CHAPTER-7

CONCLUSION AND POLICY IMPLICATION

7.1 Introduction:

The emerging human immunodeficiency virus (HIV) epidemics in India are hypothesized to be linked to migration which spread HIV from destination areas where the prevalence of HIV infection is higher. NACO India claims that, "Migration is fueling India's HIV epidemic". Due to the size of India's migrant population and its current number of PLHIV, the highest in the region, events in India will be at the center of the Asia Pacific regional response.

India's HIV epidemic is not yet contained and prevention in populations most at risk (high-risk groups) needs to be enhanced and expanded. HIV prevalence as measured through surveillance of antenatal and sexually transmitted disease clinics is the chief source of information on HIV in India, but these data cannot provide real insight into where transmission is occurring or guide programme strategy. The growth of HIV, unless contained, could have serious consequences for India's development. India's national response to HIV began in 1992 and has shown early success in some states. The priority is to build on those successes by increasing prevention coverage of high-risk groups to saturation level, enhancing access and uptake of care and treatment services, ensuring systems and capacity for evidence-based programming, and building in-country technical and managerial capacity.

Literature suggests mobility and migration separates people from their social support structures, creating a social milieu in which they are more likely to engage in risky behaviour, in turn leading to their having a key role in spreading the HIV epidemic in other areas large scale population mobility occurs in India, primarily in the form of male migrant labour. Although interstate migration reflects only 15% of all migrants, the absolute magnitude of interstate migration is still large.127 Mumbai (formerly Bombay), a key destination for single male migrants, assumes special importance for the spread of HIV in India. The percentage contribution of migration to the population growth of Mumbai between 1951 and 2001 has averaged 50%, with migrant men coming from as far as Uttar Pradesh, Bihar, and southern Tamil Nadu.128 A 1999–2000 study estimated net interstate out-migration to be 3·9 million people from Bihar and Uttar Pradesh combined, with Mumbai as the single largest destination. HIV

prevalence rates of 40% or more have been documented in the female sex worker population in Mumbai for over a decade; other studies point to Mumbai as the source of HIV for returning migrants to Nepal.

Data from 2009 showed that internal male migrants in five states in India were far more likely to purchase sex than were males in the general population. Among migrants, 16-88% reported paying for sex while in comparison 2.2-15% of men in the general population reported paying for sex .Overall, the majority of new HIV infections are transmitted through heterosexual contact and 39% of all estimated PLHIV are women. The trend is for infection to spread from at-risk populations, like sex workers, through their clients, like truck drivers, to the general population.

The present study intends to evaluate the relation between poverty, induced migration and incidence of HIV/ AIDS. No doubt the poor migrate out of poverty being pushed by deprivation and pulled by the lust of better life and economic opportunities but are unaware of its consequences on their health and catastrophic damages / impacts on their family and the society. The study followed a '**With and without'** approach for comparison of two situations HIV /AIDS incidence and migration among migrants and non migrants.

The present study is basically a descriptive, survey based, mixed model type of research being both quantitative and qualitative in nature. Although the study relies more on primary information/data due to the very nature of the topic and its objectives, it nevertheless makes substantial use of secondary sources of information, to be abreast of other studies and their findings, and to build upon an appropriate methodology for the present one. Secondary information has been obtained from books, reports, journals, e-journals, press reports, websites. Primary data/information was obtained amongst the HIV / AIDS infected migrants and non-migrants using various forms of interviews involving questionnaires/schedules, field-work, personal in-home surveys, interactions with NGOs, field-workers, counselors, doctors, PLWHA .

This study aims to examine how poverty via migration increases susceptibility to HIV/AIDS the pandemic, also intends to add to the understanding of the relationship between poverty, migration, HIV/AIDS and its economic impact on individuals, households and the society. To meet this goal, this study identified four important objectives and has met its objectives through the analysis of data / information, through the research findings at different level with important policy implications. This chapter is the spring board of the thesis and is

divided into two sections, first section discusses the findings with references to objectives and hypotheses and the second section draws relevant conclusions and suggests appropriate policy implications for the study area at micro level and to the research problem at macro level. This chapter ends with the important constraints and limitations faced by the researcher and also propose the left out areas and perspectives relevant to this research as future plan.

