Out of Pocket Spending (OOPS) on HIV/AIDS: Reflections from Dharwad District in Karnataka

***Dattatraya R. Revankar**

**** Arunkumar R. Kulkarni**

Abstract

In this paper a modest attempt has been made to estimate the magnitude of HIV / AIDS specific out of pocket expenditure. The paper is based on the primary survey of 350 HIV/AIDS patients in Dharwad District in Karnataka state. The study reveals that the per capita expenditure on HIV/AIDS affected persons was Rs. Rs.8465 in Dharwad district during the year 2009-10. On an average the households, government and external agencies/NGOs spend Rs.6996, Rs.748 and Rs.724 respectively. Thus, the major portion of the total expenditure (i.e. 82.6 percent) has been spent by the household from Out of Pocket (OOP). The study further reveals that HIV/AIDS epidemic has severely affected the economic, social and psychological status of the families.

Key Words: *Health Expenditure, Out of Pocket Spending, Household Spending on HIV/AIDS, Antiretroviral Therapy, Sources of HIV/AIDS Spending*

Introduction

Every one wishes to be away from disease, disability and premature death. Substantial evidence is now available regarding the fact that good health is an important contributor to economic growth in any nation. In this background, both policy makers and researchers have

** Research Assistant, Centre for Multi-disciplinary Development Research (CMDR), Dharwad, Karnataka*

*** Assistant Professor, Centre for Multi-disciplinary Development Research (CMDR), Dharwad, Karnataka*

recognized the importance of investments in health. Public spending on health and education bring about a change in incomes among the poor. Such investments also seem to be the major determinants, which would contribute to the better health status of the community. Such an outcome also depends on equitable sharing of provision of health services coupled with life-enhancing activities such as nutrition and education. Therefore, the role of Government is very important in order to achieve better health in a country like India

HIV/AIDS is a calamity of the new millennium, similar to Plague and Smallpox that devastated mankind in the Middle Ages. Like leprosy in the bygone centuries, Human Immunodeficiency Virus (HIV) infection is also associated with social stigma. This is a challenge that goes beyond public health, raises fundamental issues of human rights, and threatens human achievements in many areas. AIDS ranks fourth among the world's top killers of mankind. It has killed more than 25 million people since it was first recognized in 1981; it is one of the most destructive epidemics in recorded history. For this reason alone, Government has been spending significant amounts of its resources for the provision of Preventive and Curative Care Services. In this context, the present study also tried to sketch the OOPS on HIV/AIDS with an intention to further decompose such expenditure into various aspects which would throw light on the burden of such spending on households. The paper has been presented in five sections. The first section gives the introduction, second section presents the brief review of literature, third section gives methodology and profile of sample HIV/AIDS affected persons, the fourth section presents findings of the study and the last section concludes.

Brief Review of Literature on Private Expenditure on HIV/AIDS

There are a few studies that have previously been undertaken to estimate the amounts spent on HIV/AIDS-related activities. Some focused only on expenditures incurred by the public sector, whereas others provided more information on sources and uses of funds for HIV/AIDS. In the early 1990s, two studies sought to estimate expenditures on HIV/AIDS in Asia – one in Thailand for 1991-92 (Viravaidya, Obremsky and Myers 1993), and the other in Sri Lanka for 1993 (Bloom *et al.* 1997). The Thailand study highlighted HIV/AIDS expenditures by various *ultimate* sources of funds – the Government, donors and the private sector. The authors also tried to estimate expenditures incurred on treatment, using estimates based on costs for a limited sample of AIDS patients in two provincial and two central hospitals. Many health care providers (e.g., traditional providers) are excluded from their analysis and it is not clear, what proportion of the estimated expenditures in their study was an out-of pocket payment by households, and what proportion was paid by other agencies.

The study for Sri Lanka considered expenditures incurred by the Government, Non-Governmental Organizations and international donor agencies. Data for this study were obtained from Government records, Sri Lanka's National AIDS Control Agency, and from international donor groups. The study suffered from many of the coverage inadequacies identified above for Thailand. For instance, it did not include any estimate of household expenditures on prevention and treatment. The second study for Thailand (Pothisiri *et al.* 1999) presents data on public expenditures that are directly related to HIV/AIDS. It also failed to include expenditures made by HIV/AIDS patients.

