Learning to Care for the Vulnerable HIV Positive Population as a Public Health Nurse

David A. Rogers

National American University

Abstract

The human immunodeficiency virus (HIV) should no longer be considered a death sentence but rather a manageable chronic disease. The most vulnerable are those that engage in unprotected sex, have multiple partners and men who have sex men. Stigmas surrounding HIV are based in ignorance and widely publicized misinformation broadcast in the early 1980's. This has exacerbated social isolation and vulnerabilities of this vulnerable population. Fortunately pharmaceutical advancements, aggressive research and improved treatment strategies have greatly improved the prognosis and extended the life expectancy of HIV positive patients. HIV screenings and community education as part of outreach programs are key nursing interventions that prevent the spread of HIV and identify existing infections early. Many at risk individuals do not seek out information, testing or treatment due to social pressures and fear. This research is intended to help nurses overcome internal biases, those of their patients and the community at large.

Learning to Care for the Vulnerable HIV Positive Population as a Public Health Nurse

As a public health nurse learning to care for the HIV positive population, exploring the many factors that put populations at risk for contracting HIV required. The stigma that surrounds this disease has exacerbated the social isolation and vulnerabilities of this population even before a confirmed diagnosis. It is the main focus of this research to help nurses overcome their own internal biases, those of their patients and the community at large. HIV should no longer be considered a death sentence but rather a manageable chronic disease.

Perspectives on the Vulnerability of the HIV Positive Population

Vulnerability is being more likely to be put at risk for poor health due to circumstances beyond the control of the individual (i.e genetics), socioeconomic conditions or lifestyle choices. In the population of those diagnosed with HIV all of these can be factors that put an individual at risk and often there is a combination of several factors. Risk factors are simply the things that increase the probability of contracting HIV. (Stanhope & Lancaster, 2012)

Vulnerable populations are at risk for contracting HIV due to their exposure to other factors such as having unprotected sex, especially with multiple partners and men who engage in homosexual couplings (Aho, et al., 2014). Intravenous drug use and children born to infected mothers are also at risk (Vinis, 2009).

HIV makes the patient more susceptible to secondary pathologies and late stage immune system degradation better known as acquired immunodeficiency syndrome (AIDS).

Consequently they are likely to be socially ostracized by the mainstream which may result in efforts to conceal their condition, downplay their risk factors or flat out ignore the likelihood of exposure. Self defense mechanisms can lead to resisting counseling or failing to comply fully with medical treatments due to shame and embarrassment. Negative social pressure such as this

creates further risk for depression which can lead to destructive behaviors, self neglect, failure to thrive and suicide.

Most disparities that currently exist are global in scale. The Sub-Saharan African region is a prime example, having a substantially higher prevalence of HIV with less access to adequate care and treatment. HIV is the highest cause of death in these economically disadvantaged countries (AVERT, 2012). It is the same for economically disadvantaged peoples around the world who do not have the type of health care that the average American has. Even the poor in richer countries do better than those in countries with fewer assets. Accurate health education, concerning the cause and prevention of HIV, is nearly impossible in societies whose masses are largely illiterate. Traditional ethnic cures that are effective in treating common ailments may not be in patients with HIV/AIDS. Treating the expressed symptoms without recognizing the underlying immunodeficient disease will frustrate the healer's efforts. Disparities in socioeconomic status and deficiencies in health education are both priority issues that need to be overcome in order to meet Maslow's hierarchy of needs for all peoples.

Contributing Vulnerability Factors for Those with HIV

Issues like poverty, homelessness, socioeconomic status, youth, substance abuse, violence, isolation, physical and psychological abuse all add to the risk for acquiring HIV and other sexually transmitted diseases (Amiri, et al., 2014). The greatest risk is to men from age 20 to 34 (Fig. 1) an age when young adults normally leave their childhood homes to strike out on their own to make their way in society (Centers for Disease Control and Prevention, 2014). HIV infection could compromise more than the patient's health it may undermine their ability to maintain their current socioeconomic status. Resiliency may be challenging in the vulnerable HIV population without assistance.

