A COMPARISON OF HIV/AIDS HEALTH POLICY IN SELECTED DEVELOPED AND DEVELOPING COUNTRIES

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ABSTRACT

Background: Human Immunodeficiency Virus (HIV) infection and Acquired Immune Deficiency Syndrome (AIDS) continue to be major global public health issues. Approximately 34 million have died since the first five cases were described in 1981 and currently, 36.9 million are estimated to be living with the disease. New HIV infections globally have declined by 35% since 2000 and this can be attributed to the HIV/AIDS health policies and prevention programmes by various countries. Health policy refers to decisions, plans, and actions that are undertaken to achieve specific health care goals within a society. This article aims to compare the HIV/AIDS policies of three developed (the United States of America, United Kingdom and Australia) and three developing (Nigeria, India and Sudan) countries and their impact on HIV/AIDS epidemic.

Materials and Methods: A comprehensive review of literature and country reports on HIV/AIDS policies and prevention programmes in the above mentioned developed and developing countries were performed.

Result: While all the six countries that were reviewed have their own health policy in the prevention and control of HIV/AIDS, it was observed that a more prompt decline in HIV infection was in the economically buoyant countries compared to the developing countries.

Conclusion: Attributing factors to the different outcomes of the HIV/AIDS prevention programmes can be listed as difference in the policy statements, timing of their implementations, commitments of the governments, financial and political stability of the government, healthcare infrastructure & delivery system and also the involvement of the international and national Non Profit Government Agencies (NGOs).

Keywords: HIV, AIDS, Health Policy, USA, UK, Australia, Nigeria, India, Sudan
1.0 Introduction

In 1981, the Centers for Disease Control and Prevention (CDC) reported the cases of unusual clusters of Pneumocystis carinii pneumonia and Kaposi’s sarcoma in gay men in several parts of the United States of America (USA). These were the first reported cases of AIDS. Since 2000, 38.1 million people have become infected with HIV and 25.3 million people have died of AIDS-related deaths (UNAIDS 2015). By the end of 2014, an estimated 36.9 million people are living with HIV globally compared to 28.6 million people in 2000. The new HIV infections have decreased by 35% since 2000 as only 2.0 million people became newly infected with HIV in 2014 compared to 3.1 million in 2000. There is a 42% decrease in AIDS-related deaths since the peak in 2004, 58% decrease in the new HIV infections among children since 2000 and an 84% increase in access to antiretroviral therapy since 2010 (UNAIDS 2015). From many aspects, the global HIV/AIDS epidemic is an enormous tragedy for human-kind. Sub-Saharan Africa is the most affected region, with 25.8 million people living with HIV in 2014. Sub-Saharan Africa also accounts for almost 70% of the global total of new HIV infections. It is estimated that currently only 54% of people with HIV know their status. Between 2000 and 2015, new HIV infections have fallen by 35% and AIDS related deaths have fallen by 24% (WHO 2015).

Health policy and planning involves series of activities with a common goal to improve the health outcomes, efficiency of health services provision or both. Despite the environmental, political issues, media headlines and public pressures and expectations; a well designed health policy and planning process can be tenacious enough to withstand the pressures and seize the opportunities therein to go forward and improve the health care provision and health outcomes of the population it serves (Buse, Mays & Walt, 2012). The aim of this article is to understand the HIV/AIDS policies and their impact on HIV/AIDS epidemic in the three developed (the USA, United Kingdom and Australia) and three developing (India, Nigeria and Sudan) countries by reviewing the literatures and country reports comprehensively.

2.0 Overview of the countries and HIV/AIDS epidemic

In this article, the health policy on HIV and AIDS between three developed countries which include the USA, United Kingdom (UK), Australia; and three developing countries, i.e., Sudan, Nigeria and India are being reviewed and compared. This comparison was based on the framework of Walt and Gilson (1994) to explore on the emphasis made by the countries in different levels of HIV/AIDS prevention. These countries were grouped to “developed” and “developing” nation based on the World Bank income classification by Gross National Income (GNI) and Gross Domestic Product (GDP).

