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## *Essential Nursing Competencies Related to HIV and AIDS*

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*With nearly 33 million global citizens living with HIV or AIDS, the need for a highly qualified, competent nursing workforce is critical. With the recent increase in global funding to expand access to antiretroviral therapy, there have been considerable efforts to improve the capacity of nurses to initiate and maintain antiretroviral therapy while evaluating its effectiveness, monitoring for side effects, reducing the incidence of drug–drug interactions (including drug interactions related to therapies provided by traditional healers), promoting adherence to therapies, and providing management of symptoms. Therefore, using a participatory action approach, nursing leaders from six sub-Saharan African countries collaborated to develop the essential nursing competencies related to HIV and AIDS. These competencies can help to guide preservice education related to HIV and AIDS, to strengthen in-service or capacity-building programs designed for already qualified nurses, and to guide policy and regulatory reform in the context of task-shifting, task-sharing, and scope of nursing practices.*

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## EXECUTIVE SUMMARY

### Introduction and Context

Worldwide, the Joint United Nations Programme on AIDS (UNAIDS) estimated that nearly 33 million adults and children (30.3–36.1 million) were living with HIV or AIDS in 2007 (UNAIDS, 2008), with sub-Saharan Africa continuing to be the most affected region. In this region, an estimated 22 million adults and children were living with HIV or AIDS in 2007

(20.5–23.6 million), whereas an estimated 1.9 million persons (1.6–2.1 million) became newly infected with HIV (UNAIDS, 2008). Overall, in 2007, sub-Saharan Africa accounted for 67% of all people living with HIV and 75% of AIDS-related deaths (UNAIDS, 2008, p. 30, 32).

Seven southern African countries—Botswana, Lesotho, Namibia, South Africa, Swaziland, Zambia, and Zimbabwe—experience adult HIV prevalence rates exceeding 15% (UNAIDS, 2008). In Botswana, Malawi, and Zambia, recent surveillance data from antenatal clinics suggest that the epidemic might be stabilizing (UNAIDS, 2008). However, in Lesotho, prevalence rates among pregnant women continue to increase (UNAIDS, 2008). Although South Africa's epidemic might not be growing in size, there is minimal evidence of significant change in HIV-related behavior that could decrease the magnitude of the epidemic. Subsequently, with nearly 6 million South Africans living with HIV or AIDS, it remains the nation with the largest number of people living with HIV in the global community. Comparatively, in 2006, Swaziland documented the highest ever seroprevalence rate in a national population-based sample at 26% (UNAIDS, 2008).

In 1990, southern Africans had a life expectancy of approximately 61 years at birth, an increase from approximately 45 years in 1950. However, as a consequence of the HIV and AIDS epidemics, life expectancy has declined substantially in many southern African countries (UNAIDS, 2008). In Swaziland, for example, the life expectancy for a child born today is estimated to be around 30 years, whereas in South Africa, it is around 45 years.

Although significant progress has been achieved in reducing mother-to-child transmission of HIV, the vast majority of children living with HIV or AIDS acquired the infection through this route. Globally, children under the age of 15 account for one in six AIDS-related deaths and one in seven new HIV infections. Furthermore, according to UNAIDS, “some 15 million children under age 18 have lost one or both parents to AIDS and countless children become responsible for the care of their siblings and other family members when parents are debilitated by poor health” (UNAIDS, 2009). Children who have lost one or both parents are frequently subjected to discrimination and are less likely to receive health care, education

and other critical services. Additionally, child-headed households, or children living on the streets, are at an even higher risk for exploitation, abuse, exposure to HIV, and poverty (UNAIDS & UNICEF, 2004).

However, despite increased resources, the limited numbers of African health care professionals available to address the epidemic will only add to the challenges in the region. Critical to addressing these issues, but particularly the roll out of antiretroviral therapy (ART), is the availability of a competent, sustainable nursing workforce. In relation to ART, this workforce must demonstrate capacity to initiate and maintain ART while evaluating effectiveness, monitoring for side-effects, reducing the incidence of drug–drug interactions (including drug interactions related to therapies provided by traditional healers), promoting adherence, and providing management of symptoms.

Furthermore, comprehensive prevention programs require knowledgeable and skilled nurses and community health workers to provide evidenced-based interventions to prevent new infections while increasing individuals' knowledge of his/her serostatus through counseling and testing. For those at the end-of-life stage, palliative care nursing interventions require nurses who are not only available but also trained to coordinate, deliver, and evaluate state-of-the-science interventions that are culturally relevant and sensitive. Finally, preventing mother-to-child transmission also requires available nurses who are knowledgeable about reproductive health and the scientific basis of preventing HIV infection during pregnancy.

In much of sub-Saharan Africa, the physician workforce is limited or almost nonexistent. For example, in Lesotho, Malawi, and Zambia, the ratio of physicians to population is <1:10,000 (World Health Organization [WHO], 2008a). Throughout the region, nurses (registered, enrolled, and auxiliary) comprise the largest number of health care providers, although their shortage is also often extreme. Narasimhan et al. (2004) stated that “in most low-income countries, there is insufficient human capacity to absorb and apply newly mobilized resources because the workforce is unavailable” (p. 1469).

Throughout the region, the migration of nurses, not only from rural to urban, but also intercountry within as well as outside of the region, has reduced the availability of human resources addressing the HIV and AIDS epidemics (WHO & World Bank, 2002).

Additionally, HIV and AIDS, as well as tuberculosis, is yielding monumental workloads, while simultaneously reducing the health care provider workforce (Narasimhan et al., 2004). Furthermore, Samb et al. (2007) stated that “poor working conditions and low pay conspire with the risk of occupational transmission and the stress of working in communities devastated by the HIV epidemic to drive up rates of attrition” (p. 2510).

In many countries, the number of nursing students completing their education and entering the workforce frequently does not equal the number of nurses leaving the workforce because of declining health (due to HIV, AIDS, tuberculosis [TB], or other chronic conditions), retirement, or migration (Hongoro & McPake, 2004). It is estimated that between 18% and 41% of the workforce, including health workers, is infected with HIV in many sub-Saharan African countries (Narasimhan et al., 2004; Cohen, 2002).

With decreasing life expectancies in many sub-Saharan African countries as a result of AIDS, at least 1 million additional health workers, including nurses, are needed to offer basic services as recommended by the World Bank (Chen et al., 2004; Sheldon, 2006). On the basis of the research in Tanzania and Chad, Kurowski et al. (2004) estimated that the sub-Saharan African countries need nearly 1.4 million health care workers, specifically, 720,000 physicians and 670,000 nurses (Hongoro & McPake, 2004). When examining the estimated number of people needing ART compared with those using it, there is a significant need for expansion of antiretroviral roll-out across the sub-Saharan African region. Again, expanding ART to persons eligible requires nurses to be available, knowledgeable, and retained.

### Addressing the Problem

The President's Emergency Plan for AIDS Relief (PEPFAR) is the U.S. Government's international HIV/AIDS program. Under the leadership of Ambassador Eric Goosby, it works in partnership with host nations to support the (a) treatment for at least 3 million people; (b) prevention of 12 million new infections; and (c) care for 12 million people, including 5 million orphans and vulnerable children. To achieve these goals, PEPFAR will support training and retention of at least 140,000 new health care workers, including nurses, in HIV and AIDS prevention, care, and

treatment. This is one component of many health systems strengthening activities that build local capacity to lead the response to the HIV pandemic and other health issues. PEPFAR's health systems strengthening efforts include providing support to country governments, regulatory agencies, and educational systems.

In this context of global cooperation, a search conference of African nursing leaders from six countries as well as representatives from the International Council of Nurses, the Association of Nurses in AIDS Care (U.S.), and the Department of Health and Human Services (U.S.) participated in the *Regional Leadership Summit on HIV and AIDS Nursing Education, Practice and Policy* held in St. Lucia, South Africa in June 2008. The search conference approach (Emery, 1996), a type of participatory action methodology, was used to identify and critically examine issues, establish priorities, and formulate a plan for nursing's contribution in addressing these complex issues. At the closing session, summit participants identified a Regional Lead Team of nursing leaders to work collaboratively in formulating a work plan to prioritize and address the identified issues during the Summit. The members of the Regional Lead Team met throughout 2008-2009 to address the critical priorities identified from the Summit.

Using a participatory action framework, the members of the Regional Lead Team identified as priority the need "to strengthen capacity of nursing to address the HIV and AIDS epidemic through the establishment of core competencies specific to nursing" (Relf et al., 2011). As a result, *The Essential Nursing Competencies related to HIV and AIDS* were developed on the basis of the meetings held with nursing leaders in each of the six participating countries (Botswana, Lesotho, Malawi, South Africa, Swaziland, and Zimbabwe), the efforts of the Regional Lead Team, and an expert consensus panel convened in Durban, South Africa in March-April 2009.

### **Competencies: What Are They and Why Are They Important?**

Over the past decade, accreditation and regulatory bodies providing oversight of institutions preparing health professionals; accreditation and regulatory organizations for clinics, hospitals, home health

agencies, hospices, and clinical laboratories; governmental organizations regulating the practice of licensed health professionals; health profession's councils and associations; and global health organizations, like WHO (WHO/AFRO, 2007a,b) and International Council of Nurses (ICN, 2008a); have documented the need for competency-based preservice education, competency-based orientation of clinicians, continuing competency validation as part of licensure renewal, and the critical need to have clearly identified competencies to support the efficient and effective use of resources, including human resources, in the delivery of nursing care. As defined by WHO, professional competence "is the ability to effectively and efficiently deliver a specified professional service" (WHO, 1993b, p. 4). This "implies that the nurse is able to practise at a proficiency (mastery of learning) in accordance with local conditions to meet local needs" (p. 4). To achieve professional competence, or competencies required of a professional, students must demonstrate terminal competencies "upon completion of basic education which should match as closely as possible professional competencies" (WHO, 1993b, p. 4).

Competence is comprised of three elements—knowledge, skills, and attitudes (ICN, 2008a; WHO, 1993b). Knowledge includes the mental abilities and cognitive learning that results from didactic instruction or continuing education and/or in-service education. Skills comprise the motor abilities to deliver care as well as the communicating and interacting abilities necessary to be a contributing member of the multidisciplinary team. Attitudes consist of the ability to use cognitive learning, to critically think in real life situations, and to make appropriate decisions on the spot (WHO, 1993b).

Consequently, in an era of scarce resources, combined with the complexities of nursing care of HIV and AIDS, it is essential that nurses demonstrate competence in the prevention, care, and treatment they provide in partnership with individuals, families, and communities infected and affected by HIV and AIDS. When competencies are identified, it is then possible to determine their application within the disciplines of nursing and midwifery to include not only the professional nurse and midwife but also the enrolled nurse, auxiliary nurse, health worker, home care attendant, and skilled birth attendant.



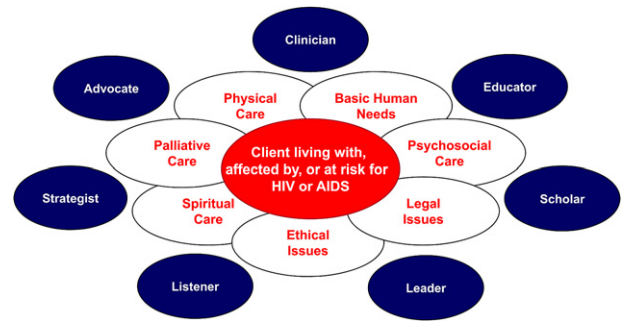
## Competence Development Methodology

In developing the essential competencies for nursing related to HIV and AIDS, a participatory action approach of regional nursing experts from the sub-Saharan African region, including educators, clinicians, and policy/regulatory experts, was used. From the outset, the participating nurse leaders from the region viewed the competencies related to HIV and AIDS as supplemental to the general competencies expected of all nurses that were achieved as a result of education, training, examination, and licensure. The general nursing competencies serving as the basis for refinement in the context of HIV and AIDS were those published by the ICN entitled *Nursing Care Continuum – Framework and Competencies* (ICN, 2008a).

