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**REDUCING THE  
IMPACT  
OF HIV/AIDS  
ON NURSING AND  
MIDWIFERY  
PERSONNEL**



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<b>PREFACE</b>	<b>5</b>
<b>INTRODUCTION</b>	<b>6</b>
<b>OBJECTIVES</b>	<b>8</b>
<b>TRANSMISSION OF BLOOD BORNE PATHOGENS AND TUBERCULOSIS</b>	<b>9</b>
<b>ETHICAL RESPONSIBILITIES</b>	<b>11</b>
<b>EDUCATIONAL STRATEGIES</b>	<b>12</b>
<b>ADDRESSING FEARS</b>	<b>13</b>
<b>CREATING A SAFE WORK ENVIRONMENT</b>	<b>14</b>
<b>REDUCING TRANSMISSION OF HIV/AIDS, HBV, HCV AND TUBERCULOSIS</b>	<b>15</b>
<b>PROCURING SUPPLIES/EQUIPMENT</b>	<b>18</b>
<b>POST-EXPOSURE CARE / FOLLOW-UP</b>	<b>20</b>
<b>ROLE OF NATIONAL NURSES' ASSOCIATIONS</b>	<b>20</b>
<b>CONCLUSION</b>	<b>26</b>
<b>REFERENCES</b>	<b>28</b>
<b>ACKNOWLEDGEMENT</b>	<b>30</b>

## PREFACE

These guidelines have been revised and expanded, reflecting ICN's continued concern with the risk reduction and management of occupational exposure to HIV, Hepatitis B and C and tuberculosis infections. The guidelines have benefited from the review and input of a special ICN Task Force and from others selected from the ICN data bank of nurse experts.

ICN's major focus is on nursing personnel, but we think these guidelines will be helpful to all health care providers, managers and employers seeking solutions for the complex issues of occupational exposure, risk reduction and risk management related to HIV, Hepatitis B, Hepatitis C and tuberculosis infections.

We believe that employer responsibilities to employees must be carefully assessed so that fair, just and ethical policies can be developed. Such policies will enhance the caring role of health workers, promote adherence to safety and reduce occupational exposure.

ICN is concerned about the lack of data on the extent of occupational exposure to blood borne pathogens and TB. We urge national nurses' associations to lobby for injection safety and other infection control measures that would assure a safer work environment.

A World Health Organization (WHO) grant for the original guidelines made it possible for them to be widely available to national nurses' associations and others world-wide.

ICN hopes that these revised guidelines will continue to be of use to nurses, national nurses' associations, other health professionals groups and individuals, governments and policy makers.

Judith A. Oulton  
Chief Executive Officer  
International Council of Nurses

## 2 INTRODUCTION

Nursing/midwifery personnel form the majority of health care workers in most countries and have a front-line caring role that brings them in close contact with patients' blood and other body fluids. This puts them at risk of contracting HIV/AIDS, Hepatitis B (HBV), Hepatitis C (HCV), and other infections such as tuberculosis (TB). Although relatively small, this risk is compounded by staff reductions and shortages in the wake of health services' restructuring in many countries; lack of basic personal protective equipment or cleaning materials in some countries; and the alarming rise in the number of people with HIV/AIDS. Plus, the widespread resurgence of other infectious diseases, such as tuberculosis, has added a new dimension to the increase of occupational risks.

Often the true picture of occupationally acquired infections such HIV/AIDS, HBV and HCV is not clearly known because of underreporting by health care workers. There are a number of reasons that affect the reporting of needlestick and other exposures, including fear of disciplinary action, lack of awareness, inadequate documentation, inadequate training or human error.<sup>1</sup>

The increasing number of people with HIV/AIDS and the associated social stigma often generate fear and a heightened perception of infection risk in the workplace among nursing/midwifery personnel, while the same level of concern may not be expressed in relation to sexual risk. Nurses and midwives, like other people, can be at risk of HIV, HBV and HCV infection due to personal behaviour or life circumstances. However the risks are considerably reduced if they exercise caution both in personal behaviours and in the workplace.

In fulfilling their role as advocates for a safer work environment and socio-economic welfare of nursing personnel, national nurses' associations (NNAs) need to ensure that ministries of health, employers and nurse managers take responsibility for protection of personnel from HIV, HBV, HCV and tuberculosis infections in health care settings. They should also ensure that appropriate care, counselling, worker compensation policies and suitable work assignments for nursing/midwifery personnel with HIV and other infections, are instituted.