2.1 Developed Countries

The USA has the largest population of 318.9 million as compared to the UK and Australia but Australia had the highest life expectancy of 82 years at birth and UK has the highest health system ranking index of 18 by WHO as shown in Table 1. The United States is categorised as having a concentrated or low-prevalence epidemic.
Table 1: General overview of the countries reviewed

<table>
<thead>
<tr>
<th>Country</th>
<th>Population in 2014 (million)</th>
<th>GNI per capita (USD)</th>
<th>Life expectancy at birth (years)</th>
<th>Health system ranking (WHO index)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>23.5</td>
<td>64,540</td>
<td>82</td>
<td>37</td>
</tr>
<tr>
<td>USA</td>
<td>318.9</td>
<td>55,200</td>
<td>79</td>
<td>32</td>
</tr>
<tr>
<td>UK</td>
<td>64.5</td>
<td>43,430</td>
<td>81</td>
<td>18</td>
</tr>
<tr>
<td>Nigeria</td>
<td>177.5</td>
<td>2,970</td>
<td>52</td>
<td>187</td>
</tr>
<tr>
<td>India</td>
<td>1,295</td>
<td>1,570</td>
<td>68</td>
<td>112</td>
</tr>
<tr>
<td>Sudan</td>
<td>39.4</td>
<td>1,710</td>
<td>63</td>
<td>134</td>
</tr>
</tbody>
</table>

2.2 Developing Countries

Among the developing countries being reviewed, India is most populous with the population of 1.29 billion and had the maximum life expectancy of 68 years at birth with highest health system ranking index of 112 compared to Nigeria and Sudan (Table 1). A third of the total population of Sudan, i.e., 17 million people are living in the conflict-affected areas.

2.3 HIV/AIDS Epidemic in the selected developed and developing countries

A generalised HIV epidemic is seen in Nigeria which is predominantly caused by heterosexual transmission, and with a population prevalence of over 1% of the population. In contrast, a concentrated HIV epidemic with overall population prevalence of HIV of less than 1% is reported in the USA, UK, Australia, India and Sudan which predominantly affected particular groups such as gay men, men who have sex with men (MSM), people who inject drugs (PWID) and sex workers (UNAIDS 2015).

While having a concentrated epidemic, India, being among the most populous country, have the largest number of people living with HIV/AIDS (PLWHIV) in Asia and the second largest in the world. The estimated HIV prevalence among the age group of 15 to 49 years was 0.35% (NACO 2015). Overall, India’s HIV epidemic is declining, with a 19% reduction in new HIV infections and a 38% decline in AIDS-related deaths between 2005 and 2013. Despite, this 51% of deaths in Asia are in India (UNAIDS 2014).

Nigeria still has the second highest HIV/AIDS burden in the world with an estimated 3,391,546 PLHIVs. However, estimates show that new infections have declined from an estimated 316,733 in 2003 to 239,155 a decade later in 2013. A total of 174,253 died from AIDS related cases in 2014 which is lower than 210,031 people in 2013. Key drivers of the HIV epidemic in Nigeria include low personal risk perception, multiple concurrent sexual partnerships, transactional and inter-generational sex, ineffective and inefficient services for sexually transmitted infections (STIs), and inadequate access to quality healthcare services. According to UNAIDS 2015 Millennium Development Goal (MDG) 6 Report, among the countries which reversed the spread of HIV (more than 20% decline in HIV Infections from 2000 to 2014) are India and Nigeria, whereas the ones which managed to halt the spread of HIV (-20% to +20% change in the HIV Infections) is the USA. The countries which showed increasing trends of HIV Infections (increase of 20% or more) are Australia, Sudan and the...
UK. The long and devastating civil war in the south Sudan has resulted in the worst internal displacement problem in the world. The United Nations estimated that there are four million internally displaced people. Displacement increases the number of vulnerable groups, and has an adverse effect on HIV/AIDS control especially when coming from high HIV/AIDS prevalence countries. Table 2 shows the comparison of HIV prevalence rate, AIDS-related deaths, Key affected people (KAP) and also the percentage of financial commitment of the 6 mentioned countries.

