



Issues and Challenges of HIV/AIDS Prevention and Treatment Programme in Nepal

Sharada Prasad Wasti (Corresponding Author)

Department of Public Health, School of Medicine

University of Aberdeen, AB25 2ZD, Scotland, UK

Tel: 44-122-455-9165 E-mail: spwasti@abdn.ac.uk

Padam Simkhada

Section of Population Health, School of Medicine

University of Aberdeen, AB25 2ZD, Scotland, UK

Tel: 44-122-455-2491 E-mail: p.p.simpkada@abdn.ac.uk

Julian Randall

University of Aberdeen, Business School

AB25 2ZD, Scotland, UK

Tel: 44-122-455-2491 E-mail: julian.randall@abdn.ac.uk

Edwin van Teijlingen

Centre for Midwifery, Maternal & Perinatal Health Research

School of Health & Social Care, Royal London House

University of Bournemouth, Bournemouth BU1 3LT

Tel: 1202-961-564 E-mail: vanteijlingen@bournemouth.ac.uk

Abstract

This paper explores some of the key issues and challenges of government HIV/AIDS prevention and treatment programme in Nepal. Providing HIV/AIDS prevention and treatment services in Nepal is associated with a number of issues and challenges which are shaped mostly on cultural and managerial issues from grass root to policy level.

Numerous efforts have been done and going on by Nepal government and non-government organization but still HIV prevention and treatment service is not able to reach all the most at risk populations because cultural issues and managerial issues are obstructing the services. The existing socio-cultural frameworks of Nepal do not provide an environment for any safe disclosure for person who is HIV infected. Thus, there is an urgent need to address those issues and challenges and strengthen the whole spectrums of health systems through collaborative approach to achieve the millennium development goals. It will be the purpose of this paper to contribute to the policy makers by exploring the pertinent issues and challenges in the HIV/AIDS programme.

Keywords: HIV/AIDS, Prevention, Treatment, Cultural issue, Nepal

1. Background of the study

For more than two decades, the Acquired Immune Deficiency Syndrome (AIDS) and its aetiological agent, the Human Immunodeficiency Virus (HIV) has been a growing challenge worldwide. HIV/AIDS is recognized as a global emergency demanding the attention on the international health agenda and one of the most important public health issues (WHO 2006). The spread of HIV/AIDS has reached a pandemic form within a short span of time. A total of 33

million people are estimated to be living with HIV across the globe, 2.7 million people became infected with the virus and 2 million people have lost their life due to AIDS (UNAIDS 2008). Every day, more than 6800 people become infected with HIV and more than 5700 die, mostly because they have no access to HIV prevention, treatment and care services (UNAIDS 2008). The United Nations included HIV in its sixth millennium development goals which stated in combating and reversing the spread of HIV/AIDS by 2015 as well as to achieve universal access by 2010 (WHO 2008a). This paper discusses the government's efforts on HIV/AIDS programme management and explores some of the key issues and challenges of HIV/AIDS prevention and treatment programme in Nepal. Its impact is necessarily wider than just medical and includes the cultural and managerial considerations which govern success in medical interventions.

2. Literature search strategy

Electronic journals and reports were accessed by using Medline, Science Direct, Google and Google Scholar. The search strategy was limited to published year from 1990 to 2009. Other "grey literature" (especially policy documents) published by national and international, governmental and non governmental organizations (UNAIDS, WHO, UNGASS, Ministry of Health and Population, NCASC) was also searched.

3. HIV/AIDS programme

3.1 HIV/AIDS epidemiology in Nepal

HIV/AIDS is a major public health concern in Nepal (MoPH 2005), since its first case was reported in 1988. Currently, Nepal is depicted from a "low prevalence" to a "concentrated epidemic" (UN 2008). According to the National Centre for AIDS and STD (Sexually Transmitted Disease) Control (NCASC), there were 12933 HIV positive people, 2151 people living with AIDS and 509 AIDS cases were reported to have died by the end of 2008 (NCASC 2008a). The HIV/AIDS cases in Nepal from 1988 to 2008 years wise male and female cases are shown below figure 1.

<Figure 1>

Poor surveillance systems and the lack of access to quality voluntary counselling and testing services, means prevalence figures are likely to be a gross under estimate. However, the United Nations estimates that the current prevalence is about 0.49% in the adult population, and the estimates number of people living with HIV/AIDS at 75,000. The prevalence in the general population may still be low but it is increasing prevalence in several risk groups. The difference between these two data demonstrates the seriousness of the problem.

The highest burden of people living with HIV is estimated seasonal labour migrants (41%) followed by the, injecting drugs users (34.7%), clients of sex workers (16%) and 21% partners of HIV positive men (WHO/UNAIDS 2008, WHO/UNAIDS 2006, NCASC 2007a). Majority (74.5%) of HIV infection in Nepal is through sexual transmission and followed by injecting drug use and perinatal were found to be the third main route of HIV transmission (table 1).

< Table 1>

However, the distribution of HIV prevalence across the country is uneven. It shows that almost 50 percent of all HIV infection lies in the terrain highway epidemic region which constitutes from the east to the west of the country, followed by the hill region 19 percent, far western and Kathmandu valley 16 percent each respectively (NCASC 2007b).