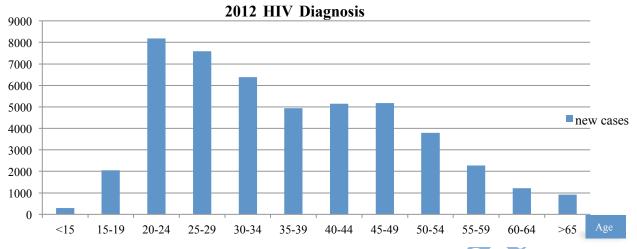


Fig. 1 (Centers for Disease Control and Prevention, 2014)

There are many organizations at all levels of civil society which contribute to supporting the health status of chronic diseases including HIV. The ultimate goal is to find a cure, better the lives of those afflicted and reduce the incidence of HIV and other such diseases (World Health Organization, 2014). The vast resources being dedicated to the fighting HIV and caring for those suffering with this horrendous disease help to provide education, testing and treatment programs. For example in Sub-Saharan Africa, home to the majority of the world's population that has HIV, programs combine the efforts of government, employer, trade union and international organizations that go out and serve the people where the work and live (Fultz & Francis, 2011). The Centers for Disease Control and Prevention, proposed the expansion of HIV screenings in 2020 with an expected increased cost to U.S. tax payers of 2.7 million dollars (Martin, Paltiel, Walensky, & Schackman, 2010). The president has requested a 685 million dollar increase of U.S. Federal funding for HIV for the 2015 fiscal year (Kaiser Family Foundation, 2014). Currently the budget for both domestic and international spending on HIV/AIDS programs is 29.7 billion dollars. Most State Governments and many privately owned organizations contribute funds to lower costs for patients who do not qualify for Federal entitlement programs

(Martin, et al., 2010). Unfortunately there is not enough data concerning the adequacy of these programs meeting the specific needs of vulnerable peoples because there is no way to accurately measure utilization.

Positive outcomes and Negative outcomes

Positive outcomes of vulnerability in the HIV positive population include improved disease management and treatment availability for an increased number of patients. HIV is now considered a manageable chronic disease in contrast to the acutely fatal ebola virus.

Pharmaceutical advancements, aggressive research and improved treatment strategies have greatly improved the prognosis of an HIV diagnosis. More people are surviving and living longer with HIV in just a few decades as a result of these efforts to end this epidemic.

Negative outcomes that increase vulnerability in the HIV positive population include: the evolving of resistive strains, stigma, fear, social isolation, depression, suicide, and increased risky sexual behavior in response to lower transmission and mortality rate reports which demonstrate the cycle of vulnerability as it relates to this population. Resistive viral strains develop when patients do not take medication consistently, which is common amongst the economically disadvantaged who point to the high cost of prescriptions as the reason (Gallant, Mehta, & Sugarman, 2013). An unintended consequence to better health outcomes has been the increased engagement in unprotected sex particularly amongst homosexual men. With improved prognosis for surviving with HIV and the belief that transmission rates of HIV have dropped people are taking less precautions (Joseph, Flores, Parsons, & Purcell, 2010). Alarmingly there is an increased prevalence and mortality being reported amongst adolescents, a population that also includes a growing numbers of Hispanics and females (Nkansah-Amankra, Diedhiou, Agbanu, Harrod, & Dhawan, 2011). Despite evidence that early treatment can limit the

devastating effects of HIV and provide for a long life many people hesitate to seek prompt treatment, due to hopelessness concerning their survival (Fagan, et al., 2012).