7.2 Sections-1 Discussion and Hypothesis Testing:

Poverty can be seen as lack of financial ascertain and enable capacity to avail required adequate level of standard of living. Poverty is multi dimensional in character. It should not be limited only to earnings but also include the dimensions like access to services, lack of income, hunger and malnutrition, limited access of basic services and education, illness, unsafe living environment and social discrimination and exclusion. Migration is not a new phenomenon; people have been moving since civilization. Migration can be helpful in reducing poverty because it provides opportunities for low skilled jobs offered by the poor as a rapid route out of poverty. Thus migration can be considered as path out of poverty mechanism. Migration has direct and indirect impact on poverty. It helps to reduce poverty directly by reducing number of people that poor household who have to support his family. If the potential migrant was unemployed, this effect could be beneficial. Migration helps to earn and stabilize the household income and further it also help to prevent the household from plunging into poverty again.

On the other hand migration does not only help to move income and better opportunities from one place to other but migration also facilitates the spread of diseases. Various studies shows that migrant who move from higher HIV prevalence area to lower prevalence area will become more likely to get infected with HIV.

After being infected, the migrants will carry this disease with them and if the disease is infectious in nature, then it may infect others. Being migrants is itself not a risk factor for HIV/AIDS, the situation encountered and the risky behaviors possibly engaged in during migration, increases the vulnerability the risk of HIV/AIDS (UNAIDS, 2001).

HIV/AIDS is a pandemic that causes huge economic impact on infected and his family as well as to the Government and the society. This disease lead to considerable economic cost for the poor migrants due to direct out of pocket expenditure (cost related to medical and non-medical) and indirect cost in the form of lost earnings due to work loss and low productivity at household level as well as economy level. This study is an attempt to examine the relationship

between poverty, migration and HIV/AIDS with the estimation of direct and indirect cost of HIV/AIDS at household Level.

7.3 Methodological Contribution:

This is an epidemiological study. To achieve the objectives a primary household survey had been conducted in Delhi and Chandauli in Uttar Pradesh, India. In order to ascertain the socio economic characteristics, prevalence of morbidity and economic cost of HIV/AIDS, relevant data has been collected using a structured questionnaire through the face to face interview method among a total of 234 PLHIV of which 156 were migrants from Uttar Pradesh and 78 were from non-migrants of Delhi. The study sample size is based on the snow ball sampling technique and purposive sampling method. Since the study aims at examining the role of poverty induced migration on HIV /AIDS the study resorted to a cross sectional method including both migrants and non migrants HIV infected. Since the study aims at economic implications through health and productivity loss the cost of both mortality and morbidity associated being involved with HIV/AIDS has been included. The mortality cost estimated using the established Years of life lost (YLL) method where the number of death cases valued by the numbers of life years lost multiplied by the potential earnings per annum, similarly morbidity cost attributed by the diseases captured by the cost of illness approach where an episode of disease involves both direct/ out of pocket costs as well as indirect cost in terms of work absence and loss of earnings due to illness. This study has tried to check the collected of data every three months to measure the changes. The collected data has been analyzed using Excel and SPSS (version 16.0).

7.4 Section-2- Important Findings:

7.4.1 Main Findings:

Social and economic development is essential elements in the battle against AIDS. As the history of other devastating epidemics has shown, vulnerability is magnified by poverty, migration, discrimination and despair. And people's capacity to deal with the threat of disease is fundamentally shaped by the social and economic conditions in which they live. The present study on the basis of an exhaustive and systematic literature review and appropriate methodology analyzed the data and information from the field with the help of suitable statistical and methodological tools and finally reached the following important observations and findings.

7.4.2 Important findings of the study:

- The findings of the study prove that still poverty and unemployment are one of the major reasons of Migration (Census 2001).
- According to 64th round of NSS (2007-08) the reason for male migration was dominated by employment, in both rural and urban areas. 29% of rural and 56% of urban male migrants had migrated for employment reason.
- Total 234 HIV patients have been interviewed in this study. Among them 156 patients belongs to Uttar Pradesh, who are the main population of the study. Among them 142 are males and 14 are females. Another 78 respondents were non-migrants of Delhi in which 67 were male, 10 were female and 1 was transgender.
- In this study all the respondents belong to age group 15-60 and among them in migrants 92.3% (144) and in non-migrants 94.9% was belong to active and productive age group of 15-50 years. 81.8% from migrants and 57.7% from non-migrants was married.
- In migrants 28.2% of the respondents were illiterate and 21.8% had only primary education in non migrants only 11.5% of respondents were illiterate.
- Most of the respondents from migrants (48.7%) were working as non agricultural labour followed by transport driver/workers (21.8%) and self employed (16.7%) while in non-migrants only 7.7% of the respondents was non-agricultural labour followed by small shop owner (24.4%) and PVT. Services (21.8%).