3.2 HIV/AIDS prevention

The aim of the HIV prevention programme is to change individual behaviour of those at risk of infection to change to less risky behaviour by adopting consistent condom use, or stop sharing of injection equipment and providing antiretroviral drugs to pregnant women to child transmission. In addition, preventing subsequent HIV transmission by those new and identified as infected is an important goal (WHO 2008b). The HIV/AIDS prevention programmes in Nepal have included by media, poster/pamphlets campaign. Similarly, other programmes also have included such as information education communication, behaviour change interventions, safer sex behaviour, condom promotion, identifying and treating STIs, harm reduction, voluntary counselling and testing services, sexual health and HIV/AIDS to youth, preventing mother to child transmission and treatment of adults through antiretroviral drugs (FHI 2004). However, the absence of above prevention interventions even a "low to concentrated growth of HIV" would make AIDS the leading cause of death in Nepal.

3.3 Government efforts

The main government agency responsible for HIV/AIDS and STD is under the Ministry of Health and Population. The Government of Nepal lunched the first National AIDS prevention and control programme in 1988 with the implementation of a short-term plan (Subedi 2003). At the beginning, the country provided priority in prevention approaches. A number of local and International Non Governmental Organizations (INGOs), the Government of Nepal and donors have developed well targeted model prevention programmes reaching difficult to access populations with different prevention programmes (DoHS 2004). Similarly, in 1995 the Government of Nepal formulated a national policy with the consultation of different stakeholders for the control of HIV/AIDS. Provisions were made for reducing

stigma and discriminatory practices against people living with HIV/AIDS, confidentiality of blood testing and safe blood transfusion in this policy (MoHP 2007).

There have been diverse efforts to mitigate the increasingly devastating impact of HIV/AIDS in Nepal. The country has proceeded through many phases of AIDS and STD prevention and treatment efforts (table 2).

< Table 2 >

In 2001 Nepal initiated a special programme named as “Nepal Initiative” which was developed on assessing the increasing incidence of HIV among high risk behaviour groups (Subedi 2003). Documentation of a rapidly increasing HIV prevalence among drug users and clients of sex workers over the past several years led the country to question the effectiveness of prevention approaches. In this regard, NCASC developed a national strategy on HIV/AIDS in 2002 which was a milestone in national efforts to combat the epidemic in the country. It was developed for five years (2002 – 2006) which has subsequently been translated into a five year HIV/AIDS operational work plan for 2003 – 2007 (World Bank 2006). This strategy had been formulated different activities such as prevention of STI and HIV among most at risk groups, prevention of new infections among young people, ensuring care and support services, expansion of monitoring and evaluation frame, establishment of an effective and efficient management and implementation mechanism. Although the strategy address a wide range of programme issues and its implementation also need to be effective (Sharma 2004, NCASC 2003).

A number of multilateral and bilateral organizations support HIV/AIDS prevention and treatment programmes in Nepal, including interventions for vulnerable groups, condom promotion, STI testing, behaviour change communication, volunteer counselling and testing services and providing antiretroviral drugs. But what is being done on the field of HIV/AIDS by these organizations are not enough to address the pertinent cultural issues in grass-root level and management issues in service provider level. These should be clearly identified otherwise the problems will continue unless the root causes of these issues and challenges are identified.

4. Major issues and challenges for HIV prevention and treatment

Despite the progress that has been made still many issues and challenges are unidentified either programme management level or services seeking level. The facts that the number of new HIV infections continues to increase that have impacted the current efforts on the evaluation of the HIV epidemic. Thus, the ultimate goal of this paper is to identify those issues and challenges for the effective response.

4.1 Limited coverage of prevention programme

Two decades has taken place in HIV/AIDS prevention. To date the health service has had limited success in addressing the need of the commercial/female sex workers such as poor knowledge about safe sex and poor negotiation of condom use (World Bank 2008, Limbu 2007). Sexual transmission is a key driver of HIV transmission in Nepal. Sex workers are both at high risk because of multiple sexual partners and highly vulnerable because of environmental and structural barriers that prevent them from accessing prevention services and having control over their activities (Vuylsteke *et al* 2007). For example, Nepalese young women with their traditionally lower social status, they have knowledge about HIV/AIDS and STD but they have no access to means of protection which is more pertinent to cultural issue. Similarly, still many village women do not consider themselves at risk of HIV/AIDS/STIs from their migrant husbands because they do not believe their husbands are having sex with other partners or sex workers (Bondurant *et al* 2001). But the evidence shows that 27% of Nepali migrants who work in India were engaged in high risk sexual behaviours and frequently visited sex workers. One of the high migration districts reported nearly 50% of suspected PLWHAs (34 out of 71 cases) were migrants (CARE 2004).

The size of the IDUs population also varied by location and they are found to be highly mobile. Nepal was the first developing country to establish a harm reduction programme with needle exchange but the programme’s coverage is found very limited (Vuylsteke *et al.* 2009) Similarly, men having sex with men in Nepal is still a taboo subject (Pokhrel *et al.* 2008).