Considerations When Assessing a Patient with HIV

Major assessment considerations needed for this vulnerable population revolve around patient's perceptions of their own identity. A diagnosis of HIV begins a journey of change neither expected nor welcome; forcing the patient to deal with feelings about a disease that is often little understood until the day it becomes personal. The first questions most people ask concern their chances for survival and the quality of their remaining life (Gallant J., 2012). A common belief that HIV kills quickly is a major obstacle to seeking care. Belief that not having symptoms, meant that antiviral treatment was not yet needed, was another major reason reported for not seeking prompt treatment. These examples make assessment of the patient's attitudes and beliefs a priority. The potential impact of assessing the newly diagnosed HIV patient's beliefs and attitudes is that they would be less vulnerable from the stigmas that surround this disease that would further isolate them.

Next assess the patient's social support system, financial status, medical history, family history, current medications, tobacco, drug and alcohol use. This population will need a secure social support network that may not include their current family and friends due to lifestyle and stigma (Aho, et al., 2014). Financial status will be important; having work brings personal satisfaction and provides income and possible insurance coverage. Eligibility for assistance may be available because medications are expensive. Medical and family history will guide future assessments to guard against opportunistic infection. Medication and substance use will most likely need to be modified the same as with any other chronic disease.

Testing is often not sought out, so notification does not always come with the opportunity to assess the newly diagnosed patient's feelings and attitudes. Research reveals that it could be many years before HIV treatment is sought and often not before the patient becomes symptomatic (Grodeck, 2007). When the opportunity for performing a nursing assessment on the person who has HIV presents itself, take the time to find out what they feel about it. Individuals that are isolated or engage in risky behavior are often fiercely independent and capable of taking care of themselves. Tap into this strength and encourage them to take control of their health care. They can be the strongest advocates for others they perceive as suffering the same as they have, so encourage them to help themselves by helping others. The goal is to educate and motivate them to engage in treatment sooner than later and it all begins with assessing attitudes and beliefs that create barriers to early treatment.

Evidence based research supporting nursing implementations

The following is an evidence based plan for implementing public health nursing interventions aimed at the prevention of HIV. All three levels of prevention; primary, secondary and tertiary are addressed. The impact these interventions have on the individual patient, families and communities may vary but the goals are mostly the same. Each is drawn from research supporting their effectiveness.

One of the Healthy People 2020 goals is to prevent the spread of infectious diseases including HIV/AIDS (Centers for Disease Control and Prevention, 2014). This represents a primary level of prevention goal that includes teaching in the community about safe sex practices and the avoidance of risky behaviors to prevent HIV/AIDS. Unfortunately there have been statistical indicators of increased incidence and mortality rates among adolescents suggesting a need for renewed attention on school age education (Nkansah-Amankra, Diedhiou, Agbanu,

Harrod, & Dhawan, 2011). Another primary prevention approach is the new pre-exposure prophylaxis (PrEP), made from a combination of two antiviral drugs, tenofovir and disoproxil labeled, Truvada[®] that has recently been approved by the FDA. Regrettably providers in one study reported difficulty deciding the criteria and protocol for prescribing (Arnold, et al., 2012).

Secondary prevention would be in the form of HIV screenings that would be part of outreach programs in the community coupled with primary prevention education. Initial HIV screenings will be offered to outpatients on site as well as information regarding mail order and self tests available via the clinic website or other media. This would be coupled with education concerning prevention treatment and the survivability of HIV. Identifying the disease early is important because the initial infection often goes unnoticed and is a time when transmission is more likely due to a high viral load (Gallant J. , 2012).

Tertiary prevention comes in the form of periodic lab tests, early implementation of ART, home health care, mental health support, substance abuse counseling, dentistry, medical and social support (Gallant, Mehta, & Sugarman, 2013). Early treatment is recommended regardless of symptoms and has proven to be the most effective course both for individual health outcomes and to limit the spread of the virus (Gallant, Mehta, & Sugarman, 2013).

Evaluation of these Nursing Interventions

Evaluation of the primary prevention goal of reducing the incidence of new cases of HIV can be done by trending data year to year. These numbers can be compared between community, national and worldwide epidemiological data gathered by organizations such as the U.S. Department of Health and Human Services, the CDC and WHO. The secondary prevention goal of providing education and initial HIV screenings would be evaluated by the number of identified people engaging in at-risk behaviors and their response to community outreach

programs. The number of incidence of new cases may rise as a result of outreach efforts but this is a positive if it is due to helping those who have been hereunto unaccounted for due to their vulnerability status. The tertiary prevention goal would be best evaluated by an increasing number of those surviving with the chronic disease of HIV with no rise in new cases and a reduction in mortality rates.

