# The Impact of HIV Scale-Up on the Role of Nurses in South Africa: Time for a New Approach

Jennifer Dohrn, DNP, CNM, ICAP,\*† Bongi Nzama, EdD, MCur,‡ and Marita Murrman, EdD, MS§

Abstract: South Africa's health care system is struggling to respond to the devastating impact of HIV/AIDS while at the same time respecting its postapartheid mandate to provide equitable health services to all. These unprecedented challenges are forcing a rethinking and reorganization of health resources and systems and a reappraisal of the role of nurses in the care of complex and chronic illness. Increasingly, the scale-up of HIV services is being reconceptualized to match both the urgent need for prevention, care, and treatment and the national vision of decentralized primary health care. HIV scale-up has triggered innovations in nurse training, task shifting, retention, and scope of practice that need not remain HIV specific. Lessons learned in the context of HIV have the potential to enhance nursing practice and human resources for health more generally, strengthening South Africa's health systems and improving access to effective health services.

Key Words: HIV/AIDS, health systems, nursing, scale-up, South Africa

(J Acquir Immune Defic Syndr 2009;52:S27–S29)

 $\mathbf{S}$  outh Africa's health care system is struggling to respond to the devastation of HIV/AIDS while at the same time respecting its postapartheid mandate to provide equitable health services to all. The "shattering dimensions" of the HIV/AIDS epidemic in South Africa include adult HIV prevalence of 18.1%,<sup>2</sup> an estimated 5.7 million people living with HIV/AIDS,<sup>2</sup> and a fall in life expectancy from 63 years in 1990 to 54 years in 2007.3 The health care system, already markedly underresourced, has been severely stressed as increasing numbers of people require care and treatment for HIV. The prevalence of HIV among doctors and nurses approximates that of the general population, 4 leading to higher rates of illness and absenteeism among the very people needed to provide health services; combined with attrition and brain drain, the result is a vicious cycle in which "the epidemic fuels the crisis in the health workforce at the same time that the shortage of health workers presents a major barrier to preventing and treating the disease."5

These unprecedented challenges are forcing a rethinking and reorganization of health resources and systems and a reappraisal of the role of nurses in the care of complex and chronic illness. Despite the fact that South Africa's health system has historically been nurse-driven, nurses outnumber physicians 5 to 1, and even though the majority of the population receives formal health care from nurses rather than doctors, it is clear that nurses have been insufficiently empowered and resourced to play their key roles effectively. This has become starkly evident within the context of HIV/AIDS, where expanded training, task shifting, and remuneration, as well as revision of regulatory and legislative policies have been necessary to enable nurses to respond effectively to the epidemic.

The widespread implementation of interventions to prevent mother-to-child transmission (PMTCT) in 2002 and to provide antiretroviral therapy (ART) in 2004 initially focused on physician-led services at the tertiary level. Nurses were charged only with diagnosing HIV infection and referring patients "up" to higher levels of the health care system. There has been, however, growing recognition that this strategy is impractical for a decentralized nurse-driven health system in which most people receive care at the community level.<sup>6</sup> Increasingly, the scale-up of HIV services is being reconceptualized to match both the urgent need for prevention, care, and treatment and the national vision of decentralized primary health care. Of note, HIV scale-up has triggered innovations in nurse training, task shifting, retention, and scope of practice that need not remain HIV-specific. Lessons learned in the context of HIV have the potential to enhance nursing practice and human resources for health more generally, strengthening South Africa's health systems and improving access to effective health services.

## TRAINING, MENTORING, AND SUPPORTIVE SUPERVISION

As in other countries, the emergence of a new epidemic required the urgent implementation of new training initiatives. Developing HIV expertise among nurses became a national priority, highlighted in South Africa's National HIV/AIDS Strategic Plan,<sup>7</sup> and the South African Department of Health (DOH) initiated new certificate courses in PMTCT and ART for nurses in 2002. Although DOH recognizes this in-service training, it is conducted largely by nongovernmental organizations rather than by accredited nursing institutions. The new

From the \*Clinical Nursing, Columbia University School of Nursing, New York, NY; †Nurse Capacity Initiative, International Center for AIDS Care and Treatment Programs (ICAP), Columbia University Mailman School of Public Health; ‡School of Health Sciences, University of Fort Hare, South Africa; and §International Center for AIDS Care and Treatment Programs, Columbia University Mailman School of Public Health, New York, NY. Sources of support: none.