Young people are vulnerable to HIV/AIDS due to their poor knowledge about sexual health; poor translate of safe sex practice and limited condom use because adults do not talk to children about sexual matters (Pokhrel *et al.* 2008). On the other hand there are strong cultural taboos against premarital and extramarital sexual relations but young people are practicing risky sexual behaviour such as having multiple partners and non-use of condoms. Various studies showed that electronic media (radio, TV, internet) are the primary source of information to the young people and a significant proportion of young people use these media in their leisure time (UNGASS 2006). Similarly, teachers, peer, health workers, poster/pamphlets were other prime sources of information. Sex and HIV education is included in school and college curricula but there is a question about how can dropout student will take this information. Moreover, the methods of teaching remain didactic (Shimkhada & Karki 2002). Similarly, sexual health is a sensitive issue in Nepalese culture as a result; only 27.6% of female and 43.67% of male young people can currently identify ways of preventing the sexual transmission of HIV (NDHS 2007) Moreover, despite the cultural and social norms, girls are

traditionally lower status; they have knowledge about HIV/AIDS and STD but no access to means of protection (<http://www.indiana.edu/~kinsey/ccies/np.php>, Pigg 200). Thus, Nepal lack of educational programmes based on behavioural science and access to youth friendly information. In this regards, still many Nepalese youth are at risk of acquiring HIV which is a big challenge to the government to tackle these socio-cultural taboos.

4.2 Limited condoms use

The condoms are considered best weapons to fight against HIV/AIDS transmission. Availability shall be ensured and correct ways of use shall be promoted (Karkee & Shrestha 2006). The spread of AIDS would be slowed if more people used condoms (NCASC 2007). In Nepal, very few drug users are using condom ranging from 34% to 51% with regular and non-regular sex partners among them adolescent condom use in their first sexual contact was found to be only 14% (Limbu 2007). Still, it is a taboo to talk about sexuality in Nepalese society and people might feel embarrassed about it buying condoms from pharmacies (Poudel et al 2008). A study in Nepal revealed that, only 14% of married men and 4% of married women had reported using condoms for the prevention of HIV/AIDS & STI (CREHPA/NDI 2006). Similarly, a study revealed that HIV positive men in Kathmandu who had sex did not always use condom (Poudel et al. 2008).

On the other hand, government supply of condoms is irregular and no accessibility of free condom in remote areas which in turn discourages target groups for adopting safer sex practices (UNAIDS/FHI 2007). Studies overwhelmingly demonstrate that condoms are highly effective in preventing HIV transmission (Wegbreita et al 2006) but availability and regular use is found a big issue.

Thus, government should need to access the success history of other countries such as Thailand, Uganda and so on (Bertozzi 2008). In 1989 Thailand was initiated “100% condom programme” targeted sex workers. *No Condom No Sex* was propagated through mass media and workplace which was credited for reducing new HIV infections by 80% and STDs by 90% within three years (Rojanpithayakorn 2006, Chen 2007). Thus, we need to identify whether similar intervention in Nepal would be possible and equally effective.

4.3 Inadequate surveillance system

The surveillance data is scarce in Nepal however the existing medical and public health infrastructure in Nepal and the lack of continuity in National HIV/AIDS reporting mechanisms, it is very likely that the actual number of cases is many times higher. The discrepancy in reported versus estimated HIV/AIDS cases is a reflection of this gape. Without this information, it is very difficult to determine which interventions are more likely to mitigate the impact of HIV/AIDS. Similarly, the use of surveillance to understand trends and patterns in HIV epidemic is important in Nepal that characterized by heterogeneity in terms of the sub-populations affected, geographical distribution and their evolution over time (NCASC 2007c) but the service is still limited which is big challenge to the NCASC to produce high quality and complete information for designing interventions programme to the high risk populations which make government intervention difficult to take contact with vulnerable groups in a diffused population.

4.4 Limited coverage of HIV testing and counselling

Counselling services have a pivotal role in HIV/AIDS care (Gilks 2001). HIV counselling and testing is a major starting point for accessing and being informed on HIV/AIDS related services which provide psychological support (Lamptey 2006). Basic assumption that widespread uptake of Voluntary Testing and Counselling (VCT) within communities can help “to normalise HIV/AIDS to reduce AIDS related stigma and to raise awareness of the epidemic” (UNAIDS 2001) and represents a mechanism for referral into care and treatment in health centres. The knowledge of sero-status may lead individuals to avoid engaging in risky behaviours and increases abstinence (Birdsal et al. 2004, Wegbreita et al. 2006). So the government intervention needs to focus on these particular groups.

Due to the limited access of testing facilities, 90% of HIV positive people in Nepal are unaware of their status and even though there is available of treatment services, so many people living with HIV are dying without knowing their status (Kshetry 2008). On the other hand, this very limited VCT services are mostly concentrated in urban centres. Weak pre and post test counselling, difficulties to confirm result and maintaining confidentiality are other issues testing and counselling service in Nepal (UNAIDS/NCASC 2006). Few public health facilities were equipped with laboratory services (CD4 count) and most hospitals with laboratories do not have essential equipment and trained technicians. Technicians in government laboratories have not received recent training on appropriate STI diagnostic procedures (NCASC, WHO & UNAIDS 2006).

Similarly, coverage of VCT service was very low amongst most at risk groups such as migrants’ workers, drug users, sex workers and men who have sex with men (www.aidsdatahub.org) who are potential carriers of HIV. Effective VCT is vital for identifying individuals who can benefit from early treatment, for promoting treatment adherence and bolstering prevention. Unfortunately, there are still challenges on this front. VCT services are available 112 hospitals and clinic across the country in the public and private sector (UN 2008). However, several key issues were seen for make available of VCT services in terms of access, infrastructure, trained manpower, quality of services, service

provision hours (for employed people, students etc), and maintaining private and confidential working spaces. To make available of complete package of counselling and testing services for those daily increasing HIV infected people is really challenges to NCASC. It is a well known fact that without preventing HIV among most at risk people, it is not possible to halt and reverse the HIV epidemic (World Bank 2008).