The primary operating assumption of the regional nursing leaders involved in the development of the HIV and AIDS nursing competency process focused on regional collaboration. This collaboration was essential because of the following reasons:

- It facilitated sharing of expertise and resources through a South-to-South collaboration of nursing leaders;
- It expanded partnerships and networks to reduce duplication of efforts and to facilitate action;
- It mitigated the effects of regional migration of nurses; and
- It established a regional network for sharing best practices related to task-shifting.

The participating nurse leaders unanimously supported the development of essential nursing competencies for HIV and AIDS if the competencies were comprehensive in nature, holistic in approach, and not merely focused on ART delivery. To be comprehensive, the participating nursing leaders firmly articulated that the identified competencies must address the cognitive, affective, psychomotor domains specific to HIV and AIDS as well as the professional expectations of nurses related to HIV and AIDS. Finally, to address the complex issues associated with HIV and AIDS, the nurse leaders participating in the development process supported a holistic approach examining the contribution of nursing across the care continuum (prevention, care, and treatment) while also addressing the psychosocial,



**Figure 1.** A holistic perspective of HIV and AIDS nursing practice.

spiritual, ethical perspective, individual, and community level stigma associated with the disease as well as the essential leadership, mentoring, and professional development required of nurses and nursing.

Figure 1 illustrates the complex nature of HIV and AIDS nursing care. The client, delineated in the middle of the graphic, is defined as the individual, family, and/or community living with, at risk for, and/or affected by HIV and AIDS. Surrounding the client are the nursing care activities demonstrating the complex, multilevel needs of persons living with, affected by, or at risk for HIV or AIDS. In partnering with the client to address these needs, the nurse uses many roles, which are illustrated in the outer circles.

### The Essential Competencies for Nursing Related to HIV and AIDS

In accordance with the requirement self-imposed by the Regional Lead Team, and supported by the external stakeholders convened for the expert consensus panel, the identified essential competencies are holistic in nature and address the complex, multilevel issues surrounding the HIV and AIDS epidemics (please see Table 1). Both the Regional Lead Team and the expert consensus panel felt that to be meaningful and applicable, there were several issues that must be considered.

- First, the essential competencies must be adapted to the spectrum of care delivery, the care setting, and within the scope and standards of care for nursing specific at a country, provincial, or local level.

**Table 1. The Essential Nursing Competencies Related to HIV and AIDS**

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| Care, Treatment, and Prevention of HIV and AIDS   |  |
|   | Distinguish between the normal functioning immune system and an HIV compromised immune system;   |
|   | Appropriately stage the HIV client on the basis of analysis of clinical manifestations in accordance with WHO guidelines;  |
|   | Develop with the client an individualized risk reduction plan for HIV to positively influence behaviors;   |
|   | Consistently apply principles of prevention of mother-to-child transmission (PMTCT) of HIV;  |
|   | Provide HIV counseling appropriate to client needs in all encounters with the health care system;  |
|   | Make appropriate decisions in the provision of postexposure prophylaxis;   |
|   | Make appropriate decisions to plan and implement evidenced-based nursing interventions in the clinical management of persons living with HIV- and AIDS-related conditions across the lifespan; |
|   | Make appropriate decisions regarding management of clients on ART (assessment, initiation, and follow-up).   |
| Psychosocial, Spiritual, and Ethical Issues related to HIV and AIDS                       |  |
|   | Support clients to accept and positively cope with an HIV diagnosis and its psychosocial and emotional consequences;   |
|   | Support clients spiritually;   |
|   | Incorporate clients' beliefs, values, lifestyles, and cultures into the holistic plan of care within evidenced-based standards;  |
|   | Effectively support clients' decisions regarding disclosure of their HIV serostatus;   |
|   | Effectively support clients in their efforts to live positively with HIV and AIDS and plan for life events;  |
|   | Positively influence perceptions and empower communities to reduce HIV-related stigma;   |
|   | Effectively assist clients to address the consequences of HIV related stigma.  |
| Psychomotor Skills Necessary to Provide HIV and AIDS Nursing Care                         |  |
|   | Demonstrate the correct technique for performing skills related to HIV and AIDS diagnosis and management;  |
|   | Demonstrate the correct technique for specimen collection related to HIV and AIDS diagnosis and management;  |
|   | Demonstrate the appropriate use of universal precautions and the principles of prevention and control of infection;  |
|   | Demonstrate safe injection techniques to reduce the risk of HIV transmission;  |
|   | Demonstrate safe use and disposal of sharps to reduce the risk of HIV transmission;  |
|   | Demonstrate applicable and relevant clinical assessment skills required in the provision of nursing care for common opportunistic infections and diseases related to HIV and AIDS;             |
|   | Demonstrate correct application and safe removal of condoms (male/female) in prevention of HIV and other sexually transmitted infections (STIs).   |
| Professional Expectations Required of Nurses in the Delivery of HIV and AIDS Nursing Care |  |
|   | Translate evidenced-based knowledge to deliver quality nursing care for persons living with, at risk for, or affected by HIV and AIDS;   |
|   | Clarify one's own values, beliefs, lifestyle, and culture;   |
|   | Adhere to the core ethical principles of the nursing profession in the provision of care for clients living with, at risk for, or affected by HIV and AIDS;                                    |
|   | Effectively communicate, coordinate, and document the care of the client living with HIV or AIDS as a member of the multidisciplinary team;  |
|   | Correctly collect, analyze, interpret, and communicate data for decision-making to improve health outcomes for clients with, at risk for, or affected by HIV and AIDS;                         |
|   | Facilitate linkages with community programs and local resources in the provision of care for clients living with, at risk for, or affected by HIV and AIDS;                                    |
|   | Effectively supervise and mentor other health care providers involved in the spectrum of HIV and AIDS care and treatment; and  |
|   | Take personal responsibility to proactively address the effect of the HIV epidemic on oneself as a care giver.   |

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- Second, the essential nursing competencies related to HIV and AIDS must be leveled to the composition of the nursing workforce in the respective country, province, hospital, or clinic similar to the leveling done in the *Nursing Care Continuum – Framework and Competencies (ICN, 2008a)*. Thus, adaptation of these essential competencies for nursing related to HIV and AIDS needs to match the scope of practice and the composition of the nursing workforce so that they will be most meaningful and reasonable.
- Third, when adapted to meet the needs at the regional, country, or local level, the following nursing competencies related to HIV and AIDS should be used to:
  - Redesign nursing curricula to produce a competent nursing workforce prepared to enter practice, ready to address the complex individual,

family, community, and societal issues related to HIV and AIDS,

- Evaluate nursing regulations governing nursing practice in the context of HIV and AIDS, and
- Deliver capacity building programs that expand and validate the competence—including the knowledge, skills, and attitudes—of the nursing workforce already in practice.

Finally, these essential nursing competencies related to HIV and AIDS can help to clarify the role of the nurse in addressing the HIV and AIDS epidemics. Furthermore, they provide a mechanism for the discipline of nursing to strengthen its capacity to deliver and evaluate contributions to the health and well-being of individuals, families, communities, and societies that are affected by HIV and AIDS.

### Summary

The identified essential nursing competencies related to HIV and AIDS are powerful instruments to strengthen the capacity of the nursing profession to address the HIV and AIDS epidemics in sub-Saharan Africa. These competencies can be a resource to practicing nurses, nurse educators, professional nursing associations, nursing councils, ministries of health, funding agencies, and health care agencies to support the ability of nursing to provide holistic care to individuals, families, and communities infected or affected by HIV and AIDS. A detailed description of the essential competencies as well as supporting references reviewed in their development and resources available for strengthening nursing capacity in the context of HIV and AIDS is provided in Appendix 2.

## ESSENTIAL NURSING COMPETENCIES RELATED TO HIV AND AIDS

Worldwide, the Joint United Nations Programme on AIDS (UNAIDS) estimates that nearly 33 million adults and children (30.3-36.1 million) were living with HIV or AIDS in 2007 (UNAIDS, 2008), with sub-Saharan Africa continuing to be the most affected region. An estimated 22 million adults and children in this region were living with HIV or AIDS in 2007 (20.5-23.6 million), whereas an estimated 1.9 million

persons (1.6-2.1 million) were newly infected with HIV (UNAIDS, 2008). Overall, in 2007, sub-Saharan Africa accounted for 67% of all people living with HIV and 75% of AIDS-related deaths (UNAIDS, 2008).

Seven southern African countries—Botswana, Lesotho, Namibia, South Africa, Swaziland, Zambia, and Zimbabwe—experienced adult HIV prevalence rates exceeding 15% (UNAIDS, 2008). In Botswana, Malawi, and Zambia, recent surveillance data from antenatal clinics suggest that the epidemic might be stabilizing (UNAIDS, 2008). However, in Lesotho, prevalence rates among pregnant women continue to increase (UNAIDS, 2008). Although South Africa's epidemic might not be growing in size, there is minimal evidence of a significant change in the HIV-related behavior that could decrease the magnitude of the epidemic. Subsequently, with 5.7 million South Africans living with HIV or AIDS, it remains the nation with the largest number of people living with HIV in the world. Finally, in 2006, Swaziland documented the highest ever seroprevalence rate in a national population-based sample at 26% (UNAIDS, 2008).

In 1990, southern Africans had a life expectancy of approximately 61 years at birth, an increase from approximately 45 years in 1950. However, as a consequence of the HIV and AIDS epidemics, life expectancy has declined substantially in many southern African countries (UNAIDS, 2008). In Swaziland, for example, the life expectancy for a child born today is estimated to be around 30 years, whereas in South Africa it is around 45 years.

Although significant progress has been achieved in reducing mother-to-child transmission of HIV, the vast majority of children living with HIV or AIDS acquired the infection through this route. Globally, children aged <15 years account for one in six AIDS-related deaths and one in seven new HIV infections. Furthermore, according to UNAIDS, "some 15 million children under age 18 have lost one or both parents to AIDS and countless children become responsible for the care of their siblings and other family members when parents are debilitated by poor health" (<http://www.unaids.org/en/PolicyAndPractice/KeyPopulations/ChildAndOrphans/>, accessed 1 December 2009). Children who have lost one or both parents are frequently subjected to discrimination and are less likely to receive health care, education, and other critical services. Additionally, child



headed households or children living on the streets are at an even higher risk for exploitation, abuse, exposure to HIV, and poverty (UNAIDS & UNICEF, 2004).

These epidemiological trends indicate that a response to HIV and AIDS will be challenging because of the magnitude of the pandemic. Increased funding for prevention, care, and treatment from governments within the sub-Saharan African region as well as globally has increased resources to comprehensively address the epidemics in sub-Saharan Africa. As a result, programs to prevent mother-to-child transmission are expanding, services for orphans and vulnerable children are being implemented, and access to antiretroviral therapy (ART) is now being rolled out across the region with the goal of improving life expectancy, decreasing suffering, and providing hope.

However, despite increased resources, the limited numbers of African health care professionals available to address the epidemic will only add to the challenges in this region. Critical to addressing these issues, but particularly to the roll out of ART, is the availability of a competent, sustainable nursing workforce. In relation to ART, this workforce must demonstrate the capacity to initiate and maintain ART while evaluating effectiveness, monitoring for side effects, reducing the incidence of drug-drug interactions (including those drug interactions related to therapies provided by traditional healers), promoting adherence to therapies, and providing management of symptoms.

Furthermore, comprehensive prevention programs require knowledgeable and skilled nurses and community health workers to provide evidenced-based interventions to prevent new infections while increasing patients' knowledge about their serostatus through counseling and testing. For those at the end-of-life stage, palliative care nursing interventions require nurses who are not only available but also trained to coordinate, deliver, and evaluate state-of-the-science interventions that are culturally relevant and sensitive. Finally, preventing mother-to-child transmission also requires available nurses who are knowledgeable about reproductive health and the scientific basis of preventing infection during pregnancy.