7.4.3 Findings related to Poverty and Migration:

- Poverty as a push factor is the major reason of migration for all migrant respondents. Prior to migration, 30% of respondents were self employed, did little work for livelihood and 21% of migrants were unemployed.
- Before migration average monthly income of the respondents was Rs. 2258.06 only.
- Before migration, respondents were not able to fulfill their basic necessities and they were looking for better opportunities for more income. But at their origin place, due to lack of availability of better economic opportunities they could not get any better employment there. Thus they had to choose migration as an anti poverty method. In this study 92.30% (144) of the respondents had migrated for employment.

7.4.4 Findings Related to Vulnerability for HIV Infection among Migrants:

- Migration is widely recognized as important factor that lead different diseases, and transmission of HIV/AIDS is one of them. According to UNAIDS, (1998), the vulnerability of HIV is often greatest when people find their selves in poverty, social instability, economical insecurity etc and these all conditions apply to many migrants.

- Increased migration in urban cities has resulted in changes in traditional family structure and migration results in men having to leave back their families and redefines their identities at new destination area. HIV/AIDS and migration are not co related directly and being a migrant is not a risk factor in itself but the process of migration and integration into local communities can increase the expose of migrants to the risk of acquiring infectious diseases.

- The separation of HIV infection is governed by behavior and biological factors and at the place of destination migrants look for other alternative to satisfy their sexual need. In this study in migrants 58.3% of the respondents had sexual relationship with casual sex workers (CSW), followed by 26.3% with CSW and co workers. On the other hand only 12.8% of non-migrants had relationship with CSW.

- In migrants awareness regarding HIV/AIDS was very low in this study. Compare to 19.2% of non-migrants, 64.7% of the respondents had never heard about HIV/AIDS.

- Due to being illiterate and lack of awareness migrants are not very much aware about the HIV diseases and its prevention method. In this study most of the respondents (65.4%) have committed that they never had used condoms compare to 17.9% of non-migrants.

7.4.5 Findings Related to Economic Impact of HIV/AIDS:

- The study documents that different costs and financial burden are substantial very high and increase with the stage of disease.
- The burden of finance is disproportionately more on low income respondents and households.

- HIV/AIDS leads to reduction in savings and increase the indebtedness of households. Study found that HIV has a significant impact on infected life time earnings because it generally affects the people in their young and productive age. This disease causes an individual to reduce their productivity and have to bear income loss due to absence from work.
- In this study, in migrants 89.6% (120) of respondents committed to had absence from work due to illness than the 73.8% (31) of non-migrants. 90% (108) respondents had to suffer from income loss as well due to absence compare to 38.7 (12) of non-migrants.
- In this study it has been estimated that as total economic cost, migrant's had to bear 65.99% of their average monthly income (11126.86) compare to non-migrant's 21.94% of average income (16785.71).
- HIV/AIDS is a deadly disease also known for the reason of premature death. It strikes human into their prime age and causes earlier death which is quite earlier than their life expectancy.
- In this study 11 death cases due to HIV/AIDS have been found. The average age of death among male due to AIDS was 28 years only and the average expected year of life loss was 38 years.
- The average loss of income due to mortality among working male migrants was INR 34, 59,720 and among female migrant was INR 10, 87,760.
- Study results the huge economic loss in terms of human capital due to HIV/AIDS. So there must be need of implementation of effective strategy that prevents the HIV/AIDS and it will help to reduce the all kinds of loss in society.

7.5 First Hypothesis:

First hypothesis of the study states that ***"poverty causes migration"*** means poverty as a socio economic factor pushes people to alien distant places for better economic opportunity. In other words people migrate due to poverty and lack of opportunity. To test this hypothesis primary data had been collected and analyzed through the descriptive method.