4.5 Health systems constraints

HIV/AIDS poses a challenge for health and social systems. Although positive steps have now been taken by the Nepalese government in combating HIV/AIDS, still numerous challenges remain. One issue is the structural inadequacy of Nepal's current health care system that was geographically revealed. The basic health services and other social service systems are poorly functioning and a trained health worker are leaving for better opportunities in urban areas leaving understaffed in the rural health institutions (UNGASS 2006). However, NCASC is responsible largely for development of policy and designing of planning for HIV/AIDS prevention and treatment programmes and little progress has been made in the scale up but still arrays of essential support services remain largely inadequate as well as application of a multi-sectoral approach in practice remains a challenges (Shrestah 2005). The epidemic can not be tackled only through medical intervention but it requires multi level interventions that seek to involve a variety of partners in coordinated action that have been shown to be more successful than those that work in isolation but it has found real challenges for Nepal government to work with all stakeholders in a mutual approaches (UNAIDS 2000).

On the other hand, HIV infected people are not receiving effective health care services. Over 1400 people living with HIV/AIDS and 36 HIV positive pregnant women were receiving antiretroviral treatment through 23 ARV sites (NCASC 2008b). These sites not adequately cover to all, as many cannot access this service because it is not practical for them to travel long distance each morning which is high financial and physical cost for them (UNFPA 2008). It seems to be a big management issue for adequately expanding HIV treatment sites for targeting vulnerable groups which is not easy access to the disperse populations. Thus, the policy level people need to address these pertinent issues and overcome the diminish access to both preventive and medical care services to the high risk populations.

4.6 Financial constraints

HIV/AIDS programme is well-funded areas in any country but this epidemic burdens the economy of any country. "Prevention makes treatment affordable and treatment can make prevention more effective" (Salomon *et al.* 2005). Adequate financial resource for HIV/AIDS prevention and treatment programme scale up is a great challenge because poverty is a key factor in propagation of the HIV epidemic. Many of the high risk behaviours that expose people to HIV are related to poverty (UN 2005). There has been debate regarding the relative allocation of HIV/AIDS funding, how much should go towards prevention and how much towards treatment, with an emerging consensus at policy level that prevention and treatment are best viewed as complementary rather than in competition with one another. Increased access to treatment improves opportunities for HIV prevention through increased HIV testing and increased testing can reduce stigma and act as an entry point to prevention services. A financial issue for a developing country Nepal has great challenges for medical care because HIV is chronic in nature. HIV treatment requires a lifetime commitment and consequently there is a need to find sustainable funding. This is the main management problems for finding and allocating the adequate financial resources for medical care to people living HIV and AIDS.

4.7 Social and cultural challenges

Nepal is a multicultural and multiethnic society with over one hundred ethnic and caste groups (Dahal 2003). Socio-cultural norms provide a formidable challenge to efforts to mitigate the impact of HIV/AIDS. AIDS is a social and cultural issue, dealing the sex issues regarding in Nepalese society, it is disrespectful. Sexual behaviour is not openly discussed in Nepal and talking sex is considered impolite. Parents and elders usually do not talk openly about sex with adolescents (<http://www.indiana.edu/~kinsey/ccies/np.php>, Pigg 2001) and this cultural constraint is one that this paper will examine in more detail.

On the other hand, most of the Nepalese PLWHAs do not know their status and so many may continue to be engaging in unsafe sexual practices. They do not go to test and seek treatment because Nepalese people perceive HIV/AIDS negatively (UNAIDS/NCASC 2004). They are not ready to discuss in the society and hide their status due to the fear of the society but not due to the fear of the transmitting the disease. Mass media reinforces this negative attitude towards HIV/AIDS as the bad person's disease. It shows the great displeasured about the awareness programme from mass media for generating negative attitude towards HIV/AIDS. Similarly, commercial sex workers, drugs users, men sex with men are socially and culturally perceived as being of bad character which directly hinders the utilization of HIV prevention and treatment services (Beine 2003). Thus, these socio-cultural challenges are responsible to fuel the spread of HIV/AIDS and diminish access to both preventive and medical care services So, it is time for policy makers to think seriously address the way the media message.

4.8 Leadership and coordination

Strong leadership at all levels of society is crucial for an effective response to the HIV/AIDS prevention and treatment programme. Leadership involves personal commitment and concrete actions unfortunately NCASC is functioning with instability at the top level of management which is hindering the HIV prevention and treatment programme effectiveness in the long term. According to UNGASS, NCASC is a poorly functioning in national coordination mechanism which results in poor policy support (UNGASS 2006). Currently, more than 100 NGOs are working in the HIV/AIDS field in Nepal and many have several specific programmes but these programmes are scattered and there is a lack of a common forum and coordinating mechanism to play a significant role in strengthening the programmes with better output. It is also necessary to examine the impact of intervention on a regular basis (UN 2008). There is lacking of coordination and collaboration that are always part of good programme management which develop synergies, maximize resources utilization and reduce duplication of programmes. The National Strategic Plan embodies a multisectoral response, it has been particularly challenging to maintain interest and engaging non health sectors in the planning and implementation because HIV/AIDS is not their more interest field. It has largely to be in the area of strengthening the institutional mechanism both within and outside of NCASC. Inspiring and empowering leadership at the policy levels to functional levels is needed to transform the national response to HIV and AIDS from a plan into action. This is a particular challenge to the Nepal government because of frequent turnover of senior manager in NCASC.