In much of sub-Saharan Africa, the physician workforce is limited or almost nonexistent. For example, in Lesotho, Malawi, and Zambia, the ratio of physicians to population is  $\leq 1:10,000$  (World Health Organization [WHO], 2008a). Throughout

this region, nurses (registered, enrolled, and auxiliary) comprise the largest number of health care providers, although their shortage is also often extreme. Narasimhan et al. (2004) stated that "In most low-income countries, there is insufficient human capacity to absorb and apply newly mobilized resources because the workforce is unavailable" (p. 1469).

Throughout the region, the migration of nurses, not only from rural to urban, but also from inter-country within as well as outside of the region, has reduced the availability of human resources addressing the HIV and AIDS epidemics (WHO & World Bank, 2002). Additionally, HIV and AIDS, as well as tuberculosis, are yielding monumental workloads, while simultaneously reducing the workforce of health care providers (Narasimhan et al., 2004). Furthermore, Samb et al. (2007) stated that "poor working conditions and low pay conspire with the risk of occupational transmission and the stress of working in communities devastated by the HIV epidemic to drive up rates of attrition" (p. 2510).

In many countries, the number of nursing students completing their education and entering the workforce frequently does not equal the number of nurses leaving the workforce because of declining health (HIV, AIDS, TB, or other chronic conditions), retirement, or migration (Hongoro & McPake, 2004). Furthermore, it is estimated that between 18% and 41% of the workforce, including health workers, is infected with HIV in many sub-Saharan African countries (Cohen, 2002; Narasimhan et al., 2004).

With decreasing life expectancies in many sub-Saharan African countries as a result of AIDS, at least 1 million additional health workers, including nurses, are needed to offer basic services as recommended by the World Bank (Chen et al., 2004; Sheldon, 2006). On the basis of the research in Tanzania and Chad, Kurowski et al. (2004) estimated that the sub-Saharan African countries need nearly 1.4 million health care workers, specifically, 720,000 physicians and 670,000 nurses (Hangoro & McPake, 2004).

When examining the estimated number of people needing ART compared with those already using it, there is a significant need for expansion of antiretroviral roll-out across the sub-Saharan African region. Again, expanding ART to persons eligible requires nurses to be available, knowledgeable, and retained.

To address these complex issues, a group of nursing leaders participated in the Regional Leadership Summit on HIV and AIDS Nursing Education, Practice and Policy held in St. Lucia, South Africa, in June 2008. Summit participants identified a Regional Lead Team of nursing leaders, from Botswana, Lesotho, Malawi, South Africa, Swaziland, and Zimbabwe, to work collaboratively to formulate a work plan for the issues identified from the Summit. The members of the Regional Lead Team met throughout 2008-2009 to address the critical priorities identified from the Summit.

Using a participatory action approach, the members of the Regional Lead Team identified the need “to strengthen capacity of nursing to address the HIV and AIDS epidemic through the establishment of core competencies specific to nursing” as a priority. As a result, The Essential Nursing Competencies related to HIV and AIDS were developed on the basis of the meetings held with nursing leaders in each of the six participating countries (Botswana, Lesotho, Malawi, South Africa, Swaziland, and Zimbabwe), the efforts of the Regional Lead Team, and an expert consensus panel convened in Durban, South Africa in March-April 2009.

### **Competencies: What Are They and Why Are They Important?**

Over the past decade, accreditation and regulatory bodies providing oversight of institutions preparing health professionals; accreditation and regulatory organizations for clinics, hospitals, home health agencies, hospices, and clinical laboratories; governmental organizations regulating the practice of licensed health professionals; health profession’s councils and associations; and global health organizations, like WHO and International Council of Nurses (ICN) have documented the need for competency-based preservice education, competency-based orientation of clinicians, continuing competency validation as part of licensure renewal, and the critical need to have clearly identified competencies to support the efficient and effective use of resources, including human resources, in the delivery of nursing care.

In 1993, the Regional Office for the Western Pacific of WHO released the Integrating HIV-related Content into a Competency-Based Curriculum (WHO, 1993b).

This document declared that nurses require more and different knowledge and skills than what were needed in the past as a result of societal change, technological advances, the changing patterns of disease, and scientific progress. After almost 20 years, societies continue to change as a result of globalization of economies, civil unrest, and global migration, even that of health care workers. Simultaneously, as societies change so do patterns of the disease.

The global community collectively and the sub-Saharan African region in particular continue to be challenged by the changing patterns of the disease, especially communicable diseases like HIV, H1N1 influenza, severe acute respiratory syndrome (SARS), multi-drug-resistant tuberculosis (MDR-TB), extreme drug-resistant tuberculosis (XDR-TB). Furthermore, technological advances, such as electronic medical records and point-of-care testing, as well as requirements to demonstrate the outcomes and effectiveness have necessitated the integration of informatics into clinical practice. Specifically, in relation to HIV and AIDS, scientific advances have yielded a better understanding of the mechanisms associated with viral replication resulting in the development of new classes of antiretroviral drugs, the mechanisms associated with resistance and strategies to manage it, and evidence-based interventions to promote antiretroviral readiness and adherence. However, just increasing the awareness, knowledge, and skills of these issues and advances among nurses does not automatically result in proficiency, mastery, or competence.

As defined by WHO, professional competence “is the ability to effectively and efficiently deliver a specified professional service” (WHO, 1993b, p. 4), which “implies that the nurse is able to practise at a proficiency (mastery of learning) in accordance with local conditions to meet local needs” (p. 4). To achieve professional competence, or competencies required of a professional, students must demonstrate terminal competencies “upon completion of basic education, which should match as closely as possible professional competencies” (WHO, 1993b, p. 4).

The ICN (2008a) defines competence as “the effective application of a combination of knowledge, skill, and judgment demonstrated by an individual in daily practice or job performance. In nursing definitions, there is wide ranging agreement that, in the

performance of nursing roles to the standards required in employment, competence reflects the following:

- Knowledge, understanding, and judgement;
- A range of skills, cognitive, technical or psychomotor and interpersonal; and
- A range of personal attributes and attitudes” (ICN, 2008a, p. 40).

Therefore, competence comprises three elements—knowledge, skills, and attitudes (ICN, 2008a; WHO, 1993b). Knowledge includes the mental abilities and cognitive learning that results from didactic instruction or continuing education and/or in-service education. Skills comprise the motor abilities to deliver care as well as the communicating and interacting abilities necessary to be a contributing member of the multidisciplinary team. Attitudes consist of the ability to use cognitive learning, to critically think in real life situations, and to make appropriate decisions on the spot (WHO, 1993b).

Consequently, in an era of scarce resources, combined with the complexities of nursing care of HIV and AIDS, it is essential that nurses demonstrate competence in the prevention, care, and treatment they provide in partnership along with individuals, families, and communities infected and affected by HIV and AIDS. When competencies are identified, it is then possible to determine their application within the disciplines of nursing and midwifery to include not only the professional nurse and midwife but also the enrolled nurse, auxiliary nurse, health worker, home care attendant, and skilled birth attendant.

### **Intended Use and Application of this Article**

Whether at a birthing center or hospice, acute care setting or primary care clinic, an urban university teaching hospital or a rural infirmary, a neonatal care unit or an adult palliative care unit, nurses are caring for individuals, families, and communities both infected and affected with HIV and AIDS. Furthermore, across the globe, there are, and will continue to be, nurses who are also living with HIV or AIDS, caring for a child or family member with HIV or AIDS, living in a community devastated by HIV or AIDS, and struggling with the epidemic grief associated with HIV and

AIDS. Consequently, regardless of the practice setting or the client population, the application of essential competencies related to HIV and AIDS nursing practice is critical to provide holistic, comprehensive care (Relf et al., 2011).

In 2008, the ICN published *Nursing Care Continuum – Framework and Competencies* (ICN, 2008a). In this document, competencies were identified for the range of nursing personnel—nursing support worker; enrolled, registered, or license practical nurse; registered or licensed nurse; nurse specialist, and advanced practice nurse—most commonly found in the 129 ICN member countries. This document identified “competencies expected of a generalist nurse at the point of entry into professional practice” (p. 9), which fall under the three following domains: professional, ethical, and legal practice; care provision and management; and professional, personal, and quality development. Furthermore, the ICN has published various other documents in its ICN Regulation Series or its Standards and Competencies Series that are important documents to refer to in relation to competencies. They include the following:

- The Scope of Practice, Standards, and Competencies of the Advanced Practice Nurse (ICN, 2008b);
- ICN Framework of Competencies for the Nurse Specialist (ICN, 2009);
- International Competencies for Telenursing (ICN, 2007); and
- The ICN Framework and Core Competencies for the Family Nurse (ICN, 2003).

This article is meant to serve as a compendium to these and other articles that describe the scope of practice, standards of practice, and competencies essential for clinical practice related to nursing. Specifically, the members of the Regional Lead Team developing this article and the expert consensus panel endorsing the essential nursing competencies related to HIV and AIDS used the *Nursing Care Continuum – Framework and Competencies* published by ICN in 2008 as a building block (ICN, 2008a).

Furthermore, both the Regional Lead Team and the expert consensus panel felt that to be meaningful and applicable, there were several issues that must be considered.

- First, the essential competencies must be adapted to the spectrum of care delivery, the care setting, and within the scope and standards of care for nursing specific at a country, provincial, or local level.
- Second, the essential nursing competencies related to HIV and AIDS must be leveled to the composition of the nursing workforce in the respective country, province, hospital, or clinic similar to the leveling done in the *Nursing Care Continuum – Framework and Competencies* (ICN, 2008a). Thus, adaptation of these essential competencies for nursing related to HIV and AIDS needs to match the scope of practice and the composition of the nursing workforce so that they will be most meaningful and reasonable.
- Third, when adapted to meet the needs at the regional, country, or local level, the following essential nursing competencies related to HIV and AIDS should be used to:
  - Redesign nursing curricula to produce a competent nursing workforce prepared to enter practice, ready to address the complex individual, family, community, and societal issues related to HIV and AIDS,
  - Evaluate nursing regulations governing nursing practice in the context of HIV and AIDS, and
  - Deliver capacity building programs that expand and validate the competence—including the knowledge, skills, and attitudes—of the nursing workforce already in practice.

Finally, these essential nursing competencies related to HIV and AIDS can help to clarify the role of the nurse in addressing the HIV and AIDS epidemics. Furthermore, they provide a mechanism for the discipline of nursing to strengthen its capacity to deliver and evaluate contributions to the health and well-being of individuals, families, communities, and societies that are affected by HIV and AIDS.

### **Application to Preservice Nursing Education**

In 2008, WHO and the Global Health Workforce Alliance stated, “pre-service curricula that emphasize lifelong learning and relevant health issues and competencies better prepare graduates for in-service work and on-going training” WHO/GHWA, 2008, p. 50. Similarly, the African office of WHO (WHO/

AFRO, 2007a), in its 2007 document, WHO Guidelines for Implementing Strategic Directions for Strengthening Nursing and Midwifery Services in the African Region, 2007-2017, declared that “promoting the development of competent practitioners who have the required core competencies (skills and knowledge) for all nursing and midwifery practice at pre-registration and post-registration levels” is essential (WHO/AFRO, 2007a, p. 15).

In 2007, WHO/AFRO (2007b) released guidelines for evaluating basic nursing and midwifery education and training programs for the African Region. This document established the basic standard for educational outcome as follows:

“The nursing and midwifery school must define the competencies that students should exhibit on graduation in relation to their subsequent training and future roles in the health system” (p. 20).

These competencies, building upon the evidence documented by the WHO and the ICN, can serve as a tool for preservice nursing programs to critically evaluate current curricula in the context of HIV and AIDS. Particularly, in sub-Saharan Africa where the epidemics are so great, it is essential that these competencies build upon the competencies required of all nurses as outlined by ICN in 2008 (ICN, 2008a).