Table 2: Overview of the HIV/AIDS epidemic in the selected countries

<table>
<thead>
<tr>
<th>Country</th>
<th>HIV Prevalence rate (%)</th>
<th>AIDS-related deaths</th>
<th>Key Affected people (KAP)</th>
<th>Financial Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>0.38</td>
<td>5380</td>
<td>MSM (67%), IDU (6%), Heterosexual (25%) and others</td>
<td>100% -</td>
</tr>
<tr>
<td>UK</td>
<td>0.28</td>
<td>530</td>
<td>MSM (43%), IDU (2%), Heterosexuals (52%)</td>
<td>100% -</td>
</tr>
<tr>
<td>Australia</td>
<td>0.10</td>
<td>10000</td>
<td>MSM (73%), IDU (3%), Heterosexuals (15%) and others</td>
<td>100% -</td>
</tr>
<tr>
<td>India</td>
<td>0.38</td>
<td>130000</td>
<td>Heterosexuals (87%); Transgender, Female Sex workers, IDU (1.6%); MSM (1.3%) and bridge populations</td>
<td>90% 10%</td>
</tr>
<tr>
<td>Nigeria</td>
<td>3.20</td>
<td>170000</td>
<td>Heterosexuals (80%); MSM (11%), IDU (9%)</td>
<td>5% 95%</td>
</tr>
<tr>
<td>Sudan</td>
<td>0.24</td>
<td>2900</td>
<td>Mainly MSM and Female Sex Workers</td>
<td>10% 90%</td>
</tr>
</tbody>
</table>

3.0 HIV/AIDS Health Policy Statements

Policy statements made by the selected countries regarding HIV and AIDS are presented in Table 3. It can be observed that the policy statements of the developed countries reflect on improving the quality of life and treatment of those suffering from HIV/AIDS whereas the policy statements of the developing countries reflect upon the elimination of stigma and discrimination of those infected with HIV/AIDS and also improve the access to health care services.
Table 3: Policy statements on HIV and AIDS

<table>
<thead>
<tr>
<th>Country's policy</th>
<th>Policy Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States of America</td>
<td>“The United States will become a place where new HIV infections are rare, and when they do occur, every person, regardless of age, gender, race/ethnicity, sexual orientation, gender identity, or socio-economic circumstance, will have unfettered access to high quality, life-extending care, free from stigma and discrimination” (White House Office of National AIDS Policy, 2010).</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>The UK, Government’s 2001 National Strategy for Sexual Health and HIV outlined policies “To reduce levels of unsafe sex, new HIV diagnoses, and undiagnosed HIV, via investing in prevention, improving outreach services, coordinating initiatives and extending information campaigns” (HIV in United Kingdom 2007).</td>
</tr>
<tr>
<td>Australia</td>
<td>“Australia will work towards achieving the virtual elimination of HIV transmission in Australia by 2020, while aiming to reduce the morbidity and mortality caused by HIV and minimising the personal and social impact of the disease” – 2014.</td>
</tr>
<tr>
<td>India</td>
<td>India’s policy states that “Every person living with HIV has access to quality care and is treated with dignity. Effective prevention, care and support for HIV/AIDS is possible in an environment where human rights are respected and where those infected or affected by HIV/AIDS live a life without stigma and discrimination” (National AIDS Control Organisation (NACO), 2014 – 2015).</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Nigeria’s policy states that “To make Nigeria a nation of people with functional knowledge of HIV/AIDS, who provide care and support to individuals, families and communities confronted with the epidemic” (National Agency for Control of AIDS (NACA), 2014 – 2015).</td>
</tr>
<tr>
<td>Sudan’s</td>
<td>Sudan’s policy states that “To maintain HIV prevalence at levels below 1%, to reduce morbidity and mortality due to HIV/AIDS through capacity building, political commitment, patient care and treatment and to eliminate stigma and discrimination against people infected with HIV” (Federal Ministry Of Health (FMOH), 2014).</td>
</tr>
</tbody>
</table>