The Harvard School of Public Health undertook a study on behalf of UNAIDS to track the level and flow of national and international resources to HIV/AIDS related activities in developing countries during 1996 and 1997 (Ernberg *et al.* 1999). It relied mainly on seven mailed questionnaires to collect information on HIV/AIDS expenditures from 64 developing countries and transition economies of Eastern Europe, and provided information only on funds provided by the Government and the donor agencies, while data on expenditure by households, employers and NGOs, and the entire private sector, were not captured by the study.

Shepard and others undertook a five-country study of the sources and uses of health expenditures linked to AIDS – in Brazil, Cote d'Ivoire, Mexico, Tanzania and Thailand, respectively (Shepard *et al.* 1998; Kone *et al.* 1998; Izazola *et al.* 1998; Lunes *et al*. 1998; Tibendebage *et al.* 1998; Kongsin *et al.* 1998). These studies used a variety of sources (e.g., official documents, expert assessments, household health surveys) to bring together estimates on sources of funds by public, private and international sources, and uses – by prevention and treatment. For example, expert assessments were used to estimate the health care utilization patterns of AIDS patients and per-case costs of treatment of AIDS, which were then multiplied by the estimated number of AIDS cases to obtain total treatment costs.

Barnett *et al.* (2001) used a methodology similar to the one for Latin America and adapted it to the case of Rwanda to construct HIV/AIDS accounts based on the National Health Accounts (NHA approach) This study identified three HIV/AIDS-related activities, namely those relating to *prevention and promotion*, such as raising awareness, effecting behavior change and promoting safe sex campaigns; *management*, such as palliative care, surveillance, blood

screening and family support; and *treatment,* including hospital and clinic expenditures, counseling and alternative/traditional therapies. It also considered the expenditure by households on HIV/AIDS. NCAER-UNDP-NACO (2006) study shows that about 20 per cent of non- food spending of HIV households goes into medical expenditure as against 5 per cent of non-HIV households. In such a context, estimating HIV/AIDS specific OOPS would help health sector managers to get a clear idea about the quantum of OOPS and its impact on affected households. In this paper a modest attempt has been made to estimate the magnitude of HIV / AIDS specific out of pocket spending.

In sum, different researchers have tried to understand different facets of private expenditure on HIV/AIDS but various expenditures still need to be further decomposed to throw light on the burden of such spending on households in India.

Methodology and Profile of Sample HIV/AIDS Patients

Karnataka ranks sixth in number as far as HIV-infected patients are concerned. Moreover, 30 districts including Dharwad are among the 158 high risk districts identified in the country. The study has been conducted in Dharwad district in Karnataka. Agriculture is the main occupation in the district and the District is also progressing in the industrial sector. There are more than 60,000 industrial units in the District. Thus, Dharwad is one of the developing districts in the State, Karnataka. Both primary and secondary data have been collected to calculate the total expenditure incurred by the HIV/AIDS patients. The primary data has been collected from 350 HIV/AIDS affected persons. The secondary data has been collected from Karnataka State AIDS Prevention Society (KSAPS), Dharwad district AIDS Prevention Society (DDAPS) and NGOs. The reference year for the estimation of expenditure is 2009-10.

Table No 1: Profile of Sample HIV/AIDS Affected Persons

Items	Categories	Percent

Table 1 shows the profile of selected HIV/AIDS affected persons. It reveals that 18.91 percent of the total surveyed HIV/AIDS affected persons belongs to Scheduled Castes (SC), 9.45 percent belongs to Scheduled Tribes (ST), 18.91 percent belongs to Other Backward Communities (OBC) and 11.17 percent belongs to religious Minority Communities. All these taken together, account for 58.46 percent of the total. General category which consists of forward community accounted for about 41.54 percent of the patients. It is interesting to note that, out of 350 patients the people belonging to the poverty