### **Application to In-service Education or Capacity Building**

Across the sub-Saharan African region and across the globe, there has been significant investment in activities that increase the nursing capacity. Many of these early activities focused on increasing the workforce capable of supporting ART roll-out. With an increasing number of individuals on ART and as a consequence of task shifting, nurses are now initiating ART, evaluating effectiveness, managing side-effects, and coordinating the care for persons stabilized on ART. However, the HIV and AIDS epidemics need more than just pharmacologic intervention. New HIV infections are reported daily, requiring nurses to individualize prevention efforts on the basis of evidences that are grounded in the cultural context of the community and remain sensitive to the gender roles and norms of the society. The ethical, spiritual, legal, and societal responses to HIV



and AIDS have always been, and continue to be, complex. Consequently, nurses must be prepared to protect the autonomy of the individual yet facilitate planned disclosure anticipating the many negative consequences in partnership with the person living with HIV or AIDS.

As described by WHO and the Global Health Workforce Alliance in 2008, lifelong learning is fundamental to professionalism and optimizing the quality of care delivered regardless of the disease (WHO/GHWA, 2008). Therefore, with ongoing advances in preventing, diagnosing, treating, and supporting persons living with HIV or AIDS, including those affected, it is critical to support lifelong learning through capacity building or in-service programs. Again, as in preservice education, these competencies can serve as a framework to health care organizations validating the competencies of nurses in relation to HIV and AIDS or to capacity building programs funded to enhance the ability of nursing to comprehensively address the complex issues related to the HIV and AIDS epidemics.

### **Application to Regulation and Policy**

With the shortage of health care providers, task sharing and shifting becomes essential in the delivery of services and care. However, many national nurse practice acts and regulatory documents are outdated and do not match the contemporary scope of practice demands of nurses. With the identification and acceptance of essential competencies for nursing related to HIV and AIDS, it is possible to revise regulations to ensure and accept competencies as a framework to ensure a standard of care, it is possible for policy makers to refine regulations and practice acts. Furthermore, these competencies can serve as a tool for regulatory bodies to qualify (or certify) nurses in the practice of HIV and AIDS nursing. Additionally, regulatory bodies can use these competencies as a mechanism for curricular restructuring to prepare the next generations of nurses skilled to care for persons infected or affected by HIV and AIDS.

### **Competency Development Methodology**

In developing the essential competencies for nursing related to HIV and AIDS, a participatory

action approach of regional nursing experts including educators, clinicians, and policy/regulatory experts was used.

From the outset, the participating nurse leaders viewed the competencies related to HIV and AIDS as supplemental to the general competencies expected of all nurses that were achieved as a result of education, training, examination, and licensure. The general nursing competencies serving as the basis for refinement in the context of HIV and AIDS were those published by the ICN entitled *Nursing Care Continuum – Framework and Competencies* (ICN, 2008a).

The primary operating assumption of the nursing leaders involved in the development of the HIV and AIDS nursing competency process focused on regional collaboration. This collaboration was essential because of the following reasons:

- It facilitated sharing of expertise and resources through a South-to-South collaboration of nursing leaders;
- It expanded partnerships and networks to reduce duplication of efforts and to facilitate action;
- It mitigated the effects of regional migration of nurses; and
- It established a regional network for sharing best practices related to task shifting.

Furthermore, the participating nurse leaders unanimously supported the development of essential nursing competencies for HIV and AIDS if the competencies were comprehensive in nature, holistic in approach, and not merely focused on ART delivery. To be comprehensive, the participating nursing leaders firmly articulated that the identified competencies must address the cognitive, affective, and psychomotor domains specific to HIV and AIDS as well as the professional expectations of nurses related to HIV and AIDS. Finally, to address the complex issues associated with HIV and AIDS, the nurse leaders participating in the development process supported a holistic approach examining the contribution of nursing across the care continuum (prevention, care, and treatment) while also addressing the psychosocial, spiritual, ethical perspective, individual, and community level stigma associated with the disease as well as the essential leadership, mentoring, and



professional development required of nurses and nursing.

Figure 1 illustrates the complex nature of HIV and AIDS nursing care. The client, delineated in the middle of the graphic, is defined as the individual, family, and/or community living with, at risk for, and/or affected by HIV and AIDS. Surrounding the client are the nursing care activities demonstrating the complex, multilevel needs of persons living with, affected by, or at risk for HIV and AIDS. In partnering with the client to address these needs, the nurse uses many roles, which are illustrated in the outer circles.

### Competencies as a Focus

In June 2008, The Regional Leadership Summit on HIV and AIDS Nursing Education, Practice and Policy was convened by the nurse capacity building program, Nurses Strengthening our AIDS Response, and the Department of Nursing Science from the University of Zululand (Republic of South Africa). The Summit organizers used a participatory action approach, which allowed the regional nursing leaders to identify contextual, system, professional, and regulatory issues affecting nursing education, practice, and policy related to HIV and AIDS to identify a way forward for the Southern Africa region.

To achieve the summit goal of engaging in a dialogue and discussion to build consensus on the critical issues related to HIV and AIDS nursing education, practice, and policy, the summit was organized to include a broad representation of nursing leaders throughout the region. Over 30 nursing leaders from Botswana, Malawi, South Africa, Swaziland, Zambia, the United States of America, and the ICN met for 3 days.

For this summit, the search conference approach was used (Emery, 1996). This methodology supported participatory action facilitating sustainability of action over time. The “searching” format brings together relevant stakeholders for a 2- to 3-day meeting to examine critical issues that are common to the stakeholders and where the opening session focuses on elucidating the factors of the contextual environment, in this case, the HIV and AIDS epidemics in sub-Saharan Africa.

Through the sessions with small and large groups, the “searching” format examined current contextual

issues and challenges and identified the issues most likely to affect the future. The content was contributed entirely by the members. In this participatory action approach, the staff—in this case, the staff of Nurses Strengthening our AIDS Response! and representatives from the United States—acted as facilitators only. The agreed-upon priority issues were listed without skepticism or criticism in the plenary session and then critically examined in greater depth in small groups with the composite regional picture being established by the large group. At the end, action steps were identified and a Regional Lead Team (see Appendix 4) was appointed to establish priorities and formulate a work plan.

### The Issues

As identified through consensus by the Summit participants, the prioritized goals to be addressed by the Regional Lead Team were as follows:

Goal 1: To strengthen the capacity to integrate HIV, AIDS, tuberculosis, and palliative care into pre-service nursing education.

Objective 1: To identify core competencies of licensed nurses related to HIV, AIDS, TB, and palliative care.

Objective 2: To develop a standardized curriculum for adaptation related to HIV, AIDS, TB, and palliative care.

Objective 3: To enhance partnerships between education, practice, national nursing associations, and national nursing councils that facilitate knowledge, skill, and ability of preservice students to deliver evidenced-based care related to HIV, AIDS, TB, and palliative care.

Goal 2: To strengthen and enhance the Southern African nursing community’s response to HIV and AIDS through development of a postgraduate nurse specialist program in HIV and AIDS.

Objective 1: To identify core competencies of advanced practice nurse specialists related to HIV and AIDS nursing.

Objective 2: To formalize regional partnerships to jointly design and implement a postgraduate nurse specialist in HIV and AIDS.

In October 2008, the Regional Lead Team met in Pretoria, South Africa. During the deliberations at this meeting, the representatives reviewed the preliminary summit report and provided guidance on areas to expand. Additionally, the group critically reviewed the many priorities identified by the June 2008 Summit Participants and determined that the first priority was to identify the essential competencies for nursing related to HIV and AIDS. Therefore, the Regional Lead team developed a comprehensive work plan to address this identified priority.

Further discussions focused on Goal 2, which relates to strengthening and enhancing the Southern African nursing community's response to HIV and AIDS through development of a postgraduate nurse specialist program in HIV and AIDS. After the essential competencies for nursing related to HIV and AIDS are endorsed by the countries participating in the Regional Summit, the Regional Lead Team then recommended conducting a needs assessment of key informants and stakeholders to determine the needs for a nurse specialist in HIV and AIDS. If there is identified need and support for a nurse specialist in HIV and AIDS, then the Southern African Nursing Leaders must reassemble to develop a work plan.

In February 2009, the Regional Lead Team met again and continued work on developing the essential competencies. At this meeting, the country representatives updated the group on the results of the meetings held with key stakeholders in the respective countries. At this meeting, the members of the Regional Lead Team critically examined the evidence supporting the need for essential competencies (Appendix 1) as well as the existing training and/or education programs identified that were related to HIV and AIDS nursing practice (Appendix 3). At the closure of the February 2009 meeting, the first draft of the essential nursing competencies related to HIV and AIDS was prepared.

In March/April 2009, the Regional Lead Team convened a regional stakeholders meeting (see Appendix 5) to critically examine the drafted essential competencies for finalization. At the closure of this meeting, through a participatory action approach using a consensus development methodology, the finalized essential competencies for nursing related to HIV and AIDS was prepared.

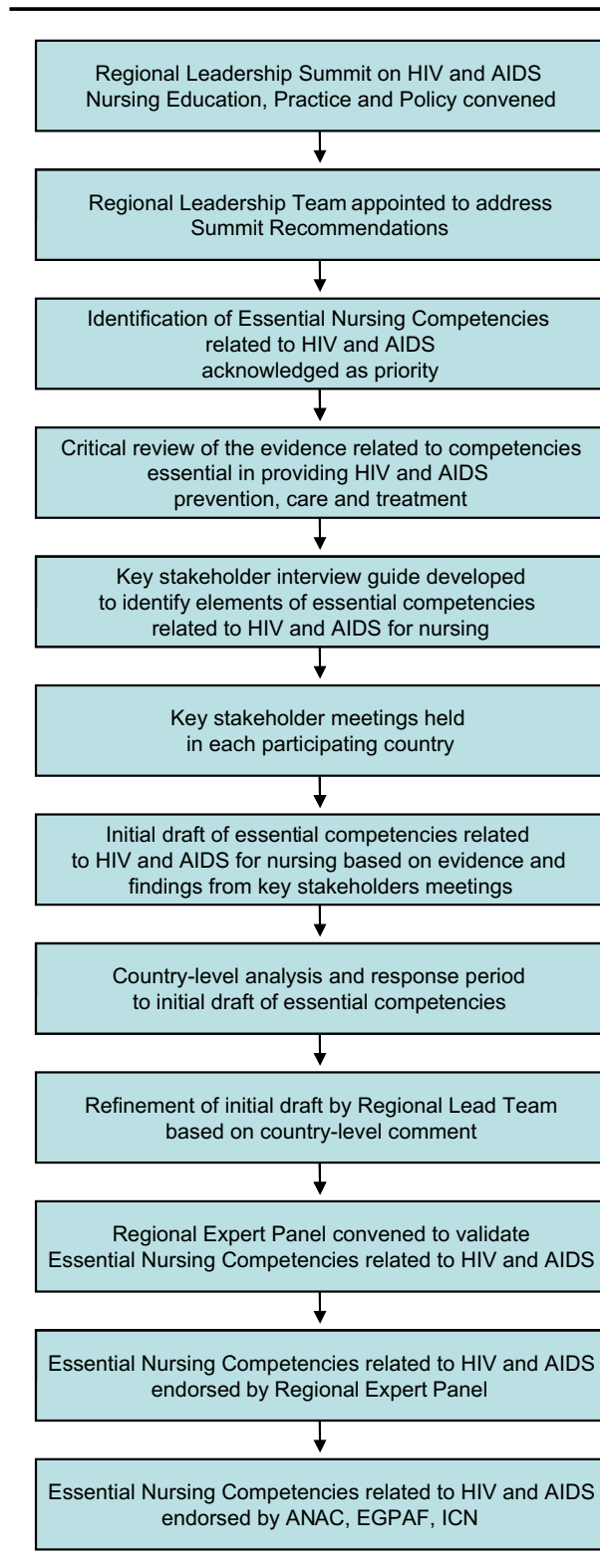


Figure 2. Competency development methodology.

Figure 2 provides a graphic illustration of the methodology used in developing the essential competencies for nursing related to HIV and AIDS.

### **The Essential Competencies for Nursing Related to HIV and AIDS**

In accordance with the requirement self-imposed by the Regional Lead Team, and supported by the external stakeholders convened for the expert consensus panel, the identified essential competencies are holistic in nature and address the complex, multilevel issues surrounding the HIV and AIDS epidemics.

Table 1 lists the identified essential competencies statements for nursing related to HIV and AIDS. In Appendix 2, a detailed description of the essential competencies is provided as well as references related to the competency element in brackets.

