretroviral therapy (ART) (World Health Organization, 2007). In sub-Saharan Africa, 1.34 million people are receiving ART, but still the region contributes 68% to the global total of unmet treatment needs. In 2004 the South African government implemented a strategy to provide ART to HIVpositive patients. This was an additional service to complement the current services provided by the national network of VCT centres. By the end of 2006, there were approximately 1 million

ı	Table 1. Regional comparison of HIV/AI	nparison of HIV/AIDS burden of disease (UNAIDS, 2007b)				
		Sub-Saharan Africa	Latin America	Western and Centra		
	Contribution of global burden of adults and children					

Contribution of global burden of adults and children estimated to be living with HIV	68%	4.8%	2.3%		
Contribution of global new infections in children and					
adults	68%	4%	1.2%		
Contribution of global total of AIDS deaths	76%	2.8%	0.6%		

João Carapinha (BPharm, MM P&DM) is the owner of PharmaLogica, a consulting company active in South Africa and the USA. Its aim is to respond with effective and innovative insight to the needs of the pharmaceutical sector in developing countries. PharmaLogica has worked for non-profit institutions, government agencies and also consulted on a project basis for pharmaceutical companies. This research was self initiated by the author and funded by PharmaLogica.

Correspondence to: info@pharmalogica.net

Journal of Social Aspects of HIV/AIDS

206

al Europe







patients who needed ART, approximately 355 000 of whom were receiving therapy (WHO, 2007).

There are only 273 accredited facilities for the provision of ART in the public sector (SAPC, 2006). It is estimated that by 2010, 117 000 deaths per annum could be avoided if ART is successfully provided (Dorrington, et. al., 2006). There is a need to further resource and expand the current network. Whether the current network can be rapidly expanded to meet the growing demand for HIV services is dependent on political will and efficient government administrative processes. There are alternative methods of meeting the demand; one of which includes leveraging the current infrastructure of services available in the private pharmacies.

# Advocating for an integrated approach

#### From task-shifting to task-sharing

National governments should investigate the removal of legal, regulatory or other barriers that prevent access to effective HIV/AIDS services (UNAIDS, 2006). The effects of the legal barriers are further aggravated by shortages of health care workers. Sub-Saharan Africa faces the greatest challenge in this regard. The region has 11% of the world population, 24% of the global burden of disease, yet it has only 3% of the world's health care workers (WHO, 2006a). The crisis is associated with the recruitment, distribution and attrition of health care workers.

Alternative and simplified models must be found that rapidly expand the number of available healthcare workers to fight HIV/AIDS. The UNAIDS reports that policy changes and new alternative delivery models are required to strengthen and protect the available pool of health care workers. The proposed solution involves 'task-shifting' that aims to move appropriate tasks to less specialised workers (WHO, 2006a). Task-shifting involves an interdisciplinary, integrated approach for the provision of HIV/AIDS services. When doctors are in short supply there is no need for a trained doctor to handle the prescribing and dispensing of ART when this could be done by nurses. However, the concept of task-shifting overlooks other well-equipped health care workers, such as pharmacists, who can assist with the management of HIV/AIDS. Unfortunately, the concept of task-shifting has been narrowly defined to refer only to the need to integrate less skilled health care workers. Rather, the concept should be opened to espouse a new approach of task-sharing one that encourages the optimum use of all available health care workers for the management of HIV/AIDS. The integration of pharmacists would be a decisive step in the direction of sharing tasks in an integrated way to tackle the epidemic.

## **Public-private partnerships**

In South Africa there are 2 718 private community pharmacies in comparison to 552 in the public sector (Serfontein, Lubbe, Basson, John & Adsetts, 2006). The private sector comprises of 4 483 community pharmacists in comparison to the 1 561 pharmacists employed in the public sector (Department of Health, 2006b; SAPC, 2006). Thus the private sector is better resourced than the public sector.