Table 7.1: Employment and earning situation before migration:

Employment Status Before Migration	**Frequency**	**Percentage (%)**
Unemployed	33	21.2
Agricultural Activity	30	19.2
Small shop keeper	27	17.3
Rickshaw/auto driver	19	12.2
Self employed	47	30.1
Income	**Frequency**	**Percentage**
1000-2000	71	57.25%
2000-3000	32	25.80%
3000-4000	17	13.70%
4000-5000	4	3.22%
Mean	Median	Mode
Rs. 2258.06	Rs. 2000.00	Rs. 2000

Source: Compiled from Primary Household Survey

Table 7.2: Employment and Earning Situation after Migration:

Nature of Employment	
House wife	2 (1.3)
Unemployed/ Not working/ Retired	2 (1.3)
Agricultural labour	5 (3.2)
Non agricultural labour	76 (48.7)
Domestic servant	1 (0.6)
Small shop owner	4 (2.6)
Transport worker/ Driver	34 (21.8)
Self employed	26 (16.70)
PVT. Service	1 (0.6)
Govt. Service	3 (1.9)
Self a CSW	2 (1.3)

Student	00
Large business	00
Monthly Income Group	
2000-5000	33 (21.2)
5000-10,000	79 (50.6)
10,000-15,000	35 (22.4)
15,000-20,000	5 (3.2)
Above 20,000	2 (1.3)
Average Monthly Income	Rs. 9396.10

Source: Compiled from Primary Household Survey

As presented in the table No:7.1 , which describes the prior nature of employment and income pattern shows that the in total 156 respondents 21.2% were unemployed and 30.1% of respondents were self employed followed by 19.2% in agricultural activity, 17.3% in small shop keeper and 12.2% was rickshaw/auto driver and they were earning average monthly Rs. 2258.06 only. But after migration they got better economic opportunities and there employment pattern are as follows:

At present 48.7% of the migrants working as non-agricultural labour followed by 21.8% as transport workers/drivers, 16.70% was self employed and so on. Their average monthly income is Rs.9396.10.(Table-7.2)

On the other hand, at the time of interview respondents had been asked the major reason for their migration and 99.35% of the respondents replied that they migrated to various places due to poverty and for better employment. These ***result consistent with the first hypothesis and indication that poor economic status and lack of employment opportunity is positively and significantly associated with migration.***

7.6 Second Hypothesis:

Second hypothesis stated that ***"Migration increases the risk of HIV/AIDS"*** its means migration make migrants more likely to get infected with HIV. With the help of various literatures (Chapter-3) it has been clearly understand that all migration does not lead to HIV but there are several factors that increase the probability which lead HIV infection among migrants.

In this study with the help of chi-square and logit model (table no. 6.11 and 6.12) the factors that put migrants on risk for HIV, have been identified and it has been found that the although most of the respondents from both migrants and non-migrants group were infected due to heterosexual relationships (migrants 92.3 % and non-migrants 96.2%) but the percentage fuelling determinants like low condom use, heterosexual relation with casual sex workers, frequency of visit are found higher with migrants than non migrants (chi-square= statistically significant at 1%). On the other hand migrants also got infected due to injecting drug (3.8%) but there was no any cases were found in non-migrants. The factors that push migrants to get involved in risky sexual behavior with casual/professional sex workers is their being away from the family /spouse. The logit analysis also supports this statistically significant level at 1%. Thus these findings confirm the second hypothesis that **"Migration increases the risk of HIV/AIDS".**

7.7 Third Hypothesis:

Third hypothesis stated that ***"Migration induced HIV/AIDS involves higher economic (health) cost"*** means HIV causes the high economic burden as out of pocket expenditure.