### **Summary**

The identified essential nursing competencies related to HIV and AIDS are powerful instruments to strengthen the capacity of the nursing profession to address the HIV and AIDS epidemics in sub-Saharan Africa. These competencies can be a resource to practicing nurses, nurse educators, professional nursing associations, nursing councils, ministries of health, funding agencies, and health care agencies to support the ability of nursing to provide holistic care to individuals, families, and communities infected or affected by HIV and AIDS. A detailed description of the essential competencies as well as supporting references reviewed in their development and resources available for strengthening nursing capacity in the context of HIV and AIDS is provided in Appendices 2 and 3.

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The Essential Nursing Competencies related to HIV and AIDS has been endorsed by the International Council of Nurses, the Elizabeth Glaser Pediatric AIDS Foundation, and the Association of Nurses in AIDS Care.

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## APPENDIX 1. EVIDENCE EVALUATED BY THE REGIONAL LEAD TEAM SUPPORTING THE NEED TO ESTABLISH ESSENTIAL COMPETENCIES FOR NURSING RELATED TO HIV AND AIDS

This section provides the justification from the published literature about the need for establishing core competencies in HIV and AIDS for health professionals. It is intended to provide an overview of the need for and role of competencies in providing preservice and in-service training and capacity building to ensure a qualified workforce to provide HIV and AIDS prevention, care, and treatment services.

**World Health Organization. (2008b). Planning human resources development to achieve priority health programme goals. Geneva, Switzerland: WHO.**

- “The first step in developing a human resources development and capacity building training approach focuses on the identification of core competencies that groups need to have in order to be able to fulfill the assigned tasks (e.g., for HIV treatment, the task: prescribe first line ART; competencies: ability to perform staging; ability to evaluate eligibility for treatment, etc.). The core competencies flow directly from the defined tasks of the care cadres, and once they are spelled out they will form the backbone of training curricula development. A comparison of required core competencies with pre-existing competencies of staff to be recruit(ed) leads directly to the identify of training curricula” (p. 11).
- “Certifying training for successful acquisition of competence through the training activity is in itself seen as an element of quality control for training providers, as they have to demonstrate that the training adheres to certain national standards” (p. 14).
- “Countries that decide to build in a certification component for trainees do so on the basis of nationally defined standards and procedure[s] that regulate (a) on what basis trainees will be awarded certification (including training content, training process, and outcome verification procedures), (b) what processes can be put in place to enable training issues such as certificates (e.g., accreditation of training providers” (p. 14).

**National HIV Nurses Association. (2007). National HIV nursing competencies. London, England: Mediscript Ltd.**

- “Nurses are integral to the delivery of optimum care to clients and the National HIV Nursing Competencies provide an exemplary framework for providing this care in primary, secondary and community settings” (p. iv).

**World Health Organization. (2005). Core competencies: Results from the International Consensus Meeting on HIV Services Delivery Training and Certification. Geneva, Switzerland: WHO.**

“Training and certification of health and community workers has been identified as a critical bottleneck in efforts to scale up antiretroviral therapy. WHO has committed, in strategy 7 of its ‘3 by 5’ plan, to ‘strengthen and build the human capacity for scaling up antiretroviral therapy.’ Action steps to achieve strategy 7 include:

- 7a Develop standardized training packages for the key competencies necessary for ‘3 by 5.’
- 7c Support countries in issuing certificates of HIV and AIDS competence” (p. 3).

“The key challenges for capacity-building and training at the country level include:

- Focusing training on the core competencies (knowledge, skills and attitudes) needed at the front line of service provision (p. 3).
- Competencies formulated as tasks reflect what needs to be done by whom within a chronic HIV care programme, which can then be tailored to produce suitable training materials” (p. 9).
- “This list of core competencies does not cover all competencies within all aspects of HIV and AIDS care. It is assumed that health workers will build on their preexisting experience in such fields as prevention, counselling, home-based care and end-of-life care. This list is meant to highlight the main tasks that are added to the portfolio of

competencies with the introduction of antiretroviral therapy” (p. 9).

- “An emergency response to scaling up training for health workers focuses primarily on building the core antiretroviral therapy–specific competencies upon already existing knowledge, skills and attitudes in an in-service setting. This emergency phase requires the immediate expansion of training programmes to ensure that as many workers are trained as possible within the shortest period of time. At the same time, mechanisms to support the sustainability of competency development must be examined. Pre-service training, for example, must include training on antiretroviral therapy as a component of an integrated approach to HIV and AIDS care and prevention. Universities and vocational programmes must begin immediately to train their students in these competencies so that, when they graduate in two to four years, they can join those already providing antiretroviral therapy” (p. 9).
- “Benchmarking. Clearly defined certification standards help to establish what competencies are expected from health workers. Certification can provide training providers with guidance in developing their courses with clear aims and standards in mind. The task for instructional designers to develop curricula becomes easier when they know at what levels the participants need to demonstrate the specific knowledge, skills and attitudes (competencies)” (p. 15).

**WHO & UNAIDS. (2004). Emergency scale-up of antiretroviral therapy in resource limited settings: technical and operational recommendations to achieve 3 by 5 (18-21 November 2003, Lusaka, Zambia). Geneva, Switzerland: WHO.**

- “Take emergency measures to expand the availability of health workers, including treatment supporters. Authorize trained and certified nurses or other health workers with equivalent clinical experience to initiate first-line standard regimen in people who do not have complications under the supervision of physicians and/or clinical officers” (p. 18).

**WHO. (2003a). Human capacity-building for scaling up HIV/AIDS treatment. Geneva, Switzerland: WHO.**

- “The proposed plan identifies five elements that are critical for building and sustaining human capacity for the 3 by 5 target at the point of service delivery:
  - Making available simple and appropriate training programmes on key competencies for antiretroviral therapy;
  - Designing country-specific approaches to training and human resource development;
  - Providing targeted technical assistance for rolling out training programmes;
  - Developing training certification and quality control mechanisms; and
  - Ensuring the availability of sufficient funds for implementing training” (p. 2).
- “Given the differences in task distribution between countries, training packages will focus on core competencies that are essential in team approaches to HIV and AIDS care and antiretroviral therapy at levels where the need for skilled personnel is greatest” (p. 4).
- “However, the unprecedented shortage of skilled individuals essential for achieving 3 by 5 requires a concerted international effort to rapidly expand the cadre of health professionals skilled in HIV and AIDS. International support for installing certification schemes at the national level can provide an important stimulus to expanding training opportunities and demand and can support national efforts to ensure the attainment of high-quality training” (p. 13).
- “Certificates of HIV and AIDS competence are of particular use to individuals if they enhance their employment progression, which is best achieved through national regulations and agreements. WHO can support this process by recommending appropriate standards and procedures, and reference to WHO standards can be added to certificates provided by training providers that have demonstrated that they adhere to WHO standards” (p. 13).
- “Providing certificates of HIV and AIDS competence to individuals who have successfully upgraded their skills in quality-assured training programmes will be an important part of

a comprehensive strategy for expanding the workforce to achieve 3 by 5” (p. 13).

- “WHO will work with appropriate national bodies in countries and with training providers to establish certification procedures that are in accordance with WHO quality standards for HIV and AIDS training. WHO will provide technical support to assess the appropriateness of training opportunities and authorize training providers that have demonstrated that they adhere to WHO standards to explicitly refer to WHO on the certificates” (p. 13).

**Medical Foundation for AIDS & Sexual Health. (2003). Recommended standards for NHS HIV services. London, England: British Medical Association.**

- “Throughout the standards there are important implications for training and professional development. Different types of training are appropriate depending on the competencies needed or intensity of involvement” (p. 22).
- “For post-registration nurses, there is no single standard specialist HIV training course universally available. Some universities offer the curriculum previously approved by the former English National Board for Nursing, Midwifery and Health Visiting (ENB), but provision is very variable around the country. A range of alternative multidisciplinary training, which nurses can access, is available throughout the country and addresses aspects of HIV prevention, treatment and care” (p. 23).
- “Healthcare workers in settings where HIV is not the main focus of work, such as primary healthcare, accident and emergency departments (A&E) or general medical wards, would benefit from training to develop a basic level of awareness about the aspects of HIV they may come across, such as identifying undiagnosed infection, as well as a grounding in relevant attitudinal and ethical issues” (p. 23).

**World Health Organization. (2002). Nursing role in HIV and AIDS care and prevention in South-East Asia region. New Delhi, India: WHO/Regional Office for South-East Asia.**

- “Wide ranging skills and competencies are required from nurses and midwives to combat the HIV epidemic in the Region” (p. 1).
- “The specific objectives of the review were:
  - To review activities being undertaken in nursing schools and colleges with regards to HIV and AIDS pre service and in service education of nurses and midwives;
  - To ascertain the role nurses and midwives play in HIV and AIDS prevention and care;
  - To assess knowledge, attitude and practice of nurses regarding HIV and AIDS;
  - To ascertain the participation of nursing/midwifery personnel in policy-making process of national AIDS control programme; and
  - To assess the level of collaboration between the national AIDS programme and nursing education and services” (p. 2).
- “A senior AIDS programme official admitted that nursing schools have often been overlooked. Private nursing schools and nurses of private hospitals appear to be excluded from information sharing and in service training open to government institutions” (p. 8).
- “...it is apparent that most countries in the Region have yet to develop standards and to identify key elements of HIV and AIDS that need to be included in nursing curriculum” (p. 11).
- “Content of HIV and AIDS curriculum taught in nursing schools. ...Topics listed were as follows: epidemiology, transmission, prevention, testing for HIV, nursing care of adults and children, care of ante and post natal women, health education for HIV and AIDS, counselling skills, post exposure prophylaxis and universal precaution” (p. 13).

## APPENDIX 2. DETAILED DESCRIPTION OF THE ESSENTIAL COMPETENCIES FOR NURSING RELATED TO HIV AND AIDS WITH SUPPORTING REFERENCES

This appendix includes a detailed description of the essential competencies for nursing related to HIV and AIDS. Following the competencies is a list of supporting references that provide evidence and/or support for the competency and its supporting elements.

In support of the *Nursing Care Continuum – Framework and Competencies* (ICN, 2008a) that established competencies in three domains – care provision and management; professional, ethical and legal practice; and professional, personal, and quality development – these essential nursing competencies related to HIV and AIDS support these domains and are organized as follows:

- Nursing Competencies: Care, Treatment, and Prevention of HIV and AIDS
- Nursing Competencies: Psychosocial, Spiritual, and Ethical Issues related to HIV and AIDS
- Nursing Competencies: Psychomotor Skills Necessary to Provide HIV and AIDS Nursing Care
- Nursing Competencies: Professional Expectation Required of Nurses in the delivery of HIV and AIDS Nursing Care

Note: Each competency statement is supported by references. Throughout Appendix 2, the supported references are numbered. The associated reference can be located in the master reference list; look for the reference number in brackets ([ ]) after the reference.