Over the years ICN has become increasingly concerned about the risk of HIV/AIDS, HBV, HCV infections and tuberculosis in nursing/midwifery personnel and the impact this might have on the profession worldwide. This is reflected in ICN position statements on HIV/AIDS and Socio-economic Welfare of Nurses. In order to address these concerns ICN has:

1. Adopted a resolution on HIV-positive nursing personnel.
2. Developed a position statement on the Impact of HIV/AIDS on Nursing/Midwifery Personnel.
3. Developed and disseminated *Guidelines on Reducing the Impact of HIV/AIDS on Nursing/Midwifery Personnel*.
4. Convened a task force to examine the impact of HIV/AIDS on nursing/midwifery personnel, and to put forward recommendations and action-oriented guidelines for NNAs and others.
5. Networked with the WHO Safe Injection Global Network (SIGN).

The ICN Task Force confirmed that preventing occupational exposure to HIV and other blood borne infections and guaranteeing appropriate health care and worker compensation require a shared responsibility and the collaboration of legislators, employers, NNAs, nurse managers and nursing/midwifery personnel directly involved in the provision of health care. The actions and roles played by each have an impact on the extent to which the risk of HIV infection in the workplace will be reduced or increased.

## OBJECTIVES

These revised and expanded guidelines aim to help NNAs, nursing/midwifery personnel, nurse managers, employers and others to:

- Address the educational needs and ethical responsibilities of nursing/midwifery personnel in reducing transmission of HIV/AIDS, HBV, HCV and tuberculosis.
- Develop strategies for a safer work environment and increased protection for nursing and midwifery personnel from blood borne diseases such as HIV, HBV, HCV and airborne diseases such as tuberculosis.
- Address the socioeconomic welfare issues related to the health care needs, compensation and financial security of HIV-positive nursing/midwifery personnel.

### SCOPE

The main focus of these guidelines is on HIV/AIDS, its prevention and workplace issues. Other blood borne infections, namely HBV and HCV, are also addressed, as the source of infection is similar and precautions followed for HIV infection are equally applicable and effective in their control. Tuberculosis (TB) is addressed, as it frequently occurs as a co-infection with HIV/AIDS. These guidelines do not spell out details on subjects already covered in other ICN, WHO and other publications: for example, specific procedures and techniques of universal precautions\* and such issues as ethics, cost-effectiveness, management of resources and lobbying for changes in legislation. Instead, reference is made to the appropriate resources. *(See reference list).*

\* The term Standard Precautions is now more and more in use in place of universal precautions. Standard precautions aims to be broader in scope and covers all body fluids to prevent transmission of other bacteria and viruses, not just those associated with blood.

## TRANSMISSION OF BLOOD BORNE PATHOGENS AND TUBERCULOSIS

An understanding of the risk of infection and preventive measures is essential in creating a safer work environment. needlestick injuries are the highest reported type of accidents in hospitals. The most likely means of transmission of blood borne pathogens to health care workers is by direct percutaneous inoculation of infected blood by a sharps injury, or by blood splashing onto broken skin or mucous membrane<sup>2</sup>. According to the American Nurses Association more than 80% of needlestick injuries can be prevented with safer equipment<sup>3</sup>.

The main blood borne pathogens with which health care providers come into constant contact are HIV, HBV and HCV. These infections are characterised by a chronic carrier stage or 'silent epidemic'. HIV is mainly transmitted through unprotected sexual contact, but under rare circumstances it can be transmitted in health care settings through direct contact with infected blood or other body fluids. HBV is transmitted through infected blood and body fluids as well as through unprotected sexual contact. HBV vaccination provides an effective strategy to control infection. HCV is a blood borne infection and as yet there is no vaccine. Safer sex, safe blood and universal precautions are the best strategies to control transmission of the blood borne pathogens.

An airborne infection, TB is on the upsurge in both developing and developed countries<sup>4</sup>. Often fuelled by the growing number of people whose immune system has been compromised by HIV/AIDS, TB continues to grow at an epidemic rate. The spread of HIV/AIDS and the emergence of multi-drug resistant TB are creating a worsening situation<sup>5</sup>. HIV and TB form a deadly co-infection, each speeding the other's progress. HIV weakens the immune system and someone who is HIV-positive is more likely to be infected with TB. TB is the leading cause of death among people living with HIV/AIDS. Prevention of airborne transmission, tuberculin skin testing, vaccination and treatment are effective in TB control.

## SAFETY OF INJECTIONS

WHO estimates that 12 billion injections are administered each year worldwide<sup>6</sup>. However, there is a lack of evidence about the number of needlestick injuries and their consequences in health care providers. Unsafe injection practices have been linked to the transmission of blood borne pathogens between patients and health care workers. To prevent the transmission of blood borne pathogens that result from unsafe injections, injection use must be reduced and injection safety must be achieved. A safe injection does not harm the recipient, does not expose the health care worker to any risk and does not result in waste that is dangerous for the community.

