Family medicine, primary health care and HIV medicine – a 'new' clinical speciality and its role in the South African HIV pandemic

Hagemeister DT, Dr Med, BA, MPH, EMMB, DipHIVMan (SA)
Senior family physician, Drakenstein subdistrict, Western Cape and Division for Family Medicine and Primary Care, Stellenbosch University
Correspondence to: Dr DT Hagemeister, e-mail: Dhagemei@pgwc.gov.za. PO Box 3178, Paarl, 7620
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Abstract

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Context: Because of the extent of the HIV pandemic, but also due to some specific historical conditions, HIV medicine has evolved as a field of its own in South African medicine. With the massive scale of the roll-out of antiretroviral drugs (ARVs) in South Africa, the need to devolve ARV roll-out into primary health care (PHC) services is currently being discussed. Family medicine was recognised in South Africa as a specialist qualification in August 2007 and is still undergoing an exciting process of defining its content and future role in the community of medical specialities. The South African approach to family medicine focuses strongly on the role of the family physician in the PHC setting at district hospitals and in PHC facilities within the South African district health framework.

Objectives: The objectives of this article are to discuss the relation between family medicine and the field of HIV medicine.

Key message: Family medicine in the South African context is the clinical discipline most suitable to house HIV medicine. The projected future of the ARV roll-out parallels the structures necessary for the care of (other) chronic conditions in the PHC setting, and the clinical governance for this health care delivery lies in the hands of family medicine. Thus HIV medicine should be regarded and developed as part of family medicine.

Conclusion: For the future development of family medicine, it is a natural and necessary step to incorporate HIV care. The field of HIV care as a professional area will benefit from being part of a recognised clinical speciality. Training for the treatment of HIV/AIDS will have to be included as an integral part of the registrar programme in family medicine.

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Recent changes in family medicine

Family medicine has only recently been recognised as a specialist discipline in South Africa.[1] This brought along a number of changes. Firstly, family physicians can now be registered as specialists with the Health Professionals Council of South Africa (HPCSA). Secondly, family medicine has been given the task of being the specialist discipline responsible for clinical governance in the district health system (DHS) in South Africa. Thirdly, the academic divisions and departments of family medicine at South Africa's medical schools have been given the task to train future family medicine practitioners who have the necessary skills and knowledge to excel in this function in the decades to come (See Table I).

Table I: Changes in family medicine

Level	Innovations	Activities
Medical practitioner	Specialist status	Generation of HPCSA specialist register
Public health sector	Clinical governance in the DHS	Implementation of DHS structure Creation of family physician posts
Academic institutions	Registrarship programme	Compilation of skills list Integration of academic teaching with clinical posts

Objectives

Given these exciting and challenging conditions, it is the author's intention to initiate a discussion on the future role of family medicine as a specialist discipline in the field of HIV medicine in South Africa. This would hopefully result in a thorough consideration of the potential and needs, and thereby provide the decision makers in the health system and in the academic institutions with appropriate concepts for the future development of this field.

Current status of HIV medicine in South Africa

South Africa is one of the countries with the highest prevalence of HIV in the world, and is home to the largest number of people living with HIV, estimated at over 5 million.[2,3] After some initial delay due to controversies, a massive roll-out of highly active antiretroviral therapy (HAART) has been established in South Africa's public health sector since 2004.[4]

The government adopted a 'strategic plan' to tackle the pandemic between 2007 and 2011.[5] Given the enormous scale of the challenge and the extremely ambitious goals set out in the plan (see Table II), it should be obvious that innovative approaches are necessary to achieve anything close to success.

Family medicine and HIV medicine – parallels and synergies

Given the challenges faced by the South African public health care sector (e.g. under-funding, skills shortages, lack of support and infrastructure),

Table II: National goals (excerpts from the National Strategic Plan[5])

Intervention	2007 estimated baseline	2011 strategic goal
Increase the proportion of HIV-positive adults not on ART who had a CD4 count in the last 12 months	30%	80%
Increase the proportion of eligible adults receiving cotrimoxazole	20%	80%
Increase the number of new adults starting ART (% of new AIDS cases)	120 000 (24%)	420 000 (80%)
Increase the proportion of adults started on ART by nurses	10%	80%
Increase the proportion of adults on ART managed by nurses	20%	80%
Increase the proportion of health facilities providing comprehensive HIV care, including ART	10%	80%
Build the capacity of health workers and managers to provide comprehensive care, treatment and support (% of PHC staff)	45%	90%

both family medicine and HIV medicine face similar problems. To achieve the goals of 'equal access to quality health care',[6] an entry or gateway into the services must be available over a wide geographical area.[7] Due to the constraints mentioned above, this broad geographical distribution cannot be achieved with a concept based solely on medical practitioners. Therefore, the planning for the district health services in the public sector favours a 'nurse-driven, doctor-supported' system. A professional nurse with training as an independent clinical nurse practitioner (CNP) is meant to be the first contact for the PHC patient, and the remainder are referred for assessment by a medical doctor only after the patients have been screened and treated within the scope of practice of a CNP. Especially in the field of chronic conditions, this concept has a huge potential to devolve standardised, protocol-based follow-up functions, such as the assessment of blood pressure control in hypertension or of symptom control in asthma.