The biggest obstacle to treatment is the frailty of the health care system. The state of the physical infrastructure, procurement and supply systems, human resources, laboratory capacity, financial management, and systems designed to support the provision of HIV/AIDS services, requires sustained political will to improve the access to HIV/AIDS services (De Cock, 2006). To alleviate the constraints of delivering HIV/AIDS services in the public sector, a partnership with the private sector is advocated. A partnership of such a nature requires some creativity and a balancing of conflicting interests. The superseding imperative of the partnership necessitates commitment to a goal through the joint provision of complementary resources and expertise, and joint sharing of the risks involved in providing HIV/AIDS services (Ridley, 2001). It also requires that the parties in a partnership develop a mindset of collective action as opposed to isolated initiatives.

Strategies for creating a partnership between the public and private sectors have been suggested. One includes government contracting with private providers to offer health services, and encouraging greater competition among providers (Palmer, Mills, Wadee, Gilson & Schneider, 2002). Such contracts would leverage additional resources and capacity in the private sector for delivering HIV/AIDS services. For instance, if 20% of private pharmacies entered into an agreement with the government to offer HIV/AIDS services, an additional 544 pharmacies would be formally integrated into the network of VCT centres and facilities available for the distribution of ART. This would conservatively increase the number of available VCT centres from 4 172 to 4 716, and triple the number of ART facilities from 273 to 817. This is an example of a strategy that has not been implemented by the private and public sector.

#### HIV/AIDS resource centres in pharmacies

The South African Pharmacy Council (SAPC) adopted a strategic plan on the role of pharmacists in the management of HIV/AIDS, TB and sexually transmitted infections (STIs) (SAPC, 2001). The strategic plan was structured in terms of four focus areas: (i) prevention; (ii) treatment, care and support; (iii) human and legal rights; and (iv) monitoring, research and surveillance. The SAPC decided that criteria would be









developed for services to be offered in HIV/AIDS resource centres in pharmacies (SAPC, 2002). The purpose of the criteria was to provide the pharmacy profession with clear expectations for establishing HIV/AIDS resource centres. The criteria permit the provision of preventive services, and treatment, care and support services (SAPC, 2004). Prevention services include the management and control of STI, provision of ART and post-exposure prophylaxis, and HIV testing and counselling. Minimum standards for the performance of HIV tests were also published in the Good Pharmacy Practice Guidelines. They include minimum standards for physical facilities and equipment, patient confidentiality, counselling, testing, documentation and record keeping, and ethical considerations in HIV/AIDS resource centres (SAPC, 2004).

However, before pharmacists provide HIV/AIDS services, they must prove their competency by completing an approved course with an accredited education and training provider. The objective is to ensure that all pharmacists who provide HIV/AIDS services are knowledgeable, confident, and experienced. Education and training providers have structured their courses to comprehensively cover the pathophysiology and epidemiology of HIV, standardised treatment options, nutrition advice, legal and ethical considerations, pre-test and post-test counselling, and HIV testing procedures. Pharmacists who undertook to complete the course were found to have varying knowledge of HIV/AIDS, and most were unfamiliar with the complexities of antiretroviral therapy – an experience also evident among Canadian pharmacists (Cockerill, Myers, Northington, Millson & Rankin, 1996).

The SAPC recommends that the National Department of Health recognise HIV/AIDS resource centres in pharmacies (SAPC, 2002). To date this recognition has not been provided, nor is it clear what form of recognition is intended with this recommendation. If a formal recognition of HIV/AIDS resource centres in pharmacies were provided, the current network of government HIV/AIDS service centres would be supplemented with private pharmacies. The expansion of the network would shorten service delivery times, enhance medicine access initiatives, improve patient satisfaction levels, enable greater monitoring of medicine adherence, and achieve better outcomes with all available resources.

The WHO and UNAIDS advocate for provider-initiated testing and counselling services, and that these services be recommended to all patients interacting with the health care system. Private pharmacies could make a significant contribution in this regard, by encouraging the general population to know their HIV status. The severity of the problem of not knowing one's status is evidenced in results of household surveys in high-

burden countries. These surveys have consistently shown that less than 10% of people living with HIV are aware of their status (WHO, 2006b). Knowing one's status could be encouraged by promoting voluntary counselling and testing services in HIV/AIDS resource centres in pharmacies.