To achieve injection safety requires preparation with clean hands, in a clean area, using medication drawn from a sterile vial and administered using a sterile syringe and needle. After administration, sharp equipment such as needles must be discarded in a puncture-proof container for proper disposal. When these rules are not followed, injections are unsafe and may expose the recipients, health care worker, or the community to infections. HBV and HCV are transmitted through unsafe injections respectively a hundred times, and ten times more effectively than HIV/AIDS<sup>7</sup>. The considerable prevalence of HIV, HBV and HCV in the population and the risk of transmission to patients or health care workers provide a compelling rationale for safe injections and universal precautions aimed at preventing cross infections. The WHO Safe Injection Global Network (SIGN) recommends the following three-element strategy:<sup>8</sup>

1. Change behaviour among patients and health care workers to reduce injection-use and achieve injection safety.
2. Ensure sufficient availability of sterile syringes and needles.
3. Appropriately destroy sharps waste after use.

Reducing the impact of HIV, other blood borne infections and tuberculosis in health care workers involves concerted action by employers, health care workers, managers, national nurses associations and others. Each has ethical duties and obligations to create a safer work environment and to provide care.



## ETHICAL RESPONSIBILITIES

The ethical and moral issues in HIV/AIDS, HBV, HCV and TB prevention and care include the duty of nursing and midwifery personal to provide care, and the responsibility of HIV-positive personnel to protect their patients and the community from harm related to transmission of disease.

In caring for people living with HIV/AIDS, nursing/midwifery personnel may have 'misconceptions' of the HIV/AIDS risk that interfere with their ability to provide quality care. However, they have a moral and ethical responsibility to care for all people with or without HIV/AIDS or other diseases. As the *ICN Code of Ethics for Nurses* affirms, "the nurse's primary responsibility is to those people who require nursing care".<sup>9</sup>

Under rare circumstances, HIV and other blood borne infections can be transmitted in health care settings<sup>10</sup> from patient to patient or from nursing/midwifery personnel to patients, through unsafe injection, non-sterilised equipment, poor infection control techniques, or lack of testing of donor blood. Invasive procedures that involve extensive contact with broken mucous or cutaneous tissue or direct contact with blood and other body fluids can increase the risk of HIV, HBV and HCV transmission to patients or health care workers. Tuberculosis can spread through droplet infection to patients or health care providers, especially when the immune system is compromised due to HIV/AIDS.

Health care workers do not pose a serious risk of HIV and other blood borne infections to patients, provided they adhere to basic principles of universal precautions<sup>11</sup>. Despite the rare possibility, the ethical responsibility of HIV-positive nursing/midwifery personnel in preventing HIV transmission to others must be defined. This means that HIV-positive nursing and midwifery personnel must voluntarily withdraw from performing exposure prone and invasive procedures and avoid putting patients at risk. The ethical principles of "doing good and doing no harm"<sup>12</sup> must constantly be upheld.

With the public's growing awareness but persistent fear of HIV/AIDS, patients and their family members may ask nursing/midwifery personnel about their HIV status, thus raising issues of privacy, confidentiality and human rights. HIV-positive health care workers, like other people living with HIV/AIDS, are entitled to privacy and the confidentiality of personal information.

NNAs must, therefore, develop position statements and guidelines to enable nurses to deal with ethical dilemmas and disseminate information on the rights and responsibilities of nursing/midwifery personnel. As a general guideline, the respective country code of ethics and regulations regarding disclosure of personal information to clients should be applied. The education of health care providers and managers is vital in imparting knowledge as well as in changing attitudes and behaviours related to risk perception and risk reduction.

## EDUCATIONAL STRATEGIES

The education of health care workers should include risk assessment and risk reduction methods. The most powerful tool for reducing both occupational and personal risk of HIV, HBV and HCV infection is health education and behavioural change. Nurses are well placed to use this tool. Transmission of TB as an airborne disease can also be prevented through infection control measures. Education is also important in combating discrimination and negative attitudes towards people living with HIV/AIDS.

Nursing/midwifery personnel must be educated on:

- How HIV, HBV, HCV and TB are transmitted and how to prevent or reduce risk of transmission.
- Safer sex\* practices.
- Applying universal precautions.
- Safe injection practices.
- Reducing risk of sharps\*\* or other injuries, e.g. passing sharps in protective containers rather than directly by hand.
- Using safer methods and procedures for sterilisation, decontamination and handling of specimens; and
- How the risk of transmission can be reduced in sexual relations and intravenous drug use.

Where HIV/AIDS and issues of human sexuality and intravenous drug use are considered taboo subjects, nursing/midwifery personnel may feel embarrassed

\* Safer sex is defined as any sexual practice that reduces the risk of transmitting HIV from one person to another, e.g. staying in a mutually faithful relationship where both partners are uninfected, using a condom or having non penetrative sexual activity.

\*\* "Sharps" is defined as any sharp object that can penetrate the skin, including needles, scalpels, broken glass, etc.

and uncomfortable about discussing these issues or may totally ignore the topics during health education sessions, thus perpetuating the conspiracy of silence.