With the transformation of HIV infection from being a death sentence to a well-manageable chronic condition,[8] and with the standardisation of its treatment, the very same considerations (nurse-driven, protocol-based care) become true for the field of HIV medicine.[9,10]

Figure 1 depicts the referral pathways in the care of a chronic disease case. In line with national and provincial policies, the patient has to move between the different levels of health care, even within the PHC setting. At the same time, however, comprehensive and continuous care has to be provided.

In the district health system, the projected future responsibility of the family physician is as head of clinical governance to ensure that the different institutions and professions cooperate beneficially.

For specific reasons, such as political obstacles, HIV care was largely started as a 'vertical' programme in South Africa's public health sector. This means that the services dedicated to HIV care were not developed as an integrated facet of the existing services, but rather as an additional and sometimes parallel structure. Given the historical situation, this was certainly an unavoidable necessity to get the medical treatment of HIV through the roll-out of HAART off the ground. However, to ensure the sustainability of the HAART roll-out in the long run, and to cater for the diverse needs of HIV-positive patients with increasing numbers of other chronic co-morbidities,[11] the integration of HIV medicine with the other services under the roof of family medicine seems indicated (see Table III).

Discussion – challenges

As mentioned above, HIV medicine in South Africa evolved as a vertical programme, paralleling other health care structures, both geographically and administratively. Considering the framework of medical specialist disciplines, different models are possible for the integration of HIV medicine with existing, other (public) health care institutions. One could argue, for example, that the delivery of quality treatment for an HIV infection, including the appropriate management of potential side-effects and opportunistic infections, would best be organised under the clinical responsibility of internal medicine.

From an academic point of view, HIV medicine could be considered as a special field of the infectious diseases subspeciality of internal medicine. This is as true as it is for asthma or diabetes: the pathogenic causes lie in the specific domain of internal medicine, whether it is pneumology, endocrinology or infectiology, and complicated cases should be managed by these subspecialities. However, nobody in the current setting in South Africa could seriously suggest that every asthma or diabetes patient should be managed by a trained subspecialist.