#### Antiretroviral therapy

It is estimated that 50% of HIV-positive adults in South Africa are in WHO stage 1 and WHO stage 2 of disease progress – that is, they are asymptomatic. A further 36% are in WHO stage 3, suffering sporadic diarrhoea, weight loss and oral infections (Dorrington *et al.*, 2006). The remaining 14% are in WHO stage 4 – that is, they have full-blown AIDS and thus require ART. Only 4% of WHO stage 4 patients are currently receiving ART (Dorrington *et al.*, 2006). The bulk of HIV-positive patients requiring ART (86%) have not yet progressed to WHO stage 4. Eventually, when these patients develop full-blown AIDS they will create a significant demand for HIV/AIDS services, including the provision of ART. Integrating private pharmacies into government health services networks would boost the supply of HIV/AIDS services.

Improving adherence is critical in maximising the treatment outcomes of HIV-positive patients (Colombo, 1997). Numerous factors influence the level of patient adherence, including medicine cost, dosing frequency, food requirements and restrictions, adverse events, language barriers, and medical insurance. Pharmacists are uniquely positioned to manage these factors and play a leading role in improving adherence. An evaluation of pharmacist interventions indicated that the majority of their interventions were clinically significant in 89% of cases, and enhanced treatment efficacy in 62% of cases. Pharmacists counselled patients on medicine compliance, created tools to encourage regimented dosing, and recommended new therapies (Geletko & Poulakos, 2002).

# **Inter-professional obstacles**

An integrated approach to HIV/AIDS service delivery does not come without obstacles. The views of general practitioners (GPs) and pharmacists differ significantly with respect to the provision of HIV/AIDS testing and treatment services. Sixty-one per cent of pharmacists agreed that pharmacists should provide HIV pre-test counselling, whereas 66% of GPs disagreed. Also, 56% of pharmacists agreed that pharmacists should be allowed to treat STIs without a GP's prescription, whereas only 7% of GPs agreed (Van der Walt & Summers, 2006). These results are not new, and merely confirm the challenges that lie ahead. Pharmacists have successfully addressed the perceived threat of competing and overlapping roles (Colombo, 1997). Such perceptions generally arise due to the lack of understanding of







the pharmacist's role by other health care workers and patients. Pharmacists have become an integral component of HIV/AIDS services that involve promoting optimal and cost-effective drug therapy, and improving compliance (Colombo, 1997).

### Conclusion

There is insufficient dialogue between the government and the private sector, especially with respect to integrating private pharmacies into the delivery of HIV/AIDS services. The role of private pharmacies in the delivery of HIV/AIDS services must be fully understood. However, there is a lack of research in this field that refers to specific policy interventions designed to implement HIV/AIDS services in pharmacies. There is also no mechanism to monitor these interventions and their intended or unintended consequences.

This paper explored the need for private pharmacies to meet the challenge of providing HIV and AIDS prevention, care and treatment services. The aim was to construct an argument that enables better decision-making and encourages greater research in this field. Implementing an integrated approach with pharmacies requires collaboration between the government and the private sector. It also requires patient-centred partnerships between pharmacists and other health care workers. Changes will be required of the professional codes governing health care workers, and legislation must be remodeled to facilitate and encourage task-sharing and an integrated approach to providing HIV/AIDS services.

#### **Declarations**

VOL. 5 NO. 4 DECEMBRE 2008

This research was wholly funded by the author. The author is currently employed by PharmaLogica (www.pharmalogica.net). The author's views are his own.

#### References

Cockerill, R.W., Myers, T., Northington, C., Millson, M., & Rankin, J. (1996). Pharmacies and their role in the prevention of HIV/AIDS. *Journal of Social and Administrative Pharmacy*, 13(2), 46-53.

Colombo, J. (1997). Establishing pharmaceutical care services in an HIV clinic. *Journal of the American Pharmacology Association*, NS37, 581-594.