Because of the serious consequences of HIV/AIDS, nursing/midwifery personnel should break with tradition and be prepared to accept and provide counselling and education about these topics. Nursing/midwifery personnel must be perceived as competent professionals capable of discussing issues openly and confidently, and of acting fairly and compassionately. Creative approaches such as acting, use of puppets, drama and story-telling are often more effective in dealing with human sexuality, HIV/AIDS, condom use and other sensitive issues<sup>13</sup>.

To be successful, educational programmes should be sustained over a period of time and not be episodic or developed in isolation. Should nursing/midwifery personnel show complacency with existing safety protocols and guidelines, nurse managers and administrators should then take a proactive role in ensuring adherence to safety standards, so that a state of heightened awareness about HIV/AIDS prevention is maintained.

As knowledge about HIV/AIDS and other blood borne pathogens is constantly evolving, nursing/midwifery personnel must be continually up-dated through continuing education programmes. NNAs should meet these educational needs by organising seminars, workshops and 'train the trainers' projects and then evaluate the effectiveness of these programmes. Educational programmes on HIV/AIDS and other blood borne pathogens should be incorporated into basic and post-basic curriculum and continuing education programmes.

## ADDRESSING FEARS

Faced with the growing HIV epidemic, other blood borne pathogens and increased prevalence in tuberculosis, nursing/midwifery personnel may feel powerless to protect themselves and thus experience anxiety and fear of contagion. The fear may be related to lack of a clear understanding of the mode of infection, method of prevention and the social stigma attached to HIV/AIDS. The extent of fear is often disproportionate to the actual risk<sup>14</sup>. A peer support system with a network of concerned colleagues or HIV-positive nurses willing to share experiences can provide the opportunity to deal with one's vulnerability, fears and prejudices.

The irrational and often exaggerated fear associated with HIV/AIDS – even by nursing/midwifery personnel – should be dispelled through educational

programmes based on sound scientific knowledge regarding transmission and prevention. There is evidence that improving the knowledge and skills of health personnel is effective in reducing fear and enhancing their ability to care for people with HIV/ AIDS<sup>15</sup>.

Educational strategies for nursing/midwifery personnel must impart knowledge, counselling and caring skills and where appropriate change attitudes and beliefs. Creative and innovative approaches and teaching methods should be used. For example, the best educators are people infected with or affected by HIV/AIDS who are willing to share their personal experiences, thus giving the invisible disease a human face.

The more contact nursing/midwifery personnel have with people living with HIV/AIDS, the greater their knowledge and improved attitude.

## CREATING A SAFER WORK ENVIRONMENT

The health care context and environment influence not only the quality of care delivered but also the safety and wellbeing of care providers. "The nurse... has the right to expect the employer to provide a safe and healthy work environment"<sup>16</sup>, thus facilitating the provision of safe and efficient care. It is therefore incumbent upon the employer to provide a safe and supportive work environment that protects nursing/midwifery personnel from occupational hazards – such as exposure to HIV/AIDS and other blood borne infections – and prevents transmission of infection to patients/clients.

Measures that promote a safer work environment include:

- Education of employees about the occupational risk and methods of prevention of HIV/AIDS, Hepatitis B and C and other infectious diseases.
- Adherence to safety policies and procedures, and procedures for reporting exposure.
- Availability of appropriate disinfectants to clean up spills of blood or other body fluids.
- Properly placed sharps containers that are readily accessible.
- Provision of personal protective equipment such as gloves and other barrier devices.

The employer must also be responsible for:

- Providing work practice controls such as needleless intravenous systems, safe needle systems, and appropriate sharps disposal.
- Providing vaccines where available, such as Hepatitis B and others.
- Tuberculin skin testing and follow-up care and treatment.
- Maintaining appropriate staffing levels.
- Ensuring that universal precautions are implemented (see *box below*).
- Providing post-exposure counselling, follow-up treatment and care.
- Instituting measures that reduce and prevent stress, isolation and burnout.
- Controlling shift lengths and providing supervision of inexperienced staff.
- Addressing the health care, compensation and financial needs of HIV-positive nursing/midwifery personnel.
- Providing a flexible work allocation for HIV-positive personnel depending on their condition and job demands, protecting them from other infections such as tuberculosis and continuing their employment for as long as possible.
- Providing dispute settlement mechanisms for HIV-infected personnel.

Creating safer work environment includes proper disposal of medical waste so that used needles and syringes do not put the community at risk of injuries and blood borne pathogens.

## REDUCING TRANSMISSION OF HIV/AIDS, HBV, HCV AND TUBERCULOSIS

The growing prevalence of HIV/AIDS increases the risk that nursing/midwifery personnel will be exposed to blood and body fluids from patients with HIV/AIDS, HBV and HCV. However, the transmission of HIV infection in health care settings is a rare occurrence provided that basic principles of infection control and universal precautions are followed<sup>17</sup>. Adherence to blood and body fluid precautions are effective in prevention of all blood borne diseases, including Hepatitis B, Hepatitis C and HIV. Measures to control airborne infections must also be adhered.