category or popularly known as BPL (Below Poverty Line) were less than the rich community as far as incidence / prevalence of the disease. The poor accounted for about 40 per cent as against the rich which were to the extent of about 60 percent. The educational status shows that, those with less than seven years of schooling account for about 60 percent of the patients. This probably indicates that lack of knowledge and ignorance about disease to the people would act as a factor that would push the people into this death trap. This would also make a case for strong actions on spreading awareness campaigns and making the people to know how the disease occurs and how best one can prevent such occurrence. A look at the Age group of People Living with HIV/AIDS shows that 52 percent are in the age group of 18-35 and 45 percent are in 36-52 and remaining 3 percent is a gift from parents to children. A look at the Domicile Status of People Living with HIV/AIDS shows that 57 per cent are migrants. This supports the view that migrant families are at risk and resident families are somewhat safer.

Findings of the Study

The finding of the study has been presented in three sections. The first section shows HIV/AIDS scenario in Dharwad district and available health facilities in the district. The total expenditure incurred on HIV/AIDS in Dharwad district and details of Out of Pocket (OOPs) by households has been presented in third section. The third section shows impact of HIV/AIDS on the affected persons.

1. HIV/AIDS Scenario and Related Health Facilities in Dharwad District

The District has a good network of public health services including one district hospital, 32 Primary Health Centres (PHCs), and 183

Sub-centres, There are 20 Integrated Counselling and Testing Centres (ICTCs), 19 Prevention of Parent to Child Transmission (PPTCT) Centres, 8 Government-recognized blood banks and 2 Sexually Transmitted Diseases (STD) clinics in the District. There is one Community Care Centre (CCC) in each taluk, there is one ART centre, Drop-In Centre (DIC) for people living with HIV (PLHIV) and PLHIV network for the district. In addition, there are four Link ART centres in the district. The Society for People's Action for Development (SPAD) implements the TI for FSWs (in urban areas), Bhoruka Charitable Trust (BCT) implements the TI for FSWs (in rural areas), and Suraksha implements the TI for MSM-T (only in urban areas) in the district, with support from the Karnataka Health Promotion Trust (KHPT) under the Avahan Project. The Belgaum Integrated Rural Development Society (BIRDS), Tukanatti implements the TI for Truckers. The BCT also implements the Link Workers scheme in the district, under the Samastha project of KHPT, funded by United States Aid for International Development (USAID). Thus, the district is having better infrastructure related to

Table No 2: HIV+ Cases, AIDS Cases and AIDS deaths in Dharwad District (No. s)

Year	HIV +ve	AIDS Cases	Death due to AIDS	Total

ART centre

HIV/AIDS disease. The Government and many NGOs are working in Dharwad district for HIV/AIDS affected persons. They have been providing preventive as well as curative services to the affected persons. The district of Dharwad is having high prevalence of HIV/AIDS and stands second after Bagalkot district in the state of Karnataka. Table 2 shows number of HIV positive cases, number AIDS cases and number of deaths in the district.

2. Expenditure on HIV/AIDS

Based on the average expenditure incurred by the sample HIV/AIDS affected persons, the total expenditure incurred patients/households for all the affected persons(16586) in the entire Dharwad District. has been calculated

Table 3 shows total expenditure incurred from various sources on HIV/AIDS in Dharwad district.

Table No 3: Expenditure on HIV/AIDS by Different Sources in Dharwad District

Expenditure	Total Expenditure (Rs. Lakhs)	Per Capita Expenditure (Rs)	% to Total

Prevention Society

Note: *OOPS- Out of pocket spending*

Table 3 reveals that the per capita expenditure for HIV/AIDS persons was Rs.8465 in Dharwad district during the year 2009-10. On an average the households, Government and external agencies/NGOs

spend Rs.6996, Rs.748 and Rs.724 respectively. Thus, the major portion of the total expenditure (i.e. 82.6 percent) is borne by the household Out of Pocket (OOP).