4.0 Health Policy framework

4.1 Actors
State actors in the developed countries (USA, UK and Australia) constitute a central coordinating national body that oversees the HIV policy planning, development and implementation. In the USA, the Office of National AIDS Policy (ONAP) which is directly under the White House is the main state actor while in the UK and Australia, state actors composed of Departments of Health and Federal Government Agencies. In developing countries (India, Nigeria and Sudan) the authorities mainly consist of Ministries of Health, National Agencies & State action committees. In addition, state actors in India and Sudan also include non-health sector ministries (Youth, Defence, Labour, Railways and Education).

The developed countries have local organisations including businesses, faith communities, educational institutions and more importantly, people living with HIV/AIDS as non-State actors. In the UK, in addition to these, there are a few international organisations involved. Non-state actors in the developing countries are largely international donor organisations such as the WHO, UNAIDS and the World Bank and few local civil society organisations. There is a weak participation of key affected people in the developing countries (White House Office of National AIDS Policy; 2010, Australian Sixth National HIV strategy 2010-2013, NACO, 2014/2015). Table 4 shows the state and non state actors involved in the HIV/AIDS health policy in the mentioned six countries.

<table>
<thead>
<tr>
<th>Country</th>
<th>State actors</th>
<th>Non state actors</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States of America</td>
<td>The White House Office of National AIDS Policy (ONAP)</td>
<td>Businesses, faith communities, philanthropy, scientific and medical communities, educational institutions, people living with HIV and others whose commitment and contributions will help in the successful implementation of the policy and achieving its target objectives</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>The Government, Department of Health</td>
<td>House of Lords Committee, national organisations, local organisations, international organisations</td>
</tr>
<tr>
<td>Australia</td>
<td>Australian Federal Government, Political agencies, Medicare National Insurance system, National HIV/AIDS Advisory Structures</td>
<td>The Australian Federation of AIDS Organisations (AFAO), National Association of People Living with HIV/AIDS (NAPWA), AIDS Treatment Project Australia (ATPA), Scarlet Alliance, AIVL - Australian Injecting and Illicit Drug Users League Inc.</td>
</tr>
<tr>
<td>India</td>
<td>Ministry of Health and Family Welfare, National AIDS Committee, National AIDS Control Organisation (NACO), National Council on AIDS, Ministry of Road Transport and Highways, Department of</td>
<td>The Joint United Nations Programme on AIDS (UNAIDS), Community Based Organisations (CBO), Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM), Bill and Melinda Gates Foundation (BMGF), International Labor Organisation (ILO), Civil society organisations, United Nations agencies (UNAIDS, UNICEF,</td>
</tr>
</tbody>
</table>
4.2 **Contextual factors**

### 4.2.1 Situational context

Increased incidence of HIV cases and development of new control strategies influenced all countries and prompted a renewed commitment to fight the epidemic in all of the countries. For instance, in the US, the increase in number of people living with HIV (PLWHIV) that reached an all-time high of 1.1 million in 2010 prompted the renewed interest in new HIV policy and similar patterns were also observed in India. A change of government and the death of a prominent musician prompted new HIV/AIDS policies in Nigeria while in Sudan, secession of the southern part stimulated new policy reforms targeting HIV/AIDS.