### Nursing Competencies: Care, Treatment, and Prevention of HIV and AIDS

#### 1. *Distinguish between the normal functioning immune system and an HIV compromised immune system.*

##### I. Immunology<sup>13,15,28,57</sup>

##### A. Humoral immunity

##### 1. B lymphocytes

(a) Antigen recognition

(b) Antibody development

##### 2. Alterations in HIV

##### B. Cellular immunity

##### 1. Types of cells

a. Lymphocytes

b. Macrophages

c. Neutrophils

d. Eosinophils

e. Basophils

f. Natural killer cells

g. T-lymphocytes

i. CD<sup>4+</sup>

ii. CD<sup>8+</sup>

##### 2. Alterations in HIV

#### II. HIV Virology<sup>6,9,15,22,27,48,49,55</sup>

##### A. Structure and classification of HIV

1. Lentivirus

2. Retrovirus

3. HIV and relation to Simian Immunodeficiency Virus (SIV)

##### B. Life cycle of HIV

##### C. Types/subtypes/clades of HIV

1. HIV-1

2. HIV-2

##### D. Mutations and resistance

#### III. Direct effect of HIV<sup>6,15,48,55</sup>

##### A. Neurologic system

1. Central nervous system

2. Peripheral nervous system

##### B. Hematologic system

##### C. Gastrointestinal system

##### D. Other body systems

#### IV. Natural history<sup>6,9,15,27,44,48</sup>

##### A. Disease progression

1. Acute retroviral syndrome or primary HIV infection

2. Window period

3. Asymptomatic chronic HIV infection

4. Symptomatic HIV infection

5. Advanced HIV infection

6. AIDS

7. Usual course

##### B. Cofactors associated with progression

##### C. Biological markers

1. Viral load

2. CD<sup>4+</sup> lymphocytes

3. Other



2. *Appropriately stages the HIV client based on analysis of clinical manifestations in accordance with WHO guidelines.*

- I. WHO staging, adults and adolescents<sup>9,13,48,49</sup>
    - A. Stage 1
    - B. Stage 2
    - C. Stage 3
    - D. Stage 4
  - II. WHO Staging, Children<sup>48</sup>
    - A. Stage 1
    - B. Stage 2
    - C. Stage 3
    - D. Stage 4
3. *Develop with the client an individualized risk reduction plan for HIV to positively influence behaviors.*
- I. Nursing and the National HIV and AIDS Control Programmes (country-specific)
  - II. Behavioral change programmes and interventions<sup>1,9,12,13,16,18,26,33,34,37,39,45,47-51</sup>
    - A. Risk reduction
    - B. Harm reduction
    - C. HIV prevention
    - D. Theories related to behavior change
    - E. Social networking
    - F. Communication
  - III. Types of prevention
    - A. Primary prevention
    - B. Secondary prevention
    - C. Tertiary rehabilitation
  - IV. Types of prevention programmes<sup>1,4,9,12,13,14,16,26,28,33,38,47,48,49,51</sup>
    - A. Awareness programmes/campaigns
      1. Road shows
      2. HIV awareness day
      3. National campaign
      4. Media
      5. Peer education
      6. Life skills
    - B. Blood safety
    - C. Positive living
      1. Prepregnancy planning
      2. Prevention of opportunistic infections
      3. Early diagnosis and treatment of opportunistic infections
      4. Adherence to treatment
      5. Support systems

6. Partner notification
  - D. HIV prevention and traditional practices
  - E. Nutrition and HIV and AIDS
  - V. Safer Sex<sup>1,12,18,26,28,31,34,35,38,45,48,55</sup>
    - A. Individualized assessment
    - B. Sexual behaviors and levels of risk
    - C. Abstinence, Be Faithful, Consistent Correct Condom Use, Decision-Making (ABCD)
    - D. STIs
    - E. Family planning and dual protection
  - VI. Injection Drug Use<sup>1,35,36,47,55,57</sup>
    - A. Harm reduction approach
      1. Abscess management
      2. Needle/syringe exchange
      3. Needle/syringe decontamination
      4. Substitution programmes
      5. Drop-in centres
      6. Detoxification/rehabilitation
      7. Pre- and post-prophylaxis and treatment
  - VII. Managing Sex Under the Influence of<sup>1</sup>
    - A. Alcohol
    - B. Drugs
    - C. Peers
  - VIII. Managing Stigma<sup>1,6,20,22,28,33,37,38,41</sup>
    - A. Individual
    - B. Family
    - C. Community and group
  - IX. Advocacy<sup>16,39</sup>
    - A. Effective negotiation
    - B. Trends and policies
  - X. Contextual<sup>1,54</sup>
    - A. Culture
    - B. Social environment
    - C. Economic environment
    - D. Political environment
  - XI. Information, Education, and Communication<sup>1,19,26,33,49,51</sup>
    - A. Development of relevant teaching material
    - B. Health literacy
4. *Consistently applies principles of PMTCT of HIV.*
- I. Elements of the National PMTCT Programme<sup>1,4,9,16,18,26,37,46,47,48,49,51</sup>
  - II. The Nurse's Role in PMTCT

- III. Risk Factors of Vertical Transmission of HIV (mother-to-child)<sup>51</sup>
  - A. Unprotected sex
  - B. Failure to test for HIV
  - C. Failure to adhere to medication regimen
- IV. Appropriate Interventions to reduce mother-to-child HIV infection<sup>9,13,16,18,36,45,48,49,51,55,57</sup>
  - A. During prepregnancy
  - B. During pregnancy
  - C. During labour and delivery
  - D. During postpartum
  - E. During infant/child feeding
- V. Promote follow-up care of mother and infant/child<sup>26,45,51</sup>
- 5. ***Provides HIV Counseling Appropriate to Client Needs in All Encounters With the Health Care System.***
  - I. Precounseling<sup>2,9,12,13,14,16,26,36,39,40,44,47,48,49,51,55</sup>
    - A. Tailors to specific population
      - 1. Children
      - 2. Adolescents
      - 3. Pregnant women
      - 4. Special groups
    - B. Ethical and legal consideration
      - 1. Informed consent
      - 2. Assent with children
  - II. HIV testing<sup>9,13,14,16,33,40,49,51,55</sup>
    - A. National guidelines
    - B. Accurate interpretation of results
  - III. Postcounseling<sup>6,14,16,47,55</sup>
    - A. Accurately and sensitively delivers results
    - B. Ethical and legal considerations
      - 1. Confidentiality
      - 2. Disclosure
  - IV. Counseling in HIV and AIDS<sup>4,13,18,28,33,37,47,49,55</sup>
    - A. Family planning in HIV and AIDS
    - B. End-of-life planning
    - C. Delivery of bad news
- 6. ***Makes appropriate decisions in the provision of postexposure prophylaxis.***
  - I. Postexposure Prophylaxis<sup>9,13,16,26,33,44,48,49,51</sup>
    - A. Definition
  - B. National PEP guidelines
    - 1. Risk assessment
    - 2. Treatment
    - 3. Follow-up
- II. Factors influencing exposure<sup>9,28,43,49,57</sup>
  - A. Occupational
  - B. Nonoccupational
    - 1. Sexual
    - 2. Nosocomial infection
    - 3. Unsafe injection practices
    - 4. Unsafe cultural practices
- III. Health promotion behaviors while taking PEP
  - A. Counseling
  - B. Support
  - C. Risk reduction interventions
  - D. Cultural considerations
- 7. ***Makes appropriate decisions to plan and implement evidenced-based nursing interventions in the clinical management of persons living with HIV- and AIDS-related conditions across the lifespan.***

(The nursing process is expected to be used in this competency)

  - I. Sexually Transmitted Infections (STIs) and HIV<sup>12,13,18,33,40,45,46,47,48,50,51</sup>
    - A. Factors influencing STI transmission
    - B. HIV and coinfections
    - C. Common manifestations
    - D. Syndromic management of STIs
  - II. Symptoms and Common Problems in HIV and AIDS<sup>8,12,33,47,48,49</sup>
    - A. Fatigue
    - B. Headache
    - C. Pain
    - D. Peripheral neuropathy
    - E. Nausea/vomiting
    - F. Wasting
    - G. Diarrhoea
    - H. Skin rashes/itching
    - I. Candidiasis
  - III. Nutrition<sup>16,48,49,51</sup>
    - A. Nutritional status
    - B. Relationship between HIV, AIDS, and nutrition
    - C. Common micronutrient deficiencies and interventions to address deficiencies

- IV. Pediatric considerations<sup>1,9,16,28,34,48</sup>
    - A. HIV testing
    - B. WHO staging
    - C. ART initiation, dosing, and management in children
    - D. Adherence: assessment, interventions, and evaluation in children
    - E. Symptom management plan
  - V. Palliative care plan<sup>8,28,33,48,49,51,55</sup>
    - A. Assess and manage pain
    - B. Holistic planning of care at end of life
  - VI. Planning and management of common OIs<sup>28,33,45,48,49,51</sup>
    - A. Pneumocystis
    - B. Tuberculosis
    - C. Cryptococcal meningitis
  - VII. Management of common HIV- and AIDS-related complications<sup>28,45,48,49</sup>
    - A. Renal
    - B. Cardiac
    - C. Neurologic
    - D. Gynecologic
8. *Makes Appropriate Decisions Regarding Management of Clients on ART (Assessment, Initiation, and Follow-up).*
- I. Regulatory issues related to ART<sup>13,16,31,33,34,37,40,44,45,47,48,49,51</sup>
    - A. National ART Treatment Guidelines
    - B. Prescribing versus initiation versus issuing
    - C. Dispensing
    - D. Scope of nursing practice
  - II. Pharmacologic effects of ART<sup>1,16,28,33,37,40,43,44,48,49</sup>
    - A. Dosing
    - B. Follow-up and management of care of clients on ART for effectiveness and related side-effects
      - 1. CD4/Viral Load
      - 2. Resistance Testing
      - 3. Liver Function Tests
      - 4. Lactate/Lactic Acid
      - 5. FBC, Hematocrit, Hemoglobin
    - C. Management of side-effects
    - D. Management and referral of complications and toxicities
      - 1. Clinical assessment
      - 2. Monitoring laboratory results
      - 3. Potential complications
        - i. Diabetes
        - ii. Lipodystrophy
        - iii. Lactic acidosis
- E. Management of drug interactions
- III. Readiness, adherence, and ART<sup>1,8,16,18,28,33,40,44,48,49,51</sup>
  - A. Assessment of readiness
  - B. Preinitiation teaching and counseling
  - C. Social support, disclosure, and ART
  - D. Adherence interventions
- IV. Indications for initiation of ART<sup>28,33,37,47,48,51,57</sup>
  - A. Clinical assessment and indication
  - B. WHO staging
- V. Determining treatment failure<sup>40,48</sup>
  - A. Laboratory determination
  - B. Clinical correlation
  - C. Referrals for clinical management
- Nursing Competencies: Psychosocial, Spiritual, and Ethical Issues Related to HIV and AIDS**
- 1. *Supports clients to accept and positively cope with an HIV diagnosis and its psychosocial and emotional consequences.*
    - I. Psychosocial and emotional response to diagnosis<sup>8,11,13,33,48,49</sup>
      - A. Initial Crisis
        - 1. Risk for suicide
        - 2. Engaging in reckless behaviors
      - B. Transition
        - 1. Relationships
        - 2. Fears
        - 3. Losses
      - C. Acceptance
        - 1. Positive living
        - 2. Active participation in health care
        - 3. Living in present and planning for the future
      - D. Re-engage in relationships
    - II. Social support systems<sup>1,4,8,11-13,16,17,28,33,49</sup>
      - A. Therapeutic use of self
        - 1. Advocacy
        - 2. Restoration of hope
        - 3. Empathy
        - 4. Companionship