Figure 1: 'Patient flow' for ambulatory care of a chronic condition in the PHC

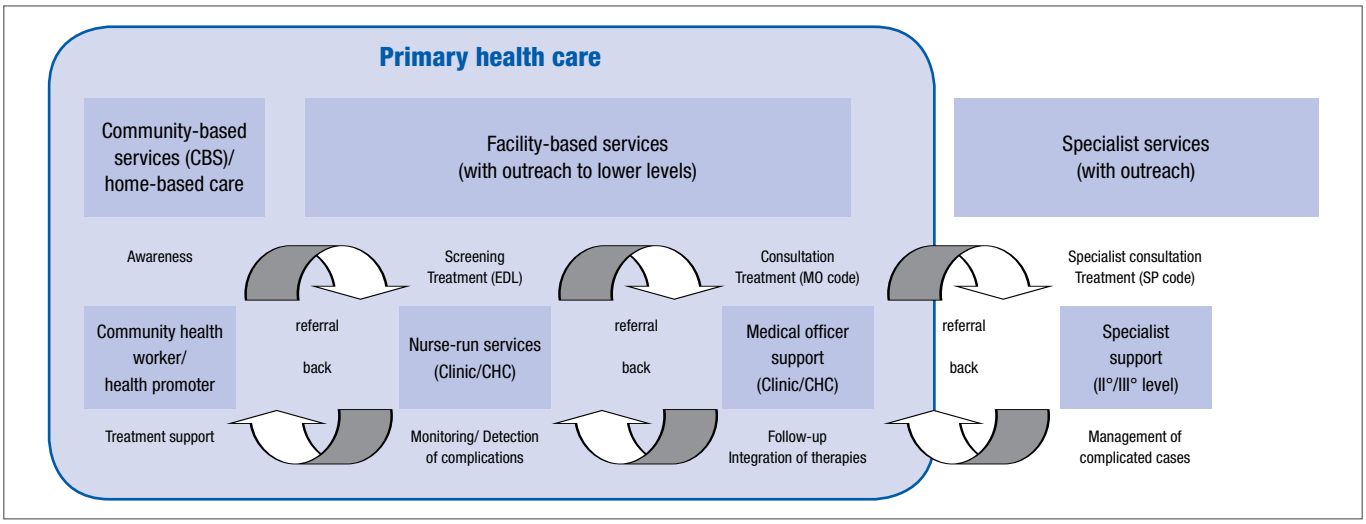

Table III: Reasons for the need to integrate services

Patient care	Care should be patient centred (one-stop clinic) rather than disease/diagnosis centred
Organisational needs	Separate structures for different but similarly managed health conditions result in a paralleling/doubling of structures, with a waste of resources
Staff/human resources	Exceptionalism of certain PHC conditions, such as HIV/AIDS, results in the disempowerment of health care staff with regard to these conditions; An 'internal brain drain' between different programmes might occur as an additional problem
Sustainability	The dependency on donor money of certain dedicated vertical programmes might prove dangerous once these external sources dry up

With a growing emphasise on the role of clinical nurse practitioners in a resource-constrained PHC environment, the medical practitioner is part of a team of clinicians (doctors and nurses) who, together, initiate and monitor the treatment. Therefore, even this 'nurse-driven' practice still needs the support of doctors. In a well-resourced, urban environment, these doctors might be specialist physicians or even infectious diseases subspecialists. Considering the fact that vast parts of South Africa are far from urban areas and the local population therefore has little access to specialist services because of the lack of such specialists in those areas, one might focus more on the family physician to take over such a role. The aim of training family physicians is to prepare medical practitioners with comprehensive knowledge and skills to practice independently in a district hospital environment, with at best only occasional support from clinical specialists. Considering the South African epidemiology, HIV/AIDS is as much an omnipresent medical matter as is asthma or diabetes. Thus, these conditions constitute an integral part of everyday general practice, and the implementation and improvement of chronic care management programmes in the public PHC setting are a genuine task to be tackled by family physicians. Future family physicians should come with the necessary clinical experience to provide leadership in this clinical field and to make quality HIV care accessible to all people living in South Africa, especially those outside the metropolitan regions.

On the side of the established HIV clinics in the PHC, pride about what has been achieved is well justified. Given the 'exceptionalism' that HIV and its care still experience in South Africa, it should not be forgotten that this condition is just one of several that place a huge burden on our community, and that many of the achievements in the field of HAART roll-out have been bought with special funding through donor money from external sources that might not be available permanently.

Lastly, the roll-out of a nurse-driven HAART programme adds additional tasks to the nursing profession, which already works under serious constraints and has experienced a heavy 'brain-drain' over the last couple of years. It is thus essential that any implementation of new roll-out models comes with a comprehensive training and ongoing teaching and support programmes.

Conclusions – possible ways forward

Family physicians will not necessarily become the superspecialised HIV physicians that urban academic environments are able to provide, but, in South Africa, family physicians need to be as capable of treating HIV/AIDS as they need to be skilled in obstetrics or in the management of diabetes.

Family medicine, both in the clinical arena in the subdistricts and as an academic enterprise, will have to realise its responsibility for HIV care: family physicians cannot do without HIV medicine, and HIV medicine cannot do without family physicians. Family physicians in the setting of the DHS have to play an active role in the roll-out of HAART and in the integration of HIV treatment with other clinical, preventive and rehabilitative services.

The academic departments of family medicine will have to continue to intensify their efforts to equip future medical practitioners in general and family physicians in particular with broad and comprehensive skills to manage HIV and related conditions. With the curricula for the registrar training of future family physicians currently being created and implemented, HIV medicine must be given appropriate space in these four-year programmes. The clinical rotations for a registrar in family medicine have to include a significant period in a dedicated HIV environment, with the Colleges of Medicine of South Africa (CMSA) requirements for the Diploma in HIV Management[12] as a potential guideline for this training.

Family medicine as a discipline also holds a critical advocacy role for the needs of the huge number of HIV-positive South Africans and their right to easily accessible health care of high quality. Family medicine has a huge potential influence on both the public and private delivery of primary health care in South Africa. Institutions such as the College of Family Physicians and academic departments will have to provide leadership to generate a mindset in the family practice populace that takes up the huge problem posed by HIV. This will require close interaction with other professional groups, such as the nursing profession, the discipline of medicine, the infectious diseases subspeciality, the existing governmental and non-governmental services for HIV treatment, as well as focus groups such as the Rural Doctors Association of South Africa (RuDASA) or the Southern African HIV Clinicians Society.

Declaration

I declare that I have no financial or personal relationship(s) which may have inappropriately influenced me in writing this paper. I am grateful to the reviewer for the valuable and inspiring comments.

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