### 4.2.2 Structural context

In the US, the political agenda of the newly elected Democrats was in line with prioritizing the welfare of ethnic minorities; as such HIV/AIDS policies became the centre of the agenda. In the UK economic reasons where the main structural factors that led to government interest because at the time Gross expenditure on HIV/AIDS became more than 50% within 4 years between 2006-2007 and 2009-2010 from £500m to more than £760 million and the number of those accessing care have trebled since 2000. Media attention focus on the HIV epidemic in most developing countries especially India and Nigeria and in Sudan, there was significant economic downfall during the period due to falling oil prices, trade embargo and loss of revenue from South Sudan.
4.2.3 Cultural context

In the US, the culture of social liberalism, widely popular at the beginning of Obama administration gave rise to many gay rights movement with specific emphasis on sexual freedom and welfare of minorities. In Sudan and Nigeria, HIV/AIDS organisations were engaging religious leaders as key stakeholders; this led to increased HIV/AIDS awareness and community participation among the respective followers. The existent Sudanese national laws criminalize FSW and MSM practices and therefore interventions targeting these hidden populations require much advocacy and coordination between government officials and regulatory bodies. Building trust between the implementers mainly the elderly in civil society and the key affected populations is one of the biggest challenge (SNAP 2014). In Sudan, even though no laws or regulations are in place to prohibit condom use, condoms remain a “taboo” issue among policy makers and decision makers probably because of the influential Islamic leaders’ anti-condom position (SNAP 2014). In India, the Supreme Court re-criminalised adult consensual same sex sexual conduct in December 2013 after the Delhi High Court decriminalised it in 2009. This action has raised fears about access to HIV prevention and treatment for MSM (UNAIDS 2009; UNAIDS 2013).

4.2.4 International context

In the developed countries, no discernible exogenous influence could be identified in the policy formulation process. This is expected as these countries are self sufficient and were leading the way in terms of innovative HIV/AIDS control strategies. To the contrary, in the developing countries, international assistance in policy-making was quite significant, especially from Global Funds, DFID, Bill and Melinda Gates Foundation and USAID.

4.3 Process

Different countries have different processes through which they developed their HIV policies. The common practice starts with identification and assessment of the problem, based on the prevalence of HIV epidemic in all these countries, people most affected, economic or political reasons. Policy formulation in the developed countries involves public consultations, central organizing body that organizes inter-agency meetings to formulate the policy. For example in the USA Office of National AIDS Policy, a component of the Domestic Policy Council of the White House held several inter-agency meetings to develop their policy. They draw ideas from previous experience, new research findings, technical experts in the field of HIV/AIDS and the academia. Similarly process of policy formulation has been observed in the UK and Australia in which policy formulation involves a central coordinating body and both state and non state actors.

In the developing countries with more decentralised health systems and poor participation of key people involved, policy formulation follows federal coordinating body that formulates the policy with the aid of international organisations, which is later being passed down to the states and districts for implementation. Policy implementation is basically the same in both developed and developing countries, in which the formulated policy is adopted and nationally implemented at all tiers government levels.
4.4 Content

The content of each country’s policy is tapered towards its main goals, strategies and objectives to be achieved. It outlines clear goals and strategies to achieve them within a reasonable time frame, in addition to detailed implementation guidelines.

5.0 Achievements of HIV/AIDS prevention and control

The HIV testing among eligible clients in the developed countries was highest in Australia (80-90%), followed by USA (87%) and UK (69%). The Anti Retroviral Treatment (ART) coverage was highest in UK (74%), followed by Australia (50-70%) and least in the USA (36%). The prevalence of HIV among HRGs was highest in USA (1 in 5), followed by Australia (1 in 7) and UK (1 in 20). The HIV Anti-discrimination Act was implemented in the USA since 1990, in Australia since 1992 but in the UK only since 2010.