It must be stressed that preventive measures are difficult to practice when supplies and protective equipment are in short supply. Priorities must be set and low-cost alternatives sought. Yet, even when supplies are available the use of universal precautions may be influenced by management policy, personal practices, attitude and complacency of staff.

Prevention of occupational exposure to HIV encompasses risk assessment and risk reduction methods. Nurse managers and employers must regularly assess procedures and practices and strengthen measures that reduce risk of disease transmission:

- Adhering to universal precautions, including use of protective equipment.
- Using forceps or wearing heavy-duty gloves when disposing sharps.
- Assessing protective or other equipment for risk and safety.
- Adopting safe techniques and procedures, e.g. disposing needles without recapping, or recapping using the single-handed scoop method.
- Making appropriate disinfectants and cleaning materials available.
- Sterilising equipment properly.
- Eliminating unnecessary injections, episiotomies and laboratory tests.
- Avoiding or covering breaks in skin, especially hands.

Reviewing current procedures and introducing policy changes that promote a safer work environment are important. One could also negotiate to change physician-prescribing behaviour in favour of oral medications over the use of unnecessary injections, and to review and revise practices and policies on "routine" procedures. Performance appraisals of nursing/midwifery personnel should include items on the practice of universal precautions and other measures that reduce the risk of HIV transmission.

The risk of occupational exposure to HIV, HBV, HCV is increased in large-bore needles, sharps and other skin penetrating injuries involving blood or other body fluids. As part of the preventive effort, commonly occurring sharps injuries should be identified through surveillance, documentation and audit of records and injury reports. The most common accidental exposures and injuries should be reviewed with the aim of finding and adopting safer ways of performing the procedure. Medical equipment suppliers and manufacturers should also be provided with a feedback on occupational injuries related to their equipment and encouraged to develop safer devices and equipment.

A work environment characterised by an *esprit de corps* where team members are responsible for each other's safety and well being creates a safer work environment with reduced risk of occupational exposure to blood borne diseases and tuberculosis.

Other factors such as more patients and lower budgets, fewer staff, a heavy workload, lack of supervision and being unfamiliar with procedures can increase

the risk of injury because of work-related stress and time pressures<sup>18</sup>. The NNA, employer, appropriate standards committee and quality assurance teams should develop strategies to ensure that quality of care and safety of nursing/midwifery personnel are not threatened by a stressful workload or poor supervision.

**U**niversal precautions are a simple standard of infection control practice to be used in the care of all patients at all times to minimise the risk of bloodborne pathogens. Universal precautions consist of:

- careful handling and disposal of sharps;
- handwashing before and after a procedure;
- use of protective barriers - such as gloves, gowns, masks - for direct contact with blood and other body fluids;
- safe disposal of waste contaminated with body fluids and blood;
- proper disinfection of instruments and other contaminated equipment; and
- proper handling of soiled linen.<sup>14</sup>

#### PLANNING AND MANAGEMENT

The proper planning and management of supplies and other resources are essential in reducing the occupational risk of HIV infection. Such measures should include risk assessment, setting of standards and written protocols that address safety, risk reduction, first-aid, post-exposure follow-up, etc. In addition, occupational risks can be reduced by introducing measures to prevent or reduce stress, maintain an optimum workload, familiarise new staff and provide supervision.

Burnout, which is a type of response to chronic stress on the job, can lead to lack of concentration and poor techniques that increase risk of pathogen transmission. Burnout is often characterised by feelings of depletion, wearing out and loss of vitality and energy<sup>19, 20</sup>. Measures to reduce burnout include: rotation of staff to less stressful assignments, providing peer support groups, ensuring an appropriate workload and providing recognition for excellence in HIV/AIDS care. Health care facilities that ignore staff exhaustion can expect negative outcomes in staff morale, in working atmosphere and in quality of care.<sup>21</sup>

Further, the fear of occupational exposure to HIV and other infections in health care settings may discourage potential recruits from pursuing nursing as a career and thus reduce the future supply of trained nursing/midwifery personnel, unless the fears are openly addressed.

NNAs, employers, nurse educators and nurse managers should, therefore, promote and emphasise the positive aspects of HIV/AIDS care and encourage recruitment and retention. In this regard, proper planning and management should apply to human resources for nursing workforce and to essential supplies and equipment<sup>22</sup>.



## PROCURING SUPPLIES/EQUIPMENT

The availability of essential supplies and protective equipment is closely tied with the safety of nursing/midwifery personnel and the quality of service that can be provided. Implicit in the availability of supplies is the importance of easy accessibility. For example, disinfectants and protective equipment might be 'available', but if they are stored away and inaccessible when needed, then the whole purpose of their protective value is defeated.