4.9 Stigma and discrimination

Stigma and discrimination are still the much talked issues (Subedi 2007). HIV related stigma significantly impacts on uptake of HIV testing, negative attitude of services providers, and adherence to HIV treatment and follow up (O'Brien 2009). This reinforces the social constraints of cultural acceptance of medical initiatives.

Due to stigma and discrimination people are less likely to undergo HIV test and seek treatment (O'Brien 2009). PLWHA hide their disease due to the fear of the separation as well as stigma sculptured by the mass media. It is important to address and take steps to eliminate stigmatization of most at risk populations when developing HIV/AIDS prevention interventions programmes. However, Nepal Demographic and Health Survey (2006) have shown that the awareness among men has gone to a level of 91.7% compared to 72.6% in women; however the level varies with age group and literacy level (NDHS 2007).

This situation, directly challenges to success of HIV prevention and treatment services. If this situation continues, government's efforts will be lost. In this regard, government needs to develop befriending support intervention programme that should to be culturally appropriate to overcome the stigmatization and discriminations toward people living with HIV/AIDS by the health personnel in health institutions and also in the community.

4.10 Geographical challenges

Nepal is geographically skewed with mountain, hilly and terrain (plan land) regions where the majority of the populations (80%) live in rural areas. Due to the geographical complexity, it is also a serious challenge to carry out mass Information Education and Communication (IEC) services, condom promotion, peer education programme, harm reduction (needles exchange programme) activities to prevent and treat the high risk groups that is a big difficulties of management of health interventions. So, no single media to single hospital is effective to carry out the preventive and treatment intervention in the country, especially in remote areas. Similarly, VCT is provided on an extremely limited scale and what little is offered is concentrated mostly in urban centres where around 80% populations live in rural areas (UNAIDS/NCASC 2004). On the other hand, unavailability of health personnel in rural areas most of the time doctors are away from their work place, so absenteeism issues is also a great challenge in mountain and hilly areas.

4.11 Limited coverage of HIV treatment

Life-saving anti-retroviral drugs (ARVs) help people living with HIV to have longer and healthier longer. The use of ARV has lead to a marked reduction in AIDS related morbidity and mortality, in countries where ARVs are widely available are experiencing clear declines in AIDS related death (Castro 2003), this has led to a 70% decline in deaths due to HIV/AIDS (WHO/UNAIDS 2006). However, less development has existed in the area of HIV treatment in Nepal despite the fact that the estimated number of people living with HIV is very high. Over 1400 people living with HIV/AIDS and 36 HIV positive pregnant women were receiving ARV treatment through 23 health institutions across the country (NCASC 2008b) but UNAIDS/WHO currently estimated that almost 20,000 adult people and 1500 of pregnant women living with HIV require ARV right now, in Nepal (WHO/UNAIDS 2008). These sites not adequately cover to all PLWHAs as many cannot access the services. This is because; we have issues about the availability of HIV treatment and other side inadequate response of the government. The access to treatment is uneven across and within countries.

Available evidence from numerous studies indicates that provision of antiretroviral drugs (nevirapine, lamivudine and zidovudine) to infected mothers significantly reduces vertical transmission, with values ranging from 33–63% reduction

in transmission (Wegbreita *et al.* 2006). Thus, PMTCT programme will be one of the entry points for ARV but numerous issue and challenge (limited testing, counselling, poor referral mechanisms, stigma etc) are hindering to reach the HIV treatment services in Nepal. These are management issues which could be addressed directly by the policy level.

4.12 Paediatric HIV/AIDS prevention and treatment

Most children infected with HIV acquire infection from their mothers during pregnancy, labour and delivery or by breastfeeding (WHO 2004). Infant and children are immensely vulnerable to HIV/AIDS in Nepal which are new born or unborn. Due to various dynamics affecting their lives, they are identified as immediate risk people. NCASC (2008) reported that 763 children age less than 15 years aged were reported on HIV positive in Nepal. However, UNICEF (2007a) estimates that 13,000 children were orphaned and 111,000 children were affected by their parents' HIV infection. HIV prevention activities are also an issue such as limited use of condom use in rural areas teenagers, still high stigma and discrimination, do not want to socialize with infected people and exclude or ignore infected people and their families at social gathering. Similarly, in health institutions was the most frequent place of discrimination followed by the family and community (UNICEF 2007b)

The survival prospects of both parents and children are dramatically improved if they are diagnosed and receive ARV treatment. Correctly used, ARV is very effective, transforming AIDS into a chronic illness for adults and giving infected children a future. The number of babies who are infected by their HIV positive mothers at birth drops from around a third to 10 percent or less with appropriate medical intervention. But the overwhelming majority of people living with HIV do not know their sero-status and consequently their lives and their children's futures are at risk (UNICEF 2007b). These are widespread issues and challenges to uptake ARV treatment to the children in Nepal. According to WHO (2008), only 51 children (under aged 15) were receiving ARV treatment in Nepal, which numbers of children in need of ARV are much higher than receiving treatment. This is because of the limited number of ARV site for children in public health system.