Through the analysis of data derived from the respondents through household survey and field visit and the findings presented this research also confirms that HIV/AIDS epidemic causes huge economic burden to infected families as direct and indirect costs. As the migrants had to spend 65.99% (Rs. 11126.86) of their average monthly income on medicines, doctor's fees, pathological tests and other health checkups and transportation as against only 21.94%(Rs. 16785.71) of their average monthly income by the non-migrants it can be fairly concluded that migrants bear a heavy burden of HIV/AIDS (the ratio of health cost is more than 3:1 between the migrants and non migrants HIV infected). No doubt in absolute terms health expenditures seems to be higher for non migrants but the real burden as the overall out of pocket expenditure and in terms of percentage of income migrants incur heavy health cost. This can be attributed to higher monthly average income of non-migrants as compared to the migrants. In this study 11 death cases due to HIV/AIDS are reported which are totally among the migrants only. The average age of death among male due to AIDS was 28 years only and the average expected year of life loss was 38 years. The average loss of income due to mortality among working male migrants was Rs. 34, 59,720 and among female migrant was Rs. 10, 87,760.Thus this findings confirms the

third hypothesis of the study that **"Migration induced HIV/AIDS involves higher economic burden (in terms of health cost and productivity loss)".**

7.8 Fourth Hypothesis:

The Fourth hypothesis of the study stated that ***"Existing poverty eradication measures fails to check migration"*** which indicates that the different programmes related to employment generation and poverty eradication is not enough sufficient to control out migration for the employment.

Although the government of Uttar Pradesh has implemented various programme to generate employment and eradicate poverty. But in spite of successful implementation of NREGA, SGSY and other programme, the rate of out migration from Uttar Pradesh is still highest in India. The reason of migration could be different, but the percentage of out-migration for employment is 37.56% (Census 2001).

According to Annual Plan of Uttar Pradesh 2016-17 government is trying to generate 32.98 lakh employment opportunities, but the need of total employment is 57.32 lakh. It means this plan can employ only 32.98 lakh of unemployed persons, but what about the remaining 24.34 lakh unemployed. . Definitely these people will seek alternative for employment and migration will one of important option which help them to get better economic opportunities (Discussed in chapter-4 and 5). Thus it could be say that due to various reason poverty eradication and employment generation programme are not adequate to control the out migration rate and this findings also consist with the fourth hypothesis that "***Existing poverty eradication measures fails to check migration."***

Thus as per the standard literature quoted and appropriate methodology followed the research success fully verified and established the research hypotheses framed and also successfully fulfilled the objectives of the study.

7.9 Conclusion:

Health always has been considered as a developmental issues in that loss of productivity, income and human potential, the important rate at which any country can progress. HIV/SIDS is differ among all the health issues because it strikes the people in their young age, who have to live long and work to build the economic and social capital for their families and communities.

In India, out of poverty and for other reasons migration is increasing day by day and this migration is basically circular in nature. NACO has recognized the migration as targeted group

to control HIV prevention in migrants and by the migrants. The findings from the study provide significant insight and empirical evidence of the importance of migration in the spread of HIV. In this study relationship between migration and HIV infection have been found highly significant and positively associated and provide robust support for the connection between migration and HIV. Study supports that migration lead the life style for other risk factors such as unprotected sexual behavior with female sex workers and injecting drugs. The previous literature which has been made earlier (Chapter-3) also supports the association between migration and HIV/AIDS.

When a person get infected with HIV its means its strike the household due to the impact like stress of illness, death and uncertainty of life. It strikes the people into their young and sexual active age, therefore the socio-economic implication of HIV/AIDS are immense from development point of view. In this study the total cost of HIV/AIDS morbidity to affected households was 65.99% of their monthly income including direct and indirect cost. The findings of the study show that HIV/AIDS infected relied on a variety of sources for treatment and care. They have to employ a broad range of copping strategy to meet the out of pocket expenditure, using saving or receiving money from relatives and others or selling and mortgage assets. It is therefore important that to implement effective policies and programmes to prevent the HIV/AIDS.

7.10 Suggestion for Policy Implications:

The pandemic of HIV/AIDS is the most serious problem facing the health system as well as whole economy of the world. Governments and other institutions must give huge priority to HIV/AIDS prevention and tried to establish an effective intersectoral response to the epidemic. On the basis of findings of this study some suggestion for policy implementation are as follows:

- The government should provide better development programme facilities, so that people living below poverty line can improve their livelihood. It also suggests that poverty alleviation programmes should also take up the issue of poverty from the social and economic perspectives.
- To be effective, poverty alleviation schemes need to address the factors leading to persistence of poverty, entry into it and strengthen factors enabling escape from it.