- B. Impact on client
- C. Community resources
- D. Mobilizing support systems
- 2. ***Supports clients spiritually.***
  - I. Belief systems<sup>1,8,13,28,49</sup>
    - A. Client
    - B. Organized religion versus spirituality
  - II. Barriers to spiritual care
    - A. Personal barriers
    - B. Knowledge barriers
    - C. Environmental/institutional/situational barriers
  - III. Spiritual interventions<sup>1,8,13,33,49</sup>
    - A. Distress
    - B. Fatigue
- 3. ***Incorporates client's beliefs, values, lifestyle, and culture into the holistic plan of care within evidenced-based standards.***
  - I. Therapeutic environment<sup>1,54</sup>
    - A. Respect
    - B. Confidentiality
    - C. Acceptance
  - II. Client assessment<sup>1,8,18,28</sup>
    - A. Values
    - B. Beliefs
    - C. Attitudes
    - D. Culture
    - E. Lifestyle
  - III. Conflicts<sup>1,16,31,50,57</sup>
    - A. Traditional versus other medicines
    - B. Gender roles and expectations
    - C. Evidence versus beliefs
    - D. Managing differences between client and provider
  - IV. Negotiation of plan of care<sup>1</sup>
- 4. ***Effectively supports client's decisions regarding disclosure of their HIV serostatus.***
  - I. Disclosure<sup>28,33,49,51</sup>
    - A. Planned
      - 1. Planning
      - 2. Disclosure process
      - 3. Counseling and support
    - B. Unplanned
      - 1. Breach of confidentiality
      - 2. Counseling and support
  - II. Management of disclosure outcomes
    - A. Positive consequences
    - B. Negative consequences
- 5. ***Effectively supports clients in their efforts to live positively with HIV and AIDS and plan for life events.***
  - I. Health promotion and disease prevention<sup>1,8,9,11,18,19,33,35,40,48,49</sup>
    - A. Adherence
    - B. Active participation in health care
      - 1. Self-efficacy
      - 2. Health literacy
      - 3. Trust
    - C. Nutrition
    - D. Stress management
    - E. Sexuality and sexual health
    - F. Psychosocial support
  - II. Life planning<sup>1,8,12,28,33,48</sup>
    - A. Return to work/school
    - B. Marriage
    - C. Children
    - D. Intimacy
    - E. End of life
- 6. ***Positively influence perceptions and empower communities to reduce HIV-related stigma.***
  - I. Public education<sup>9,20,31,33,34,49,51,54,55</sup>
    - A. Stigma
    - B. Discrimination
    - C. Prejudice
    - D. Myths
    - E. Beliefs
    - F. Misinformation related to HIV and AIDS
  - II. Frameworks for response<sup>47,51</sup>
    - A. Human rights
    - B. Professional and societal ethics
    - C. Religious
    - D. Grounding in culture
- 7. ***Effectively assist clients to address the consequences of HIV-related stigma.***
  - I. Clients' perceptions of stigma and discrimination<sup>9,33,42,49</sup>
  - II. Safe health encounter<sup>20</sup>
  - III. Referrals for stigma management<sup>13,33</sup>
    - A. Counseling and mental health
    - B. Legal
    - C. Support groups
  - IV. Reframing stigma<sup>2,18,54,57</sup>
    - A. Empowerment
    - B. Advocacy
    - C. Disclosure
    - D. Confidentiality versus secrecy

## **Nursing Competencies: Psychomotor Skills Necessary to Provide HIV and AIDS Nursing Care**

1. ***Demonstrate the correct technique for performing skills related to HIV and AIDS diagnosis and management.***
  - I. Venipuncture (as allowed by national practice act)
  - II. TB skin testing (PPD, Mantoux)<sup>13,48,58</sup>
  - III. Finger stick<sup>48,49</sup>
2. ***Demonstrate the correct technique for specimen collection related to HIV and AIDS diagnosis and management.***
  - I. Lactate levels
  - II. Dry Blood Spot (DBS/DNA-PCR)
  - III. Sputum collection<sup>58</sup>
  - IV. Cervical cancer screening<sup>48</sup>
  - V. Rapid HIV testing<sup>48,49</sup>
3. ***Demonstrate the appropriate use of universal precautions and the principles of infection prevention and control.***
  - I. Standard Precautions<sup>14-16,25,29,30,34,48,49,53,55</sup>
    - A. Hand hygiene
    - B. Personal protective equipment
    - C. Waste management
  - II. Specialised precautions<sup>13-15,29,30,48,49,57,58</sup>
    - A. Disinfection
    - B. Sterilisation
    - C. Airborne
    - D. Blood borne
  - III. Infection control<sup>14-16,33,48,49,55</sup>
    - A. Aseptic technique
    - B. Safe handling of vials and parenteral medications
4. ***Demonstrate safe injection techniques to reduce the risk of HIV transmission.***
  - I. Safe injection techniques<sup>15,30,49,57</sup>
  - II. Single use of equipment<sup>15</sup>
    - A. Needles
    - B. Vials and parental medications
  - III. Safe disposal of needles<sup>15</sup>
5. ***Demonstrate safe use and disposal of sharps to reduce the risk of HIV transmission.***
  - I. Sharps management to prevent HIV transmission<sup>15,30,43,49</sup>
    - A. Handling
    - B. Disinfection

- C. Sterilisation
  - D. Disposal
6. ***Demonstrate applicable and relevant clinical assessment skills required in the provision of nursing care for common opportunistic infections and diseases related to HIV and AIDS.***
  - I. Clinical Assessment<sup>1,3,13,26,33,44,46,48,49,51</sup>
    - A. History
    - B. Physical examination
    - C. Investigations
  - II. Psychosocial assessment<sup>13,49</sup>
  - III. Spiritual assessment<sup>1,13</sup>
  - IV. Knowledge assessment<sup>1</sup>
  - V. Readiness to learn<sup>1</sup>
  - VI. Documentation and follow-up<sup>18,19,49</sup>
7. ***Demonstrate correct application and safe removal of condoms (male/female) in prevention of HIV and other sexually transmitted infections.***
  - I. Male condom<sup>18,21,36,51,55,57</sup>
    - A. Check date and integrity
    - B. Application
    - C. Use of lubricants
    - D. Removal
    - E. Safe disposal
  - II. Female condom<sup>18,21,36</sup>
    - A. Check date and integrity
    - B. Application
    - C. Use of lubricants
    - D. Removal
    - E. Safe disposal

## **Nursing Competencies: Professional Expectation Required of Nurses in the delivery of HIV and AIDS Nursing Care**

1. ***Translate evidence-based knowledge to deliver quality nursing care for persons living with, at risk for, or affected by HIV and AIDS.***
  - I. Evidence<sup>6,26</sup>
    - A. Levels, types, sources
    - B. Retrieving
    - C. Assessing credibility
    - D. Establishing processes of dissemination and sharing
  - II. Using Evidence<sup>28,48</sup>



- A. Change practice
- B. Evaluate outcomes
- III. Continual professional development<sup>6,18,45,54</sup>
  - A. Awareness of lifelong learning
  - B. Regulatory processes
- 2. **Clarifies own values, beliefs, lifestyle, and culture.**
  - I. Self-assessment<sup>15,18,28,49</sup>
    - A. Values clarification
      - 1. Meaning of values
      - 2. Own values as related to HIV and AIDS
      - 3. Recognizing the wider range of values
      - 4. Influence of personal values on clients with HIV and AIDS
      - 5. Respecting the client's value system
        - (a) Beliefs
        - (b) Attitudes
        - (c) Culture
        - (d) Lifestyle
  - II. Self-awareness and professional sensitivity<sup>44</sup>
- 3. **Adheres to the core ethical principles of the nursing profession in the provision of care for clients living with, at risk for, or affected by HIV and AIDS.**
  - I. Ethical principles<sup>9,14,15,28,33,44,47,51</sup>
    - A. Autonomy
      - 1. Respect
      - 2. Informed decision-making
      - 3. Informed consent
    - B. Justice<sup>14,44</sup>
      - 1. Equality
      - 2. Right to health care
      - 3. Rights-based care
    - C. Beneficence<sup>9,28,33,44</sup>
      - 1. Confidentiality
      - 2. Respect
    - D. Nonmaleficence<sup>33</sup>
  - II. Human rights appropriate to nursing and health care<sup>25,28,38,47,51</sup>
  - III. Rights and responsibilities<sup>15,28,44,53,54</sup>
    - A. Client
    - B. Nurse
  - IV. Professional conduct<sup>15,27,28,44,53,54</sup>
    - A. International code of conduct
    - B. Professional boundaries
    - C. Involvement in research
    - D. Obligation to care
- V. Ethics related to HIV testing and counseling<sup>13,14,33,44</sup>
- VI. Deliberate unsafe behaviors<sup>5,50</sup>
  - A. Duty to warn
  - B. Partner notification
  - C. Legal consequences
- VII. Life planning<sup>9,47</sup>
  - A. Guardianship
  - B. Advanced directives
  - C. Power of attorney
  - D. Client choices related to resuscitation
  - E. Making wills
- 4. **Effectively communicates, coordinates and documents the care of the client living with HIV or AIDS as a member of the multidisciplinary team.**
  - I. Communication skills<sup>5,18,19,28,32,33,37,48,50</sup>
    - A. Therapeutic
    - B. Intraprofessional
    - C. Interdisciplinary
    - D. Care coordination
  - II. Documentation for continuity of care<sup>13,18,19,48,49</sup>
    - A. Legally defensible
    - B. Portable
    - C. Use of technology
- 5. **Correctly collects, analyzes, interprets, and communicates data for decision-making to improve health outcomes for clients with, at risk for, or affected by HIV and AIDS.**
  - I. Data collection<sup>18,44</sup>
  - II. Analysis and interpretation of data<sup>44</sup>
  - III. Communication<sup>19,32,44</sup>
    - A. Recording
    - B. Reporting
    - C. Quality improvement
- 6. **Facilitates linkages with community programmes and local resources in the provision of care for clients living with, at risk for, or affected by HIV and AIDS.**
  - I. Community education and counseling<sup>13,14,28,29,33,42,46,49</sup>
  - II. Networking and referrals<sup>13,14,26,28,29,32</sup>
    - A. National health framework and structures for HIV and AIDS

- B. Multidisciplinary approach
- C. Referral systems
- D. Follow-up
- III. Community empowerment for resource mobilization<sup>12,14,17,28,29,33,36,39,46,49,57</sup>
  - A. Advocacy
    - 1. Key Informants
      - a. Traditional
      - b. Religious
      - c. Political
      - d. Civil
        - i. AIDS Service Organizations (ASOs)
        - ii. Other Community-based Organizations (CBOs)
    - 2. Programs
      - a. Life-skills
      - b. Nutrition
      - c. Transportation
      - d. OVC
      - e. Youth programs
      - f. Safe harbours and places
      - g. Home-based care
      - h. Counseling centers
    - B. Fundraising strategies
    - C. Community collaboration
- 7. ***Effectively supervises and mentors other health care providers involved in the spectrum of HIV and AIDS care and treatment.***
  - I. Settings for supervision and mentoring<sup>7,10,28,18,44,51</sup>
    - A. Health care institutions
    - B. Noninstitutional settings
  - II. Supervision and mentoring<sup>7,10,32,39,50</sup>
    - A. Facilitation
    - B. Supportive
      - C. Delegation
      - D. Responsibility and accountability
      - E. Role modeling
      - F. Preceptorship
  - III. Coaching<sup>23,44,56,57</sup>
  - IV. Train the trainer<sup>23,24,44,50,54</sup>
  - V. Interface between health care settings and noninstitutional settings
- 8. ***Takes personal responsibility to proactively address impact of HIV epidemic on self as a care giver***
  - I. HIV workplace policy<sup>15,25,27,34,36,43,48,52,54</sup>
    - A. HIV testing and counseling
    - B. Infection prevention and control and PEP
    - C. Support
      - 1. Support groups
      - 2. Nutritional
    - D. Treatment for HIV, AIDS, and TB
    - E. Workplace wellness
      - 1. Work place confidentiality
      - 2. Debriefing with death and stress
      - 3. Stigma management
  - II. Impact of stress on<sup>13,19,28</sup>
    - A. Self
    - B. Family
    - C. Colleagues
    - D. Care provision
  - III. Self-management<sup>13,19</sup>
    - A. Workplace programs
    - B. Respite programs
    - C. Self-awareness and reflection
    - D. Psychosocial and spiritual support
    - E. Professional networking

### APPENDIX 3. EVIDENCE FROM THE LITERATURE ABOUT CONCEPTS AND/OR SPECIFIC CONTENT REVIEWED IN THE DEVELOPMENT OF THE ESSENTIAL COMPETENCIES FOR NURSING RELATED TO HIV AND AIDS

*Note: The evidence reviewed is presented by date of publication starting with most recent.*

This section provides an overview of the concepts included in current training programs and/or curriculum targeting nurses in the context of HIV and AIDS.