The public health facilities provide all type of services / facilities free of cost to the affected persons. Therefore, it is interesting to know, why and on which services the patients have spent their money. The pattern of Government spending reveals that, the major share of its allocation has been spent on prevention of the disease and the share of expenditure on care and treatment is comparatively less. The reverse is the case with households; they spent more on care and treatment and very less on prevention. The discussion with the patients reveals that the affected persons consult private doctors and private medical shops to maintain confidentiality. The affected persons do not want to reveal their health condition to others due to social stigma attached to HIV/AIDS and this tendency is very high in middle class families. The quality of service provided is also an important factor. The patients/households have a notion that the services provided by the Government are not of good quality. On account of this, the patients/households depend on private providers.

Table 4 shows that the BPL and APL households have spent Rs.1313 and Rs.9542 respectively on care and treatment of HIV/AIDS during the reference year. The various expenditures incurred by the households (APL & BPL) from Out of Pocket (OOP) reveals that on an average, 73 percent of the amount (Rs. 5135) has been spent on Antiretroviral Therapy & Related Medicines, 9 percent on Clinical Tests (Rs. 642), 8 per cent on STD Treatment (Rs. 585), 5 percent on Complementary and alternative medicines (Rs. 324) and remaining 5 per cent has been spent on Counseling, Prevention of Onward Transmission, Treatment of OIS, Child Monitoring, Diagnostic Services and Terminal Life Care. Thus, 89.7 percent of the total

expenditure was incurred on care and treatment and remaining 10.3 percent on preventive care by the households.

Table No 4: Expenditure on Care and Treatment of HIV/AIDS During 2009-10 (Rs/Person)

Expenditure on HIV/AIDS Related Functions	Per Capita Expenditure (Rs)		
	BPL	APL	Total

3. Impact of HIV/AIDS

HIV/AIDS epidemic severely affects the economic, social and psychological status of the family. The household impact begins as soon as a member of a household starts suffering from HIV/AIDS. Most of the sample affected persons in the study are breadwinners, for the family and due to HIV/AIDS they have lost their employment. Apart from this, the sample households are forced to spend Rs. 6996 on health and Rs. 1613 on non-health expenditure which includes travel and accommodation of patients and attendants during the reference year. The increasing expenditure and loss of income of HIV/AIDS patients result in the impoverishment of the family. As a result of this, the households are forced to borrow from various

sources to meet the health expenditures. Table 5 shows source of OOPS for HIV/AIDS care and treatment.

Table No 5: Source of OOPS to HIV/AIDS by Selected Patient Households

Source of Expenditure	BPL	All

A Table 5 show that on an average, 50 percent of the expenditure is met out of borrowings from relatives and friends, about 33 percent met out of their own savings, and 10 percent by their regular income and 3 percent by institutional lenders and 1.2 depend on money lenders for meeting the HIV/AIDS health expenditure. About 2.3 per cent of households sold their assets or articles to pay for the treatment. In case of BPL families, the higher proportion of expenditure is borne by borrowings and the proportion of distress sale of articles is also high. Borrowing as a source is likely put extra burden on the BPL households. The fallowing case study reveals burden of HIV/AIDS affected person and family.

Case Study

Rahim (Name Changed) is around 39 years old and is residing in a village of Dharwad district. He has completed his primary education in the village. Agricultural laboring is the main occupation of the family. He is staying with his wife and two male children. When we

contacted him he said that in the year 2008 he visited some other district in search of job and he got unsafe sexual contact with a Commercial Sex Worker. Presently, the patient cannot work regularly as agricultural labour, hence his children are forced to work by giving up their school education. We could also learn that unfortunately his spouse is also infected. They are taking medicines from ART center at KIMS free of cost (Government Teaching hospital at Hubli). But they have to spend lot of money on travel and food. Apart from this, they also spend for controlling opportunistic infection. These costs go beyond Rs 500 per month. The patient feels very sad because his friends and relations are away from him after knowing about his infection. His wife is also quarreling every day for her present situation and family condition. Children are also not giving any respect. Thus the family's socio-economic status has declined drastically

Concluding Observations

The study reveals that the per capita expenditure on HIV/AIDS affected persons was Rs. Rs.8465 in Dharwad district during the year 2009-10. On an average the households, government and external agencies/NGOs spend Rs.6996, Rs.748 and Rs.724 respectively. Thus, the major portion of the total expenditure (i.e. 82.6 percent) has been borne by the household from Out of Pocket (OOP). The Government has provided all type of services / facilities free of cost to the affected persons. But due to inefficiency of public providers and the social stigma attached to the disease, the patients mainly depend on private providers. Therefore, Government should try to improve the efficiency of its facilities for the benefits of patients.