These goals are unlikely to change in the near future since a new generation of people entering puberty that become sexually active occurs every year. They too need to be aware of the behaviors that can lead to HIV so they can make educated choices to protect themselves and others. Initial screenings will likely become a normal part of health care conducted by primary providers but there will always be those that are more vulnerable than others and that will still benefit from outreach programs. Until HIV becomes a rare disease those currently infected will require treatment to manage the disease and since the prognosis for a long life is good they will require care for many decades to come even after the first goal is reached. This means that nurses working with those infected with HIV will be engaged in a lifelong relationship with their patients. In time interventions may be reduced or changed to meet new goals but I do not foresee total elimination of preventative care as conducive to the best interests of society especially with current research indicators that show a need for renewed efforts to educate adolescents (Nkansah-Amankra, Diedhiou, Agbanu, Harrod, & Dhawan, 2011)

Learning to care for patients living with HIV helps by "Reducing the number of people who become infected with HIV, increasing access to care, improving healthcare outcomes and reducing HIV related disparities" which are the stated goals of the Centers for Disease Control and Prevention (CDC) in the Healthy People 2020 objectives (2014, para.4). The World Health Organization (WHO) has set eight millennium goals one of which pertain to reducing the spread

of HIV/AIDS and the care and treatment of those who currently have HIV/AIDS. These objectives can be met by nurses assessing the need of HIV patients, identifying populations of vulnerability with HIV, planning how to reach these populations, providing outreach programs and following epidemiological data concerning incidence and mortality rates.

Multiple factors lead to people being susceptible to acquiring HIV that lead to their being seriously marginalized as a result of ignorance and widely publicized misinformation concerning the disease. Education is one of the key elements of eliminating bias and preventing the spread of HIV. Identifying those at risk and providing testing can lead to better prognosis with early antiviral treatment. There is even a chemical prophylactic to protect those at higher risk of contracting the virus. Assessing risk factors, along with medical and family history can help the nurse provide the best possible interventions for patients that may have more complex life issues. Helping the patient to understand and accept that HIV is a manageable chronic disease is as therapeutic as the pharmacological interventions that are necessary for survival because it empowers them to become a member of their own health care team. Adherence to antiviral treatment that is begun early after diagnosis can slow the advance of HIV for decades. No longer does the patient have to fear a rapid and terrible death from AIDS. The nurse should anticipate a long relationship with survivors of HIV. Ultimately, there is more to treating this population than just treating the pathology in order to maintain the individual's health and that of the community as a whole by preventing the further spread of the HIV virus.

References

- Aho, J., Hakim, A., Vuylsteke, B., Semde, G., Gbais, H. G., Diarrassouba, M., . . . Laga, M. (2014, June 24). Exploring risk behaviors and vulnerability for HIV among men who have sex with men in abidjan, Cote d'Ivoire: Poor knowledge, homophobia and sexual violence. (R. Stephenson, Ed.) *PLos One*, *9*(6), 1-11. doi:10.1371/journal.pone.0099591
- Amiri, F. B., Gouya, M. M., Saifi, M., Rohani, M., Tabarsi, P., Sedaghat, A., . . . Mostafavi, E. (2014, June 4). Vulnerability of homeless people in Tehran, Iran, to HIV, tuberculosis and viral hepatitis. (J. Z. Metcalfe, Ed.) *PLoS ONE*, *9*(6), 1-7. doi:10.1371/journal.pone.0098742
- Arnold, E. A., Hazelton, P., Lane, T., Christopoulos, K. A., Galindo, G. R., Steward, W. T., & Morin, S. F. (2012, July 11). A Qualitative study of provider thoughts on implementing Pre-Exposure Prophylaxis (PrEP) in clinical settings to prevent HIV infection. (J. R. Lama, Ed.) *PLoS ONE*, 7(7), 1-8. doi: 10.1371/journal.pone.0040603
- AVERT. (2012, December). *Worldwide HIV & AIDS statistics*. Retrieved from AVERT: http://www.avert.org/worldwide-hiv-aids-statistics.htm
- Centers for Disease Control and Prevention. (2014, December 5). *Healthy People 2020 topics and objectives: HIV.* Retrieved from Healthy People:

 http://www.healthypeople.gov/2020/topics-objectives/topic/hiv
- Centers for Disease Control and Prevention. (2014, November 25). HIV in the United States: At a glance. Retrieved from Centers for Disease Control and Prevention: HIV/AIDS: http://www.cdc.gov/hiv/statistics/basics/ataglance.html

- Fagan, J. L., Beer, L., Garland, P., Valverde, E., Courogen, M., Hillman, D., . . . Bertolli, J. (2012, June). The influence of perceptions of HIV infection, care, and identity on care entry. *AIDS Care*, *24*(6), 737-743. doi:10.1080/09540121.2011.630360
- Fultz, E., & Francis, J. M. (2011, July-September). Employer-sponsored programmes for the prevention and treatment of HIV/AIDS: Recent experience from sub-Saharan Africa. *International Social Security Review, 64*(3), 1-19. doi: 10.1111/j.1468-246X.2011.01399.x
- Gallant, J. (2012). *100 Questions & Answers About HIV and AIDS* (2nd ed.). Burlington, MA: James & Bartlett Learning.
- Gallant, J. E., Mehta, S. H., & Sugarman, J. (2013, September 15). Universal antiretroviral therapy for HIV infection: Should US treatment guidelines be applied to resource-limited settings? *Clinical Infectious Diseases*, *57*(6), 884-887. doi:10.1093/cid/cit382
- Grodeck, B. (2007). *The First Year HIV An Essential Guide for the Newly Diagnosed* (2nd ed.). Cambridge, MA: Da Capo Press.
- Joseph, H. A., Flores, S. A., Parsons, J. T., & Purcell, D. W. (2010, January). Beliefs about transmission risk and vulnerability, treatment adherence, and sexual risk behavior among a sample of HIV-positive men who have sex with men. *AIDS Care*, 29-39. doi: 10.1080/09540120903012627
- Kaiser Family Foundation. (2014, June 25). *U.S. Federal funding for HIV/AIDS: The President's*FY 2015 budget request. Retrieved from Henry J. Kaiser Family Foundation:

 http://kff.org/global-health-policy/fact-sheet/u-s-federal-funding-for-hivaids-the-presidents-fy-2015-budget-request/

- Martin, E. G., Paltiel, A. D., Walensky, R. P., & Schackman, B. R. (2010, December 1).

 Expanded HIV screening in the United States: What will it cost government discretionary and entitlement programs? A budget impact analysis. *Value in Health*, *13*(8), 893-902. doi:10.1111/j.1524-4733.2010.00763.x
- Nkansah-Amankra, S., Diedhiou, A., Agbanu, H., Harrod, C., & Dhawan, A. (2011, August).

 Corelates of sexual risk behaviours among high school students in Colorado: Analysis and implications for school based HIV/AIDS programs. (T. Dye, Ed.) *Maternal & Child Health Journal*, *15*(6), 730-741. doi:10.1007/s10995-010-0634-3
- Stanhope, M., & Lancaster, J. (2012). *Public Health Nursing: Population-Centered Health Care in the Community* (8th ed.). Maryland Heights, MI: Elsevier Mosby.
- Vinis, D. (2009). *Taber's cycolopedic medical dictionary* (21st ed.). Philadeelphia, PA: F.A. Davis .
- World Health Organization. (2014). *The determinants of health: Introduction*. Retrieved from World Health Organization: http://www.who.int/hia/evidence/doh/en/