The HIV testing among eligible clients in the developing countries was highest in India (64%), followed by Nigeria (42%) and least in Sudan (5% among MSM and 9% among FSW). The ART coverage was maximum in India (36 %) followed by Nigeria (22%) and Sudan only (5%). The prevalence of HIV among the KAP was highest in Nigeria (1 in 4), followed by India ( 1 in 36 among FSW; 1 in 14 among IDU) and least in Sudan (1 in 40 among MSM; 1 in 60 among FSW). HIV Anti-discrimination Act was implemented in Nigeria since 2015 but only the HIV Anti-discrimination Bill was passed in the parliament in India in 2014 and only HIV discrimination Bill was drafted in Sudan.

6.0 Discussion

A comparison of the policy background and direction revealed that the developed countries had high performing health systems whereas the developing countries had low performing health systems. The onset of HIV epidemic in the developed countries was early and currently had a low scale of the epidemic however the developing countries had a late onset of the epidemic and the scale of the epidemic is currently high. The developed countries had a good response to the epidemic in contrast with the poor response from the developing countries.

The key affected people (KAP) in the developed countries were men who have sex with men (MSM) whereas in the developing countries it was female sex workers (FSW). The non-actors were made up of local NGO’s in the developed countries whereas it was international NGO’s in the developing countries. The participation of the KAP was higher in the developed countries. The policy in the developed countries was aimed at disease elimination but in the developing countries was aimed at disease control. The rationale of the policy in developed countries was based on new research evidence whereas in the developing countries was based on termination of old policies.

The resource allocation was strategic in developed countries but uniform in developing countries. The political verbal commitment is not translated to action or financial support in developing countries such as Sudan. The main prevention tool in the developed countries
was medications (PreP and TAP) but in the developing countries was awareness (behaviour and condom use). The problem with treatment in the developed countries was early initiation and total coverage in the developed countries. Developed countries had interagency and intersectoral collaboration but developing countries had mainly inter-sectoral collaboration. Supportive HIV care was good in the developed countries but poor in the developing countries. The undiagnosed cases were low in the developed countries and high in the developing countries. Treatment coverage was high in the developed countries as compared to the developing countries. The developed countries already had Anti-discrimination Acts whereas the developing countries only had Anti-discrimination Bills except for Nigeria which got the Anti-discrimination Act in 2014.

7.0 Recommendations

The developed countries should carry out extensive review of factual evidence with emphasis on use of valid surveillance indicators, must ensure representativeness of all key actors and if possible, include international/exogenous players, should involve rapid on-going data gathering, based on valid and sensitive indicators that will guide implementation, must give more emphasis to research for HIV vaccine/cure so as to end the epidemic, establish seamless services that link patient to care, regardless of social status/viral load, and improve surveillance, reporting and prosecution of discrimination cases. The developing countries should have fact-driven agenda setting, must ensure inclusiveness of leaderships of the KAP and high risk groups (HRGs), must have policy that takes cognizance of the need to perform monitoring and evaluation that will inform effective implementation, identify the HRGs and devise means to reach them through cost effective successful programmes, make provisions for more HIV/AIDS treatment centres to address the huge gap in treatment coverage and should scale up advocacy programmes and enact anti-discrimination laws.

8.0 Conclusions

HIV/AIDS remains a global phenomenon which exerts huge health, social and economic burden in many countries. While the countries may differ in the scale of their domestic epidemics and capacities to mount an effective response, partnership and collaboration are viable means to share experience and to develop potent action strategies. In order to succeed, such actions must be evidence-based, cost-effective and sustainable, targeting key affected populations, high risk groups and the general communities.

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Declaration

The authors have no competing interest to declare.

Authors contribution

Author 1: Development of the Framework, compilation and editing of the report
Author 2: Literature search on UK and drafting of manuscript
Author 3: Literature search on USA
Author 4: Literature search on Sudan
Author 5: Drafting of manuscript
Author 6: Literature search on Nigeria
Author 7: Literature search on Australia
Author 8: Literature search on India
Author 9: Drafting of manuscript
Author 10: Initiation of idea and editor of the report
Author 11: Initiation of idea, final review and chief editor of manuscript

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