Data presented: not applicable.

Correspondence to: Jennifer Dohrn, DNP, CNM, ICAP, 722 West 168th Street, Room 1129, New York, NY 10032 (e-mail: jed19@columbia.edu). Copyright © 2009 by Lippincott Williams & Wilkins

"PMTCT nurses" and "ART nurses" are the unofficial gatekeepers of HIV knowledge and skills at the primary health care level. They direct HIV testing and counseling services; prepare patients for ART initiation; diagnose and manage side effects and opportunistic infections; partner with midwives to provide PMTCT services during the perinatal period; and provide early infant diagnosis services. They "refer up" those who need ART initiation and those with advanced illness and complications.

Another capacity-building strategy has been the development of nurse mentors—nurses who have received intensive training in HIV prevention, care, and treatment and who can provide continuous hands-on mentoring to colleagues at the health facility level. One such example is the Nurse Clinical Mentoring Program launched in 2006 in Eastern Cape Province by Columbia University's International Center for AIDS Care and Treatment Programs (ICAP) with the Qaukeni DOH.<sup>8</sup> Nurses working in primary health care clinics receive intensive training via mentoring from HIV nurse experts who demonstrate how to perform advanced HIV-related clinical skills while simultaneously teaching others to develop these skills. The nurse experts work with physicians, modeling a collegial approach to consultation and referrals to balance the traditionally hierarchical nurse/doctor relationship. The initial training resulted in a highly competent and confident group of 10 HIV nurse mentors, who are now capable of replicating the program with nurses in other clinics in the Eastern Cape.<sup>8</sup> In addition, ICAP partnered with the Department of Nursing Sciences at the University of Fort Hare to develop an Advanced Certificate program for HIV nursing specialists, launched in 2007 and now offered annually at the University of Fort Hare.

Unsurprisingly, it has been easier to implement inservice training and short-course certificate programs than to initiate fundamental change in pre-service curricula. How to revise nursing education at the basic and advanced levels remains a central problem. Initially, each nursing institution revised its own curriculum, resulting in multiple curricula all aimed at achieving similar professional competencies. More recently, nursing leaders from 19 educational institutions agreed to implement a standardized HIV/AIDS curriculum.

### **ROLES AND RESPONSIBILITIES**

The urgent need for nurses to assume greater clinical responsibility in the care of patients with HIV/AIDS has revitalized the practice of task shifting in South Africa. "Substitution" of health care team members has long been practiced, particularly in rural areas, where enrolled nurses (nurses with 2-year diplomas) do the work of professional nurses (nurses with 3-year or 4-year baccalaureate degrees). As nursing responsibilities related to HIV care have escalated, tasks have been shifted to other cadres, requiring restructuring of health teams and the creation of new capacities at multiple levels. The World Health Organization has recognized task shifting as a central and legitimate method to meet the urgent health needs resulting from the HIV epidemic. 11

In South Africa, as elsewhere, new cadres of health care workers have been developed to provide patient education, counseling, adherence support, and community outreach. Lay counselors, for example, conduct group and individual sessions for clients of voluntary testing and counseling services, teaching them about HIV and its prevention and about the need for HIV testing and clinical follow-up. These counselors, who are supervised by nurses, also provide a critical link to the community on issues of disclosure, safer sex practices, reducing stigma, and adherence to treatment.<sup>12</sup> Peer educators have also played key roles in HIV programs. In the mothers2mothers program, HIV-infected mothers are hired to mentor pregnant women newly diagnosed with HIV. These "mentor mothers" identify themselves in antenatal clinics as HIV positive, using their own openness to break barriers of silence and stigma. They provide unique support, via individual and group counseling, freeing nurses to focus on the clinical aspects of pregnant mothers' care and treatment.<sup>13</sup> Notably, although the addition of new cadres relieves nurses of selected nonclinical tasks, it also often creates new supervisory and managerial responsibilities as the nurses are asked to oversee these new members of the health team.