5. Conclusion

Limited resources and administrative capacity tied with strong underlying needs for health services (HIV/AIDS prevention and treatment) create serious challenges to the Government of Nepal. HIV prevention programmes build individual skills needed to use prevention commodities properly and run preventive and medical services in parallel. Programmes to prevent HIV transmission often compete with programmes to treat people suffering from AIDS for limited resources with numerous challenges such as management issues and deep- rooted cultural constraints.

Nepal faces numerous challenges in effectively addressing the HIV prevention and treatment to the epidemic. Critically the use of condoms, adequately testing and counselling and behavioural change through a social-cultural change will remain among the most important prevention measures. These can be mobilized by strategic management interventions. Despite, numerous efforts by Nepal Government, HIV prevention and treatment services are not able to reach the at-risk populations because there is a gap between top levels to grass root level. Thus, the policy makers seriously need planning to anticipate and translate the plan into action to prevent and treat the increasing numbers of people living with HIV/AIDS. There is urgent need to address those issues and challenges and strengthen the whole spectrums of health systems through collaborative approach to achieve the millennium development goals. We have also identified the need to address the cultural constraints which may obstruct the use of services offered due to antipathy within or between groups of sufferers and the general population and without preventing those most at risk people, it is not possible to halt and reverse the HIV epidemic.

References

- Beine DK. (2003). Ensnared by AIDS: cultural contexts of HIV/AIDS in Nepal. Mandela book point, Kathmandu, Nepal, pp. 69 – 104.
- Bertozzi S., *et al.* (2008). *HIV/AIDS prevention and treatment*. World Bank, Washington, pp. 348.
- Birdsal K, Haliyiannism H, Nkosi Z and Parker W. (2004). Voluntary counselling and testing in South Africa: analysis of calls to the national AIDS helpline. *Centre for AIDS development research and evaluation*, pp. 1- 8.
- Bondurant T, Franklin B & Neilsen G. (2001). HIV/STI prevention and care strategies for the Far western, mid-western and western regions of Nepal. [Online] Available: <http://www.fhi.org/NR/rdonlyres/efip5yl5ehrabktr3x3bfchpb3pe4oksyqzhsi3j2f7lf6yx4mvmqn42fexqduqltnr6wxcqez6g4j/hivcarestartegies1.pdf> (Assessed on: Feb 2009).
- CARE. (2004). A pilot initiative on understanding people living with HIV/AIDS and exploring the ways forward for their support in Nepal. CARE Nepal Kathmandu.
- Castro J. (2003). HIV: care and treatment, national AIDS treatment advocacy project. New York, pp. 1- 16.

- Chen P. (2007). Measures needed to strengthen strategic HIV/AIDS prevention programmes in China. *Asia Pacific Journal of Public Health*, 19, 3 – 7.
- CREHPA/NIDI (2006). *Out of pocket expenditures on sexual and reproductive health and HIV/AIDS among the urban population of Nepal*. Centre for research on environment health and population activities & Netherlands interdisciplinary demographic institute Nepal, pp. 68.
- Dahal D. (2003). Social composition of the population: caste/ethnicity and religion in Nepal. National planning commission, *population monograph of Nepal*. pp. 87 – 135.
- DoHS. (2004). *Annual report 2004-2005*. Ministry of Health, Department of Health Service, Kathmandu, pp. 167–176.
- FHI. (2004). Family health international responds: expanding prevention, care and mitigation programmes during a decade of work in Nepal. Available from: <http://www.popline.org/docs/1655/296099.html> (Assessed on: Feb 2009).
- Gilks CF. (2001). HIV care in non-industrialised countries. British Council. *British Medical Bulletin*, 58, 171 – 186.
- Karkee R., Shrestha DB. (2006). HIV and conflict in Nepal: relation and strategy for response. *Kathmandu University Medical Journal*, 4, 363-367.
- Lamptey PR., Johnson JL and Khan M. (2006). The global challenge of HIV and AIDS, population bulletin. *Population Reference Bureau*, 16, 10- 19.
- Kshetry R. Health-Nepal: meeting mellenium development goal on HIV/AIDS - a dream? [Online] Available: <http://globalnewsblog.com/wp/2008/10/28/health-nepal-meeting-mdg-on-hivaid-a-dream/> (Assessed on: Feb 2009).
- Limbu PK. (2009). Universal access fair play. [Online] Available: <http://www.google.co.uk/search?hl=en&q=universal+access+fair+play+by+prem+k+limbu&meta> (Assessed on: Jan 2009).
- Schroeder E. (2009). The continuum complete international encyclopaedia of sexuality. [Online] Available: <http://www.indiana.edu/~kinsey/ccies/np.php> (Assessed on: Jan 2009).
- MoHP. (2005). Adolescent health and development in Nepal: status, issues, programmes and challenges, a country profile. *Ministry of Health and Population*, pp. 3-12.
- MoHP. (2007). HIV/AIDS related knowledge, attitudes and behaviour: Nepal demographic and health survey 2006. New ERA & Micro International Inc. pp. 199 – 223.
- NCASC. (2003). National HIV/AIDS strategy (2002-2006) Nepal. Ministry of Health & Population: National Centre for AIDS and STD Control. pp. 1 - 14.
- NCASC, WHO & UNAIDS. (2006). Sexually transmitted infections Nepal 2006 national programme review Kathmandu, pp. 1 – 18.
- NCASC. (2007a). National HIV/AIDS strategy (2006-2011) Nepal. Ministry of health and population: National Centre for AIDS and STD Control, pp. 1-6.
- NCASC. (2007b). National estimates of HIV infections: Nepal 2007. HIV/AIDS and STD Control Board: National Centre for AIDS and STD Control, Kathmandu, pp. 1 – 8.
- NCASC. (2007c). Review of the national HIV surveillance system: strengthening the HIV second generation surveillance in Nepal. National centre for AIDS & STI control, Kathmandu. pp. 1 – 30.
- NCASC. (2008a). Cumulative HIV/AIDS situation of Nepal. Ministry of health and population: Kathmandu, National Centre for AIDS and STD Control, pp. 1 – 2.
- NCASC. (2008b). ART centre. National Centre for AIDS & STD Control, Kathmandu.
- NDHS. (2007). HIV/AIDS related knowledge, attitudes and behaviour. Nepal Demographic and Health Survey 2006, New ERA & Macro International Inc. pp. 199 – 223.
- O'Brien DP. (2009). Universal access: the benefits and challenges in bringing integrated HIV care to isolated and conflict affected populations in the Republic of Congo. *Conflict and Health*, 3, 1.
- Pigg SL. (2001). Languages of sex and AIDS in Nepal: notes on the social production of commensurability. *Cultural Anthropology*, 16, 481 – 541.
- Pokhrel P, Regmi S & Piedade E. (2008). HIV/AIDS prevention in the Nepalese context. Evaluation & the health professions: Sage publication, 31, 198 – 210.
- Poudel KC., et al. (2008). Unsafe sexual behaviour among HIV positive men in Kathmandu valley, Nepal. *AIDS Behaviour*, pp. 1 - 8.
- Rojanpithayakorn W. (2006). The 100% condom use programme in Asia. *Reproductive Health Matters*, 14, 41 – 52.