As part of their supply and equipment procurement function, nurses and nurse managers (supported by NNAs) should exert political pressure on employers and national and international agencies to provide funds for essential supplies and equipment for safe and quality care.

It is of vital importance that supplies are available continuously, not only in response to a crisis situation, and that they are rationally used. For example, wearing gloves for making beds is not consistent with universal precautions and unless the bed linen is soaked with blood is completely unnecessary. Similarly wearing gloves for giving routine injections is a waste of supplies needed for more exposure prone procedures such as handling blood-soaked linen, suturing wounds or for deliveries. One way of assigning priorities is to classify the commonly performed procedures and tasks into low, medium and high risk of HIV, HBV and HCV transmission. Individualised decisions can be made on whether and under what conditions the HIV positive health care provider can be allowed to perform them.

One approach to achieving a sustainable supply of equipment would be to put competent and assertive nurses in leadership and decision-making bodies so they can articulate goals, plans and priorities. Another approach is to negotiate with the employer to ensure that appropriate and adequate supplies and equipment are available when needed.

The proper management and use of equipment should be guided by considerations of cost-effectiveness (as opposed to cost containment) and safety during its use. The cheapest equipment may not necessarily be safe or cost-effective in the long term.

When resources permit, the use of disposable equipment is preferred to reduce the risk of transmission of HIV and other blood-borne pathogens. If non-disposable equipment is used, it must be properly cleaned and sterilised before every use.

NNAs must look for ways to increase nursing/midwifery input into National AIDS Programmes<sup>23</sup>, e.g., by active involvement in key committees where they can participate in setting priorities and defining tasks for which protective equipment such as gloves, gowns, masks and goggles must be used.

### Obtaining Supplies / Equipment<sup>24</sup>

Supplies and protective equipment are essential for providing appropriate care and for prevention of HIV transmission. Nurse managers and employers should ensure adequate supply by exploring different approaches, based on needs and resources.

- Find out what can be obtained from government or non-governmental sources through regular distribution systems.
- Find out what is locally available and can be bought. To what extent can patients and relatives contribute? Review the quality of available supplies.
- Develop or improve systems for ordering, transporting and storage of supplies and equipment.
- Work out a schedule for procurement, considering travelling distance, delivery time and weather.
- Establish payment and procurement procedures.

In settings with limited resources some supplies may not be available even at the central store. In this case other methods can be explored, such as direct buying of supplies from local merchants, charging patients or asking patients to purchase and bring their own supplies and equipment, so long as this does not result in life threatening delays in instituting care. Care must be taken to ensure that lack of resources does not result in denial of access to care for vulnerable and marginalised populations.

## POST-EXPOSURE CARE/FOLLOW-UP

It is important that nursing/midwifery personnel who experience occupational exposure to HIV – such as needlestick injury, contact of mucous membrane or non-intact skin with potentially infected blood or other body fluids – are provided with prompt access to confidential post-exposure evaluation and follow-up counselling and care.

As part of follow-up care, NNAs together with the full participation of workers and employers, should determine the criteria for 'significant exposure' to HIV/AIDS in the workplace. In defining exposure, criteria such as the amount of blood or other body fluids injected and laceration or wound inoculated with blood or body fluids can be used. For instance, a procedure involving a deep needlestick injury contaminated with blood represents a definite exposure to HIV, HBV, HCV infection. Once the definition of what constitutes a significant exposure is agreed, protocols for dealing with exposure must be put in place.

It must be emphasised that protocols and guidelines for reporting an injury from sharps or extensive contact with body fluids in the workplace should be strictly adhered to by nursing/midwifery personnel. As HIV is primarily transmitted through sexual contact, attributing 'significant exposure' to the workplace may be challenged by the employer unless contact with potentially infected blood or body fluids was officially reported and appropriately documented.

The extent of occupational exposure to HIV should be evaluated so that the exposed health care personnel can be provided with proper counselling and care. Care should be taken not to make the process too complicated or expensive, as this will discourage nursing/midwifery personnel from reporting exposure or claiming their rights.

## ROLE OF NATIONAL NURSES' ASSOCIATIONS

In face of the prejudice and stigma surrounding HIV/AIDS and its chronic and disabling effect, nursing/midwifery personnel may fear that acquiring HIV infection will ruin their career and livelihood. Such fear may in turn compromise their ability to provide quality care or undermine their commitment to remain in the profession.

NNAs must therefore lobby to ensure that occupationally acquired HIV/AIDS is accepted as a work-related disease for which nursing/midwifery personnel will be compensated.