As the nursing profession in South Africa struggles to increase its capacity, promote task shifting, and revise nursing education, an additional issue has come to the fore—that of nursing's formal scope of practice as defined by governmental and regulatory policies. Although demonstration projects in other countries have shown that nurses can effectively provide comprehensive HIV/AIDS care, including ART,14,15 nurseinitiated and managed ART (NIM-ART) is not currently authorized in South Africa despite its potential to double the enrollment of eligible patients. 16 The South African Nursing Council is now considering a revision of nursing curricula to authorize new specialized degrees in HIV care and is considering endorsing a change in nursing scope of practice permitting NIM-ART.<sup>17</sup> Although South Africa's National Strategic Plan for HIV/AIDS calls for "training of primary health care nurses (rather than doctors) to initiate antiretroviral treatment,"18 the National DOH has not authorized NIM-ART. This contradiction has raised basic questions regarding actual and authorized scopes of practice, an issue that is not limited to the case of HIV/AIDS services.

## **RETENTION**

As issues related to changing nurses' scope of practice unfold on policy and legislative levels, the challenge of retaining nurses is unrelenting. 19 Daily, nurses face escalating workloads; changing roles and new responsibilities; possible nosocomial exposure to HIV infection; and the burden of caring for individuals with a multitude of physical and psychosocial needs. The prevalence of HIV among nurses is at least as high as in the general population, leading to increased sick days, absenteeism, and attrition. According to the DOH, the social status of nurses is not as high as it once was; remuneration is often felt to be inadequate; and burnout—causing nurses to depart the public sector for the private sector, move to other countries offering improved remuneration and work environments, or depart from the nursing profession altogether—has created "a serious crisis." 17

Strategies to address this multifactoral challenge include the development of Wellness Centers, where nurses receive

S28 | www.jaids.com

© 2009 Lippincott Williams & Wilkins

support for their own medical and emotional needs<sup>20</sup>; efforts to increase public respect for the nursing profession; and the development of nursing networks to consult and review cases and provide professional support and recognition.

The ICAP Nurse Capacity Initiative, recently funded by the United States Health Resources and Services Administration, was developed in response to these critically important issues. The project, a collaboration between the School of Health Sciences at the University of Fort Hare, the International Council of Nursing, the Columbia University School of Nursing, and ICAP, is designed to improve nurse training and mentorship, advocate for policy reform, and support retention of nurses in the public sector. The 6-country initiative will be led from South Africa, supporting a multinational stakeholder network of nursing schools, nursing associations, nongovernmental organizations, and national governments.

#### THE WAY FORWARD

The profound impact of the HIV epidemic in South Africa has triggered a reappraisal of the role of nurses. With appropriate support, nurses can dramatically enhance access to health services, including those required for the care and treatment of complex and chronic diseases. Policy-level support is needed to establish the regulatory and professional frameworks to authorize expanded scopes of work. Training and credentialing systems need to be adapted, curricula standardized at basic and advanced levels, and access to continuing education supported. At the clinical level, support is needed for the redefinition of roles and job responsibilities within the health care team, including implementation of task shifting, mentoring, and community mobilization, and retention and support strategies.

#### **REFERENCES**

- Dorrington R, Bourne D, Bradshaw D, et al; for the Burden of Disease Research Unit of the Medical Research Council. *The Impact of HIV/AIDS on Adult Mortality in South Africa: Technical Report*. Cape Town, South Africa: South African Medical Research Council; 2001. Available at: http://www.heart-intl.net/HEART/Financial/comp/TheimpactofHIVAID Sonaduy.pdf. Accessed July 10, 2009.
- Joint United Nations Programme on HIV/AIDS/World Health Organization Working Group on Global HIV/AIDS and STI. Epidemiologic Fact Sheet on HIV and AIDS: Core Data on Epidemiology and Response. Geneva, Switzerland: World Health Organization; 2008. Available at: http://apps.who.int/globalatlas/predefinedReports/EFS2008/full/EFS2008\_ZA.pdf. Accessed July 10, 2009.
- Department of Health Statistics and Informatics, Information, Evidence and Research Cluster, World Health Organization (WHO). World Health Statistics 2009. Geneva, Switzerland: WHO; 2009. Available at: http:// www.who.int/whosis/whostat/EN\_WHS09\_Full.pdf. Accessed April 21, 2009.
- Shisana O, Hall E, Maluleke KR, et al. The Impact of HIV/AIDS on the Health Sector—National Survey of Health Personnel, Ambulatory and Hospitalised Patients and Health Facilities, 2002. Pretoria, South Africa: Department of Health; 2002:34–37.