- Salomon JA., *et al.* (2005). Integrating HIV prevention and treatment: from slogans to impact. *PLoS Med*, 2, e16.
- Sharma S. (2004). HIV and AIDS: the global prospective and the challenges for Nepal. *Kathmandu University Medical Journal*, 2, 283 – 285.
- Shrestha SM. (2005). Commitment for action: assessing leadership for confronting the HIV/AIDS epidemic across Asia - focus on Nepal. Washington, DC: POLICY Project/Futures Group, pp. 1 – 20.
- Simkhada P & Karki KB. (2002). Barriers and opportunities for improved school based HIV/AIDS education in Nepal. The XIV international AIDS conference, abstract no: ThPeG8349.
- Subedi BK, Gurabacharya VL and Thapa K. (1992). Seasonal migration in western Nepal and its relation to HIV transmission. *Journal of Nepal Medical Association*, 33, 30-33.
- Subedi BK. (2003). The AIDS situation in Nepal. *Journal of Health Management*, 5, 205 – 213.
- Subedi BK. (2006). Transition of HIV epidemic in Nepal. *Kathmandu University Medical Journal*, 4 (13), 115 - 118.
- Subedi BK. (2007). Involvement of HIV positive persons in AIDS prevention activities. *Kathmandu University Medical Journal*, 5, 1- 3.
- UNAIDS. (2000). Innovative approaches to HIV prevention: selected case studies. UNAIDS, Geneva, pp. 6 – 11.
- UNAIDS. (2001). The impact of voluntary counselling and testing: a global review of the benefits and challenges. Geneva, pp. 40-46.
- UNAIDS/NCASC. (2004a). The HIV/AIDS/STD situation and the national response in Nepal: country profile. National Centre for AIDS & STD Control, Kathmandu, pp. 1– 16.
- UNAIDS/FHI. (2007). Nepal final report may 2001 – march 2007. UNAIDS's implementing AIDS prevention and care project. Family Health International, pp. 40.
- UNAIDS. (2008). Report on the global AIDS epidemic 2008: status of the global HIV epidemic. UNAIDS, Geneva, pp. 3-30.
- UNFPA. (2008). National youth shadow report: progress made on the 2001 UNGASS declaration of commitment on HIV/AIDS. United Nation Population Funds, pp. 1 – 10.
- UNICEF. (2007a). Revised country programme document: Nepal 2008 – 2010. UNICEF, Nepal.
- UNICEF. (2007b). Children affected by HIV/AIDS in South Asia: a synthesis of current global, regional and national thinking and research. UNICEF Regional Office for South Asia, pp. 1 – 20.
- Vuylsteke D., Das A., Dllabeta G & Laga M. (2009). Preventing HIV among sex workers. In Mayer KH & Pizer HF (Eds.), *HIV prevention: a comprehensive approach*. Amsterdam: Elsevier, pp. 376-406.
- Wegbreita J, Bertozzib S, DeMariab LM & Padiana NS. (2006). Effectiveness of HIV prevention strategies in resource-poor countries: tailoring the intervention to the context. *Journal of AIDS*, 20, 1217–1235.
- WHO. (2004). Antiretroviral drugs and the prevention of mother-to-child transmission of HIV infection in resource-limited settings: report of a technical consultation, Geneva, Switzerland.
- WHO. (2006). HIV/AIDS in Europe: moving from death sentence to chronic disease management. In: Matic S, Lazaarus JF & Donoghoe MC, (Eds.), pp. XII.
- WHO. (2008a). HIV/AIDS prevention, care and treatment in the South-East Asia Region. WHO: regional office for South-East Asia, pp. 1 - 6.
- WHO. (2008b). Priority interventions: HIV/AIDS prevention, treatment and care in the health sector. World Health Organization, Geneva, pp. 20- 22.
- WHO/UNAIDS. (2006). Report on the global AIDS epidemic 2006: country profiles. UNAIDS, Geneva, pp. 1-7.
- WHO/UNAIDS. (2008). Epidemiological fact sheet on HIV and AIDS: Core data on epidemiology and response, Nepal. World Health Organization, Geneva, pp. 4 - 20.
- World Bank. (2008). HIV/AIDS in Nepal. The World Bank in South Asia. Washington, pp. 1 – 4.
- UN. Population development and HIV/AIDS with particular emphasis on poverty: the concise report. 2005. [Online] Available: <http://www.un.org/esa/population/publications/concise2005/PopdevHIVAIDS.pdf> (Assessed on: Feb 2009)
- UNAIDS. Nepal country profile: country review. [Online] Available: www.aidsdatahub.org (Assessed on: Feb 2009)
- United Nations General Assembly. (2006). UNGASS Country Progress Report: Nepal, [Online] Available: http://data.unaids.org/pub/Report/2006/2006-country_progress_report_nepal_en.pdf (Assessed on: Feb 2009).