- There are many poverty alleviation programmes are running in India. For the successful implementation of these programmes there is a need of policy framework, adequate funds and effective delivery mechanism.
- A major policy focus has to be on a more vigorous pro-poor development strategy in the backward areas.
- This should address the needs of these regions, and simultaneously improve the access of the poor to land, financial resources and governance institutions. This will help to decrease in the rate of force migration which further leads to prevention of different diseases among poor households.
- Additional programs include making health insurance scheme more widely available and strengthening such programs that support social safety as pension and employment.
- There is a strong need of mitigation strategies in order to control HIV/AIDS infection in Uttar Pradesh and may include social support to the patients with changes in the management of HIV/AIDS cases.
- There is a strong need of mitigation strategies in order to control HIV/AIDS infection in Uttar Pradesh and may include social support to the patients with changes in the management of HIV/AIDS cases.
- Poverty remains the biggest developmental challenge in India. Despite the surfiet of different policies and programs of reducing poverty, the target to remove poverty is still a matter of concern.
- High cost of illness for HIV/AIDS strongly justifies efforts for the improvement of coverage of preventive measures, particularly among the poor and migrants.
- There should be more investment is needed in close to client curative services that definitely will help to expand access to treatment and reduce the different direct and indirect cost of illness.
- The health policy research and debates need to be broadened because even in availability of better health services they cannot protect the households from all illness cost particularly regarding to non medical and indirect cost. So the health related policies should be broadened to encompass measures that reduce substantial cost associated with disease of HIV/AIDS.

- The findings of the study provide a need of strong strategies aimed at making treatment more affordable for HIV/AIDS patients, specially belongs to low income households.
- There must be more focused on that programs at sites to reduce in directed cost such as transportation related expenses etc.

7.11 Strategy for Employment Generation and Poverty Eradication:

- Poverty is a situation of deprivation in well being that can be measured by individual's income, health, nutrition, education, assets, housing and certain rights in the society. So for the poverty eradication it is very essential for the implementation of policies which must provide the basic necessities to the deprived class.
- For the identification as a poor, it should be basis on their income or expenditure pattern and it will help to capture the large extent of poor.
- There must be programmes related to free education, easy and quick accessibility of health care and promoting non-farm activities for poverty reduction in rural areas.
- There are various programmes which have built especially for poor but due to leakage in programmesat delivery level, the benefits of these programmes are not reaching to the needy people. So there is need to built responsive system which can stop the leakage.
- The development of rural employment and agriculture is closely linked with the infrastructural facilities, because creation of infrastructural facilities like irrigation and power assumes special significance, but its need substantial investment that only state cannot afford. Therefroe after making as appropriate strategy should be try to involve Central Government for sufficient fund.
- Labour force basically of rural areas suffers from shortage of employment skills. The skill development programme is a powerful tool to stimulate man power into the technical power. This will definitely help to generate employment in various sectors.
- Self employment and short term wage employment related programmes are effective to create income and employment. But due to lack of entrepreneur skills and endowment, poor are unable to sustain self employment venture. Therefore capacity building programmes can help them to start their self-venture.

- It has been seen that service sector has enough scope to absorb more workers and generate employment. Therefore to strengthen this sector support from government is needed. Beside this establishment of new small and medium industries in the state can help to generate employment opportunities.
- In the context of successful running of private and voluntary sectors, the demand for skilled man power has increased by last some decade. Hence, to keeping in mind this emerging scenario, there is a strong need to launch short term training courses for human resource development. But it should be subsidized so that can reach the weaker section of the society.

7.12 Limitations of the Study:

- In this study patients had been followed for one year and checked after every three months but it has been recommended that future surveys related to this nature should collect the data every six months at least for a period of 3-5 year because HIV/AIDS is a long term illness with longer term impacts. Hence more pronounced changes could be noted every six months.
- The present findings of this study were based on micro survey for migrants from Uttar Pradesh. Due to less number of respondents, the estimated results can lot represent the whole population of Uttar Pradesh. In future, therefore there is a need for research on HIV/AIDS using multidimensional approach in other part of country.
- In this study the social cost such as stigma and discrimination has not been measured due to different nature of the study and time constrain.
- In the cost analysis we have excluded cost like pain and suffering which is hard to compute in economic term.
- Cost and benefit analysis has been analyzed only on the basis of migrant's before income and employment pattern compare to migrant's after income and employment pattern. Other related direct and indirect benefits and loss has not estimated.

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