End Notes

1. The functional categories have been adopted from the National AIDS Spending Assessment (NASA) standards.

2. Transactions that cross the boundaries of the district have not been considered for obvious reasons.
3. OIs – Opportunistic Infections
4. HB Test –Haemoglobin Test
5. HB SAG - Hepatitis B surface antigen
6. VDRL - a blood test that is used to determine whether one has an active syphilis infection.
7. CD4 Test - a CD4 percent, or a CD4/CD8 ratio is used to help evaluate and track the progression of HIV infection and disease
8. TI---- Targeted Intervention

References

Barnett, Courtney, Manjiri Bhawalkar, A.K. Nandakumar and Pia Schneider (2001) The Application of the National Health Accounts Framework to HIV/AIDS in Rwanda." Special Initiatives Report #31. Bethesda, MD: Abt Associates.

Berman, Peter (1997) "National Health Accounts in Developing Countries: Appropriate Methods and Recent Applications." *Health Economics*, 6:1.

Bloom, David, Ajay Mahal, Jaypee Sevilla and Riverpath Associates (1997) "AIDS and Economics." Draft. Boston, MA: Harvard School of Public Health, Department of Population and International Health.

Ernberg, Gunilla, Marjorie Opuni, Bernhard Schwartlander and Neff Walker (1999) Level and Flow of National and International Resources for the Response to HIV/AIDS, 1996-97. Boston, MA: Harvard School of Public Health and UNAIDS.

Gunatillake Tantrigama (1997) "Socioeconomic dimensions of the HIV/AIDS epidemic in Sri Lanka." In David Bloom and Peter Godwin (eds.) The Economics of AIDS. New Delhi: Oxford University Press.

Izazola, Jose-Antonio, Jorge Saavedra, Jeffrey Prottas and Donald Shepard. (1998) "Expenditures on the treatment and prevention of HIV/AIDS in Mexico." In Martha Ainsworth, Lieve Fransen, and Mead Over (eds.) Confronting AIDS: Evidence from the developing world.

Washington, D.C.: The World Bank.

Izazola, Jose-Antonio, Ricardo Valladares, and Edgar Barillas (2000) "National Accounts for HIV/AIDS: Estimation of funding and expenditure flows with regard to HIV/AIDS." Draft. Tepepan, Mexico: SIDALAC (Regional AIDS Initiative for Latin America and the Caribbean), Mexican Foundation of Health.

Pothisiri, Pakdee, Viroj Tangcharoensathien, Jongkol Lertiendumrong, and Piya Hanvoravongchai (1999) "Funding Priorities for the HIV/AIDS Crisis in Thailand". UNAIDS, Geneva

Shepard, Donald (1998) "Levels and determinants of expenditures on HIV/AIDS in five developing countries." In Martha Ainsworth, Lieve Fransen, and Mead Over (eds.) Confronting AIDS: Evidence from the developing world. Washington, D.C.: The World Bank.

SIDALAC (Regional Initiative for HIV/AIDS Control in Latin America and the Caribbean) (1999) "National spending on HIV/AIDS." Paper presented at the Mexican Foundation for Health, April.

Tibandebage, Paula, Samuel Wangwe, Phare Mujinja, Richard Bail, and Donald Shepar (1998) Expenditures on HIV/AIDS in Tanzania." In Martha Ainsworth, Lieve Fransen, and Mead Over (eds.) Confronting AIDS: Evidence from the developing world. Washington, D.C.: The World Bank.

UNAIDS (2000) Nigeria: Epidemiological Fact Sheets on HIV/AIDS and sexually transmitted infections. Geneva: UNAIDS.

Viravaidya, Mechai, Stasia Obremsky and Charles Myers (1993) "The economic impact of AIDS in Thailand." In David Bloom and Joyce Lyons (eds.) Economic Implications of AIDS in Asia. New Delhi: Oxford University Press.