De Cock, K.M. (2006). From '3 by 5' to universal access. 16th International AIDS Conference, Toronto Plenary Session. http://www.who.int/entity/hiv/toronto2006/DeCockspeech\_Toronto16Aug06.pdf

Department of Health (2006a). National HIV and Syphilis Antenatal Sero-Prevalance Survey in South Africa 2005. http://www.doh.gov.za/docs/reports/2005/hiv.pdf

Department of Health (2006b). A National Human Resources Plan for Health.  $http://www.doh.gov.za/docs/discuss/2006/hrh\_plan/chapt1.pdf$ 

Dorrington, R.E., Johnson, L.F., Bradshaw, D., & Daniel, T. (2006). The demographic impact of HIV/AIDS in South Africa. National and Provincial Indicators for 2006. http://www.commerce.uct.ac.za/Research\_Units/CARE/RESEARCH/PAPERS/ASSA2003Indicators.pdf

Geletko, S.M., & Poulakos, M.N. (2002). Pharmaceutical services in an HIV clinic. *American Journal of Health-System Pharmacy*, 59 (8), 709-713.

International Pharmaceutical Federation (2002). Guiding principles for pharmacists and HIV/AIDS. http://www.fip.org/www2/pdf/HIV\_AIDS\_Guiding\_Principles.pdf

National Ministry of Health (2006). More people test for HIV. http://www.doh.gov.za/docs/pr/pr1128-f.html

Palmer, N., Mills, A., Wadee, H., Gilson, L., & Schneider, H. (2002). A new face for private providers in developing countries: What implications for public health? Bulletin of the World Health Organisation, 80, 292-297. http://tinyurl.com/3b8vwm

Ridley, R.G. (2001). Putting the partnership into public-private partnership. Bulletin of the World Health Organisation, 79(8), 694. http://www.who.int/bulletin/archives/79(8)694.pdf

Serfontein, J.H.P., Lubbe, M.S., Basson, W.D., John, G.K., & Adsetts, J. (2006). The availability of private and public pharmaceutical services in different geographical areas in South Africa. *Pharmaciae*, 14 (2), 18-21.

South African National AIDS Council (2006). SANAC message on World Aids Day 2006 http://www.info.gov.za/issues/hiv/aidsday2006.htm

South African Pharmacy Council. (2001). HIV/AIDS and STI Strategic Plan: The Role of the Pharmacist. *Pharmaciae*, 9 (4), 2-3.

South African Pharmacy Council. (2002). October Meeting of Council. Pharmaciae, 10 (5), 4-7.

South African Pharmacy Council (2004). Good pharmacy practice in South Africa. (2nd ed.). Pretoria: South African Pharmacy Council.

South African Pharmacy Council (2006). Person Statistics for Pharmacy Council of South Africa. (Unpublished raw data.)

UNAIDS (2006). Scaling up access to HIV prevention, treatment, care and support: The next steps. http://data.unaids.org/pub/Report/2006/20060807\_Universal%20Access\_TheNextSteps\_en.pdf

UNAIDS (2007a). 2007 AIDS epidemic update. http://data.unaids.org/pub/EPISlides/2007/2007\_epiupdate\_en.pdf

 $\label{localized} UNAIDS~(2007b).~Global~summary~of~the~AIDS~epidemic,~December~2007.~http://data.unaids.org/pub/EPISlides/2007/2007_epiupdate_en.pdf$ 

Van der Walt, E., & Summers, R.S. (2006). Views of general practitioners and pharmacists on the role of the pharmacist in HIV/AIDS management. South African Family Practice, 48 (7), 14-14d.

World Health Organisation (2006a). Taking stock: Health worker shortages and the response to AIDS.  $http://www.who.int/entity/hiv/toronto2006/TTR2\_eng.pdf$ 

World Health Organisation. (2006b). WHO and UNAIDS Secretariat Statement on HIV testing and counseling.  $http://www.who.int/entity/hiv/toronto2006/WHOUNAIDS statement\_TC\_081406\_dh.pdf$ 

World Health Organisation (2007). Towards universal access. Scaling up priority HIV/AIDS interventions in the health sector. Progress Report, 2007. http://www.who.int/hiv/mediacentre/universal\_access\_progress\_report\_en.pdf

Journal des Aspects Sociaux du VIH/SIDA