### Post-Exposure Care and Follow-up<sup>25</sup>

- Clean wound with soap and water or antiseptic solution.
- Encourage bleeding from the puncture wound. Do not suck.
- Cover wound with waterproof dressing.
- Flush splashes to eyes and mouth with tap water or saline solution.
- Notify supervisor immediately with details of exposure and steps taken.
- Complete accidental exposure form. Include names of witnesses, if any, and of patient, if known.
- Report to the Accident and Emergency Department for further care and advice.
- Post-exposure prophylaxis (PEP) and antiretroviral therapy may be required, depending on resources and policy in the country.
- Follow-up with counselling, HIV antibody testing and monitoring at intervals.
- Report any signs and symptoms of infection such as fever, rashes or swollen lymph glands.
- Practice safer sex.
- Delay plans for pregnancy. If pregnant consult a physician for available prophylaxis.
- Abstain from donating blood.

Within the broad scope of "caring for the carers"<sup>26</sup>, NNAs should also develop alternative or supplementary health insurance schemes for meeting the care needs of nursing/midwifery personnel, or lobby for expansion of existing national insurance coverage.

While the type and extent of compensation and health care coverage may vary depending on the place of employment and employer, NNAs must:

- Protect benefits and continued employment opportunities for HIV-positive personnel.
- Negotiate employer-financed health care and disability insurance for work-related infection from HIV/AIDS and other blood borne diseases.
- Lobby for compensation benefits.
- Negotiate job retraining opportunities for nursing/midwifery personnel whose physical ability may be compromised because of HIV, TB and other illness.

An adequate compensation policy will reinforce nursing/midwifery personnel's duty to care for all patients regardless of disease status. Although it may be tempting to provide 'risk allowance' for those providing HIV/AIDS care, any allowance or premium should be linked to quality and expertise in care, not to risk of any specific disease.

### CONTINUED EMPLOYMENT

It must be emphasised that illness due to blood borne pathogens such as HIV/AIDS, HBV and HCV and TB infection is not a cause for discontinuation of employment, whether the infection was acquired on the job or not. Thus as with any other illness, HIV-positive nursing/midwifery personnel should be allowed to work as long as they are fit, provided they practise universal precautions for infection control.

It is worthwhile to remember that the services provided by trained HIV-positive professionals outweigh the extremely low risk of HIV transmission to patients/clients. In line with this affirmative thinking, NNAs, nurse managers and employers should:

- Promote access to confidential voluntary HIV testing, counselling and appropriate follow-up care.
- Support flexible approaches that allow the assignment of nursing/midwifery personnel with HIV/AIDS to be modified on the basis of their ability to perform tasks and avoid infections, e.g. tuberculosis.
- Alert HIV-positive personnel to the risks of tuberculosis infection and benefits of preventive therapy to those already exposed to the disease.
- Promote policies that treat health care workers with HIV/AIDS the same as people with other serious illnesses.

If their ability to work is limited, health care personnel with AIDS should be provided with suitable alternative work arrangements and a supportive occupational setting.

### WORKPLACE ISSUES

Even nursing/midwifery personnel may not be immune from irrational and emotional responses when working with HIV-positive colleagues. To address

such negative responses, NNAs, nurse managers and employers should develop policies that:

- Protect the confidentiality and privacy of HIV-positive nursing/midwifery personnel.
- Prevent social isolation of HIV-positive personnel by co-workers.
- Keep HIV-positive personnel in a supportive occupational setting as long as possible.
- Provide a peer support system involving health care workers including those living with HIV.
- Educate all employees, management and union leaders about the rights and care of HIV-positive health care workers.

To combat discrimination and isolation of nursing/midwifery personnel living with HIV/AIDS, educational programmes must be targeted to reach managers, supervisors, union leaders and all employees.

### NNA SERVICES

Depending on the stage of the disease and the resources available, HIV-positive nursing/midwifery personnel require a package of services which can include<sup>27</sup>:

- negotiating with employers, managers and insurance agencies not to discriminate against HIV-positive personnel;
- providing support, legal assistance and referrals;
- fostering networking with other HIV-positive health workers;
- counselling on career change and job retraining opportunities;
- advising about continued practice and disclosure of HIV status;
- developing and disseminating position statements on issues such as mandatory testing, ethical obligations of HIV-positive personnel and disclosure of information; and
- providing up-to-date and accurate information about compensation benefits, occupational risks and follow-up care.

Nursing/midwifery personnel have a long tradition of providing care without discrimination. It would be indeed unfortunate if they are themselves discriminated against because of HIV status. The challenge for NNAs, nurse managers and employers is to ensure that nursing/midwifery personnel with

HIV/AIDS are treated with dignity and afforded appropriate care and compensation benefits.