**HIV/AIDS Nursing Certification Board (HANCNB). (2008). Certification examination in HIV/AIDS nursing: Handbook for candidates. New York, NY: Professional Testing Corporation.**

Concepts:

- Epidemiology and prevention
- Pathophysiology
- Clinical manifestations and management
- Psychosocial issues
- Specific populations
- Ethical and legal issues
- Professional and institutional issues

**I-TECH. (2008). ENHANCE Training: Empowering Nurses to deliver HIV AND AIDS Nursing Care and Education, Facilitator's Guide. Seattle, Washington: University of Washington.**

Concepts:

- Understanding HIV
- Role of the nurse in HIV prevention, treatment, care, and support
- Stigma, legal, and ethical issues in HIV and AIDS care
- Prevention of HIV
- Infection control and Postexposure Prophylaxis
- Sexually transmitted infections
- Symptom management and opportunistic infections
- Palliative care for PLHA
- Introduction to antiretroviral therapy
- Prevention of parent-to-child transmission
- Paediatric HIV
- HIV and counselling
- Challenges faced by nurses in HIV and AIDS care

**Family Health International. (2007). Nursing Care of Clients With HIV and AIDS: Facilitator's Guide. Arlington, VA: Family Health International.**

- Comprehensive nursing care of PLHA
- Special issues for nurses
  - Ethical responsibilities, client confidentiality, professional behaviors, stress/burnout
- HIV basics
  - Transmission of HIV, HIV vs. AIDS, progression of HIV, TB (active, latent, treatment, TB–HIV relationship)
- Standard precautions and infection control
  - Standard precautions, infection control, hand-washing, PPE, injection administration, sharps disposal, PEP
- Common Conditions experienced by PLHA
  - OIs (assessment and management), pain management, palliative care
- Palliative care
  - Philosophy of palliative care, HIV-related symptoms, clients/families at end of life: physical and emotional issues
- Nutrition
  - Nutrition–HIV linkage, malnutrition and wasting, interventions for wasting, micronutrient deficiencies (interventions)
- Prevention with care
  - Importance of prevention, client education for prevention,
- Antiretroviral therapy
  - How ARVs work, goals of therapy, benefits/challenges, schedule/side-effects of first line therapy, referral for symptoms
- Special Issues for childbearing women
  - HIV-pregnancy-ART, PMTCT, infant feeding, follow-up
- Pregnancy
  - Pediatric HIV treatment guidelines, pros/cons of disclosure, medication administration strategies for infants/toddlers/older children, adherence for adolescents

- Assessing readiness for ART
  - Why readiness is important, assessing readiness, respecting a client's decision not to start ART
- Nursing management of ARV side-effects
  - Client education on ART side-effects, common side-effects—client education-how to manage them, symptoms requiring immediate management/hospitalization
- Helping the client understand and adhere to ART
  - Importance of optimal adherence, factors affecting adherence, priority client education topics, adherence interventions
- Antiretroviral regimen change
  - Reasons to change, client education required for regimen change, adherence, and psychological support for regimen change

**International HIV/AIDS Alliance, Academy for Educational Development & International Center for Research on Women. (2007). Understanding and challenging stigma: Toolkit for action. (accessed 1 December 2009 at [www.aidsalliance.org/publications](http://www.aidsalliance.org/publications)).**

- Naming the problem
- More understanding, less fear
- Sex, morality, shame, and blame
- The family and stigma
- Home-based care and stigma
- Coping with stigma
- Treatment and stigma
- MSM and stigma
- Children and stigma
- Young people and stigma

**National HIV Nurses Association. (2007). National HIV Nursing Competencies. London, England: Mediscript Ltd.**

- Generic HIV nursing competencies
  - Assessment of health and well-being
  - Management of antiretroviral therapy
  - Health promotion
  - Working in partnerships including clinical networks and multidisciplinary working
- Specialist HIV nursing competencies
  - HIV outclients

- HIV inclients
- Clinical trials
- Paediatric care

**World Health Organization. (2005). Core competencies: Results from the International Consensus Meeting on HIV Services Delivery Training and Certification. Geneva, Switzerland: WHO.**

- Basic HIV education for people living with HIV
- Counselling before deciding to use antiretroviral therapy
- Counselling on adherence before starting antiretroviral therapy
- Clinical assessment, preparation before initiating antiretroviral therapy and initiation
- Clinical care and documentation
- Managing co-trimoxazole prophylaxis
- Managing fluconazole prophylaxis
- Managing isoniazid prophylaxis
- Prescribing antiretroviral medicines
- Drug dispensing and management at the facility level.
- Treatment support
- Nutrition in antiretroviral therapy
- Side-effects and drug interaction in antiretroviral therapy
- Monitoring, treatment failure, and toxicity
- Prevention interventions linked with care and treatment
- Acute care in general
- Opportunistic respiratory infections
- Fever
- Chronic diarrhoea
- Mental health problems
- Sexually transmitted infections
- Skin lesions and lumps
- Oral and oesophageal lesions
- Opportunistic infections affecting the nervous system
- Palliative care
- Pregnant women
- Children living with HIV and AIDS
- Complex conditions
- Laboratory test topics
- Working as a team

“One major omission identified was the definition of minimum competencies for counselling, social and psychosocial support that are needed to reinforce clinical competencies. Other omissions are competencies related to the following issues: management and communication; activities related to mentorship and preceptorship; drug supply and management; laboratory skills; nutrition; mental health; palliative care; specific target groups, such as children, adolescents, couples, families, elderly people, and intravenous drug users; traditional medicine and traditional healers; managing long-term metabolic side-effects; ethics, equity, and human rights; and links to the larger community (family, faith-based organizations, and other groups)” (p. 10).

**Scotti, L., & Leslie, J. M. (2004). *Nursing training curriculum: HIV practice and reducing stigma (Facilitator Version)*. Baltimore, MD: Johns Hopkins AIDS Service.**

- Introduction
- Goals and objectives
- Procedure for teaching this curriculum
- Participation evaluation
- Teaching techniques
- Group dynamics
- Introductory and group-building activities
- Pretraining evaluation and ground rules
- Modules
  - 1: HIV transmission
  - 2: Disease course
  - 3: Clinical management
  - 4: Confidentiality and stigma
  - 5: Stage-based behavioral counseling

**HORIZON/The Population Council & SHARAN. (2003). *The PLHA-Friendly Achievement Checklist: A self-assessment tool for hospitals and other medical institutions caring for people living with HIV and AIDS (PLHA)*. Washington, DC: The Population Council.**

- Introduction
- PLHA-friendly achievement checklist
- Definitions

**Medical Foundation for AIDS & Sexual Health. (2003). *Recommended standards for NHS HIV services*. London, England: British Medical Association.**

- Standard 1, HIV prevention
- Standard 2, Early diagnosis of people with HIV
- Standard 3, Empowering people with HIV
- Standard 4, Clinical care of people with HIV
- Standard 5, Primary health care for people with HIV
- Standard 6, Social care integrated with health care for people with HIV
- Standard 7, Sexual health care for people with HIV
- Standard 8, HIV and pregnancy
- Standard 9, Care of families with HIV
- Standard 10, Emergency care of people with HIV
- Standard 11, Care of people with HIV during admission to hospital
- Standard 12, Respite, rehabilitation, and palliative care for people with HIV
- Affective Competency: “The stigma associated with HIV, and the sensitivity relating to its major routes of transmission, have highlighted the importance of confidentiality in this area of care” (p. 22).
- Affective Competency “The cultural, religious, and linguistic backgrounds of people living with HIV in England are diverse, as are the lifestyles” (p. 22).

**Uys, L. (2003). *Teaching manual on HIV and AIDS stigma for nurses*. South Africa: Democratic Nursing Organization of South Africa/South African Network of Nurses and Midwives.**

- Prejudice: The soil in which stigma grows
- Understanding stigma
- The results of HIV and AIDS stigma
- Frameworks for a response
- Questioning stereotypes
- Decreasing HIV and AIDS stigma
- Evaluation

**World Health Organization. (2002). *Nursing role in HIV/AIDS care and prevention in South-East Asia Region*. New Delhi, India: WHO, Regional Office for South-East Asia.**



- This publication describes the systematic analysis of nursing's role in care and prevention through a comprehensive assessment of preservice and in-service educational capacity to provide HIV and AIDS training. Furthermore, an analysis of the available curricula, teaching-learning resources, and knowledge, and attitudes and practices among nurses/midwives was conducted.

**World Health Organization, Regional Office for the Western Pacific. (1993a). HIV infection and AIDS: Guidelines for nursing care. Manila, Philippines: HIV/AIDS Reference Library for Nurses (Volume 4).**

- HIV Infection/AIDS Overview
- Prevention of HIV Transmission
  - Safer sex, injection drug use
- Group Education
  - Individual counseling
- HIV Testing and Screening
  - Testing, screening, HIV antibody test, pretest counselling, postcounselling
- Maternal and Child Care
  - Breastfeeding and HIV, children and HIV infection, childhood immunization and HIV infection
- Nursing Care in Symptomatic HIV Infection
- Utilizing the nursing process to provide care; symptoms of HIV illness, ARC, AIDS; case definition of AIDS; treatment; commonly occurring problems and nursing interventions; psychosocial needs; home care
- Care of the Dying Client
- Community Programmes and Local Resource Development
  - Developing a community taskforce, task force activities, support services, coordination of community-based programmes
- Infection Control
  - Precautions for blood/body fluids, injections, skin piercing, laboratory specimens, invasive procedures; guidelines for the safety of nurses
- Caregiver Concerns

**World Health Organization, Regional Office for the Western Pacific. (1993c). Teaching modules for basic nursing and midwifery education in the**

**prevention and control of HIV infection. Manila, Philippines: HIV and AIDS Reference Library for Nurses (Volume 5).**

- Epidemiology and transmission of HIV
- HIV infection and disease
- Prevention of HIV transmission in health care settings
- The psychosocial impact of HIV infection on the individual and the community
- Developing counselling skills
- Client education
- Nursing care of the adult with HIV disease
- The impact of HIV infection and disease on women
- Nursing care of the infant or child with HIV disease
- Terminal care in HIV disease
- Education of traditional practitioners to prevention HIV transmission through skin-piercing practices

**World Health Organization, Regional Office for the Western Pacific. (1993b). Integrating HIV-related Content into a Competency-Based Curriculum. Manila, Philippines: HIV and AIDS Reference Library for Nurses (Volume 6).**

- Basic nursing education
  - Defining the professional competencies of graduates.
  - Translating the professional competencies into student competences.
  - Designing the Implementation Plan
- Continuing education
  - Purpose of continuing education
  - Analysis of needs
  - Quick reference checklist
- Programme considerations
  - Programme design
  - Programme goals
  - Course design and learning experience
  - Timing of activities
  - Selection and preparation of resources
  - Budget
  - Implementation of the programme
  - Evaluation

#### APPENDIX 4. MEMBERS OF THE REGIONAL LEAD TEAM

The following individuals comprised the Regional Lead Team that developed the Essential Nursing Competencies related to HIV and AIDS. Without their hard work, commitment, and dedication, this document and the essential competencies would not have come to fruition.

##### Botswana



Keabitsa Ramantele  
Vice-Chair, Regional Lead Team  
*President, Botswana Nurses Association*

##### Malawi



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*Director of Educational Programs,  
Nurses and Midwives Council of Malawi*

##### Swaziland



**Secretary, Regional Lead Team:**  
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*Rector, Nazarene Higher Education Consortium &  
Principal, Nazarene College of Nursing*

##### Nurses SOAR! Program



Tony Diesel  
*Regional Program Director, Nurses SOAR!*

##### Lesotho



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*Chairperson, Lesotho Nursing Council*

##### South Africa



**Chair, Regional Lead Team:**  
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*Head, Department of Nursing Science  
University of Zululand*

##### Zimbabwe



Cynthia Chasokela  
*Director of Nursing Services/Chief Nursing Officer  
Ministry of Health and Child Welfare*

##### Nurses SOAR! Program



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*Director, Leadership Sector Nurses SOAR!  
Assistant Dean, Undergraduate Education  
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## APPENDIX 5. REGIONAL EXPERT PANEL FOR COMPETENCY VALIDATION

The following nurse leaders served on the expert review panel to obtain consensus in the validation of the essential core competencies. Without their professional expertise and valuable insights, the final essential competencies would not be grounded in context and relevant to the contemporary scope of nursing practice.

### Botswana



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President, South African Nursing Council (SANC)  
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### Swaziland



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Glory Msibi  
Registrar, Swaziland Nursing Council

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