- Samb B, Celletti F, Holloway J, et al. Rapid expansion of the health workforce in response to the HIV epidemic [Sounding Board]. N Engl J Med. 2007;357:2510–2514.
- Policy Framework Supportive of Task Shifting/Sharing [fact sheet].
  Presented at: Nurses Taking Control of HIV/AIDS Care and Treatment:
  Towards an Expanded Role for Primary Health Care; South African AIDS Conference; March 31–April 3, 2009; Durban, South Africa.
- Department of Health, Republic of South Africa. Broad Frame-Work for HIV and AIDS and STI Strategic Plan for South Africa, 2007-2011, November 2006. Pretoria, South Africa: Department of Health; 2007. Available at: http://www.info.gov.za/issues/hiv/framework.pdf. Accessed April 21, 2009.
- 8. LaRock W. Public Health Evaluation of an International AIDS Care and Treatment Programs (ICAP), Nurse-Mentor Training Program in HIV Care and Treatment in Eastern Cape, South Africa [dissertation]. New York, NY: Columbia University School of Nursing; 2009:6.
- Conference Final Report. Report on: HIV in Nursing Education in South Africa: Building a Consensus to Achieve NSP Goals [workshop]; March 3–4, 2009; Cape Town, South Africa.
- Stevens M, Mathijs FF, Bomela N, eds. *Task Shifting: Considering Legal and Regulatory Barriers*. Proceedings of the DENOSA Strategic Consultation, March 17-18, 2009. Durban, South Africa: Health Systems Trust; 2009. Available at: http://hst.org.za./publications/743. Accessed April 16, 2009.
- World Health Organization (WHO). Task Shifting: Rational Redistribution of Tasks Among Health Workforce Teams. Global Recommendations and Guidelines. Geneva, Switzerland: WHO; 2008. Available at: http:// www.who.int/healthsystems/TTR-TaskShifting.pdf. Accessed July 13, 2009.
- Bedelu M, Ford N, Hilderbrand K, et al. Implementing antiretroviral therapy in rural communities: the Lusikisiki model of decentralized HIV/ AIDS care. J Infect Dis. 2007;196 (Suppl 3):S464–S468.
- Mothers2Mothers. 2008 Annual Report. New York, NY: Mothers2-Mothers; 2008. Available at: http://www.m2m.org/images/downloads/ m2m\_AnnualReport\_2008.pdf. Accessed April 20, 2009.
- Chang LW, Alamo S, Guma S, et al. Two-year virologic outcomes of an alternative AIDS care model: evaluation of a peer health worker and nurse-staffed community-based program in Uganda. *J Acquir Immune Defic Syndr*. 50:276–282.
- Médecins Sans Frontières (MSF). Nurse-Driven, Community-Supported HIV/AIDS Treatment at the Primary Health Care Level in Rural Lesotho. 2006–2008 Programme Report. Cape Town, South Africa: MSF South Africa and Lesotho; 2009.
- Malan M, Karrim Q. 'We're not allowed to help': thousands of HIV-related deaths could be prevented if nurses were allowed to prescribe medication. *Mail Guard*. 2009;25:36.
- Department of Health, Republic of South Africa. Nursing Strategy for South Africa 2008. Pretoria, South Africa: Department of Health; 2009.
   Available at: http://www.doh.gov.za/docs/misc/nursing-strategy.pdf.
   Accessed April 22, 2009.
- South African National AIDS Council (SANAC). HIV and AIDS and STI Strategic Plan for South Africa 2007-2011. Pretoria, South Africa: SANAC; 2007. Available at: http://www.info.gov.za/otherdocs/2007/ aidsplan2007/khomanani\_HIV\_plan.pdf. Accessed April 21, 2009.
- Rispel L, ed; for the Centre for Health Policy. Research on the State of Nursing (RESON) [PowerPoint]. Presented at: Exploring Nursing Policies, Practice and Management in South Africa Workshop; October 7, 2008; Johannesburg, South Africa.
- Baumann A; for the International Council of Nurses. Positive Practice Environments Quality Workplaces = Quality Patient Care. Information and Action Tool Kit. Geneva, Switzerland: International Council of Nurses; 2007. Available at: http://www.icn.ch/indkit2007.pdf. Accessed April 23, 2009.