### LOBBYING FOR PUBLIC POLICY

A starting point for NNA work in influencing public policy on HIV/AIDS care, ethics and human rights, is to review existing practices, policies and legislation in their countries to determine what needs to be changed or introduced. Using ICN guidelines and references, NNAs must then lobby for introducing or changing existing regulations and legislation to ensure that people with HIV/AIDS are treated like any other group with a health problem. Policies, practices and legislation should:

- Ensure that health care settings have infection control policies.
- Oppose mandatory HIV testing of patients and of nursing/midwifery personnel.
- Ensure confidentiality and prevent disclosure of personal information about HIV status.
- Clarify criteria for definition of 'occupational exposure'.
- Make occupationally acquired HIV/AIDS a compensable disease, like other occupational diseases and disabilities.
- Ensure comprehensive HIV-related employment regulations, including provision of HIV prevention education and protection against discrimination in the workplace.
- Clarify professional ethical norms and obligations in regard to health care and HIV/AIDS.
- Allow continued practice for HIV-positive personnel depending on their ability to perform.

### NEEDLESTICK PREVENTION FOCAL PERSON <sup>28</sup>

NNAs should work with employers and nurse managers to set up infection control mechanisms that include prevention of needlestick injuries. Nursing and midwifery personnel must be involved in product evaluation committees to ensure that safety of devices and products is considered before purchase. As far as possible safer devices that eliminate the use of needles or that provide a barrier between the needle and the health care provider must be chosen. In addition, the needlestick prevention focal person should:

- Survey the workplace to determine where the highest number of needlestick injuries occur, and document the devices and procedures that cause the greatest number of injuries.
- Monitor needlestick reporting to assess trends and ensure that all injuries are being reported.
- Talk with health care workers and supervisors to find out why needlestick injuries may not be reported and to ensure that they are reported in the future.
- Confirm that post-needlestick protocol is in place and posted prominently for all employees to see. The protocol should include provisions on testing, counselling, prophylaxis and confidentiality.
- Educate health care providers and others on the prevention of needlestick injuries through meetings, leaflets, articles, or health and safety training sessions. As part of the educational programme, involve manufacturers of medical equipment to demonstrate their products and safety information.

### RESEARCH ISSUES AND PRIORITIES

Accurate reporting, surveillance and documentation of needlestick injuries, splashes and other exposures and their consequences on health care workers, would provide evidence an accurate picture of the problem. NNAs, nurse researchers and nurse managers should be actively involved in research that aims to address the lack of a data base in the incidence and prevalence of occupational risk of HIV, HBV, HCV and tuberculosis among nursing/midwifery personnel across countries, including those with scarce resources.

Research could identify when, where, why and how 'sharps injuries' occur in the workplace and provide insight into methods for preventing such injuries. For example, following a timely reporting and documentation of sharps injury, longitudinal tracking can be used to determine the extent of sero-conversion after occupational exposure to HIV. Such a database could then serve as a basis for developing preventive measures.

NNA research priorities could include:

- Factors that influence compassion and quality of care for people living with HIV/AIDS and TB.
- Evaluation of educational approaches that achieve desired learning outcomes in risk reduction and infection control.

- Methods of reducing occupational risk of HIV, HBV, HCV infection and TB.
- Action-oriented survey of nurses/midwives' knowledge, attitudes and practice about HIV/AIDS, HBV and HCV.
- Evaluation of supplies/equipment for availability, cost-effectiveness and safety.
- Compliance problems with universal precautions and methods of addressing them.
- Impact of HIV/AIDS and other blood borne diseases on recruitment and retention of nursing/midwifery personnel.
- Factors that cause burnout among nursing/midwifery personnel in HIV/AIDS care.

In order to develop baseline data on trends and prevalence of HIV, HBV, HCV and TB infection in health care settings, NNAs should network at the regional and international level, sharing experiences and disseminating information. They should also monitor and document types and risk of exposure with a view to identifying preventive measures.



## CONCLUSION

Risks related to personal behaviour and the potential for HIV, HBV, HCV and TB transmission in health care settings require a balanced approach to risk perception and risk reduction. Although the social stigma attached with HIV/AIDS may create conditions that interfere with quality of care, nursing/midwifery personnel have a moral and ethical duty to care for all people, including those infected and affected by HIV/AIDS.

Similarly, the employer has a moral and ethical duty to provide nursing/midwifery personnel with appropriate supplies and protective equipment as well as proper health care and financial compensation for HIV-positive nursing/midwifery personnel. The use of universal precautions, even in settings with limited supplies and protective equipment, is effective in reducing the risk of infection.

The prevention of HIV, HBV, HCV and TB infection in health care settings is a shared responsibility among NNAs, employers, nurse managers and nursing/midwifery personnel, as well as manufacturers of health care equipment.

The role of nursing/midwifery personnel in health education and information is of vital importance not only in the prevention of HIV, HBV, HCV and TB infection in the workplace but in reducing personal and social risks in the community as well. So long as there is no effective cure or vaccine for HIV infection, universal precautions and health education aimed at changing behaviour remain a powerful and effective intervention for reducing risk.

ICN in partnership with its member NNAs, WHO, UNAIDS and others will continue to promote a healthy work environment through lobbying for safer work environments, dissemination of information, development of guidelines and position statements on the prevention, care and management of occupational risks in nurses and other health care workers.

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