United Nations. (2008). UNGASS country progress report: Nepal, [Online] Available: http://data.unaids.org/pub/Report/2008/nepal_2008_country_progress_report_en.pdf (Assessed on: February 2009).

World Bank. (2006). HIV/AIDS in Nepal, November, [Online] Available: www.worldbank.org/np (Assessed on: June 2007).

Table 1. Route of HIV transmission in Nepal

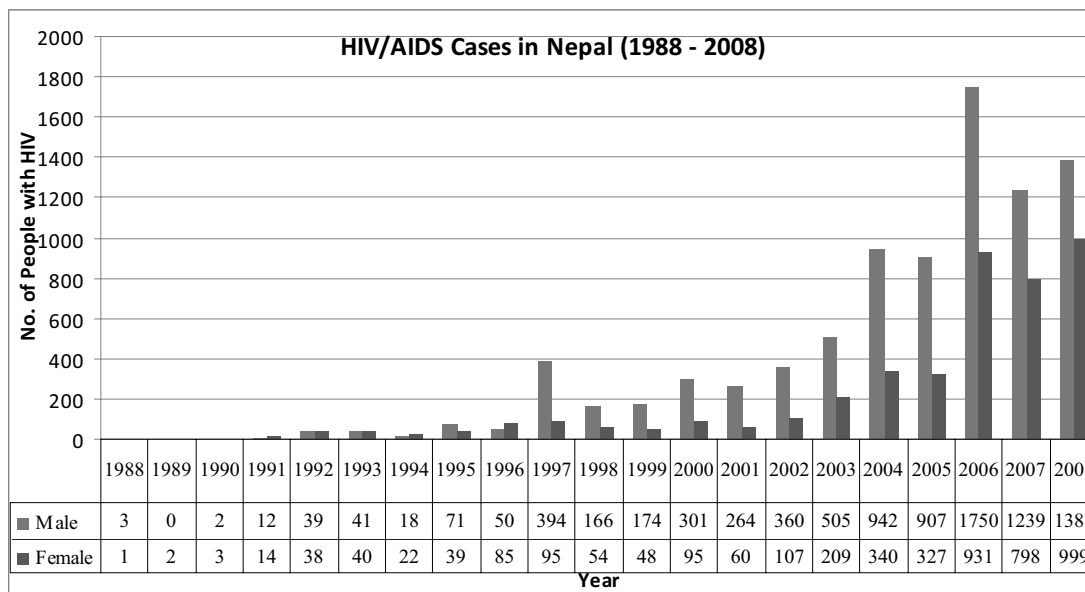
Route of Transmission	Total No. of Infection	Percent
Sexual intercourse	9712	74.5
Blood or Organ Recipients	38	0.5
Injecting Drug Use	2358	18.2
Perinatal	748	6.0
Unidentified	77	0.6
Total	12933	100.00

Source: NCASC, December, 2008

Table 2. Milestones in HIV /AIDS prevention and treatment efforts in Nepal

Year	Activities
1986	Organization of STD/AIDS control committee
1987/88	Lunched the first National short term AIDS prevention and control programme
1990/92	Implementation of medium term plan
1993	Policy adopted for 100% screening of donated blood
1993/97	Implementation of second medium term plan for AIDS/STD control
1995	National policy on AIDS and STD prevention adopted
1997-2001	Strategic plan for HIV/AIDS prevention adopted
1999	Started integrated bio-behavioural survey (IBBS)
2002	National AIDS council formed
2002 – 2006	National strategy for HIV/AIDS prevention adopted
2003- 2007	Operational plan for HIV/AIDS control
2003	National Voluntary Counselling & Testing (VCT) guidelines
2004	Antiretroviral (ARV) treatment started / National ARV guidelines
2004	Standard operating procedures on ARV for Sukraraj Tropical Hospital
2004	STI case management guidelines developed
2006 - 2011	Second National HIV/AIDS strategy
2006 - 2008	National action plan
2008 - 2011	Three year National plan

Source: DHS, 2005-6, NCASC, 2007



Sources: Subedi 2006, NCASC 2008

Figure 1. HIV/AIDS cases in Nepal (1988 – 2008)