stethoscope was enough as a precision instrument! He was one who actually examined every patient – looking into the eyes, the pupils, the nails and asked all of them to open their mouth and show their tongue. Not for him a mere ticking off, on a pre-printed letterhead, of the number of tests that a patient was to go in for."

"After he retired from government service and started private consultations, he would never **ask** his patients for any fees – if they paid, it was well and good; if they didn't, he would say he chose his profession to serve humanity, not to make money!"

"Dad was known all over Rajasthan as the 'do goliwaale daaktar sahib'. His prescriptions were brief. Practically all his students remember him for it. One of them said that if he saw a page-long prescription of anyone else, he would say that it reflected the dimagi diwaaliyaapan (bankruptcy of intelligence) of that doctor."

"He never sent his patients for unnecessary investigation. He was horrified when one of the many diagnostic centres, which had proliferated in Jaipur by the 1980s, sent him an envelope containing cash for referral commission. My brother remembers the tongue-lashing Dad gave to the sender."

"No medical representative dared to give him the kind of gifts that many doctors were plied with."

"To the end, he cherished and followed the advice given by Dr Charles Morehead, the founder of his alma mater – Grant Medical College: 'Medicine is both an art and a science but, above all, it is a form of social service, which nothing else can equal. Uphold, to the best of your ability, the noble traditions and good name of your alma mater and of your profession, and seek your highest reward in the duty well performed.'"

The final section of the book carries tributes paid to him by his students, Dr CP Dalvi and Dr Abdul Hakim. A bibliography of his research publications is provided on pages 186–189.

The book is a pleasure to read, not only on account of the free-flowing narrative and its lucidity, but also the illustrations and drawings and the designing of the book, all of which were the responsibility of Ms Rachita Dalal.

When re-reading the book to prepare this review, I felt that the book would have been better off with an index and also, if "Milestones" (pages 190–191) had referred not only to his academic and professional achievements, but to his marriage and the growth of his family as well.

***Note**: The book is available only through the publisher on a donation of Rs 500/- plus postal charges

Exploring the economic effects of HIV

SHYAMALA NATRAJ

Economic impact of HIV/AIDS on households. Savio P Falleiro, 2014, Sage Publications India Pvt Ltd., New Delhi, India. Pp 230, Rs 845.

Introduction

The social, psychological, medical, and economic impact of the HIV/AIDS epidemic has been globally acknowledged and widely documented in many countries, especially those in sub-Saharan Africa, where prevalence rates of over 30% have been documented. Although the prevalence rates in India have rarely exceeded 1% in most regions, except in the North-East among people at high risk and in specific districts across the country, there is a vast body of literature documenting the impact of HIV/AIDS on an individual's health, and social and psychological well-being. However, few studies have explored the economic impact of the disease on individuals and households, despite its critical role in the quality of life. Economic impact is considered at three levels: individual and

Author: **Indian Institute of Technology**, Chennai, Tamil Nadu, 600 036 INDIA: Shyamala Nataraj (nataraj.shyamala@gmail.com), Senior Scientist, Department of Humanities and Social Sciences.

To cite: Nataraj S. Exploring the economic effects of HIV. *Indian J Med Ethics*. 2015 Apr-Jun;12(2): 117-8.

© Indian Journal of Medical Ethics

household (HH), sectoral, and national. This book focuses on individuals and HHs, especially those that are poor/marginalised; the associations of the disease with gender; and the coping mechanisms people employ under these circumstances. A comparison with non-HIV HHs lends the book an unusual and unique perspective. Other new findings pertain to the dependence of HHs affected by HIV on food sponsored by NGOs, and to unrequited/unaccounted income (UUI) as a source of revenue.

The book relies on quantitative and qualitative data collected in 2009 from 200 HIV+ individuals and HH members, and which were matched with a similar number of persons from non-HIV HHs. For the most part, the sample comprises members of low-income HHs who were visiting counselling and testing centres (ICTCs), care and support centres (C&S), and NGOs involved in HIV/AIDS work.

Findings

The findings highlight the dismal life led by HIV-infected people, who are increasingly pushed to live on the brink after the diagnosis. On an average, HHs affected by HIV report a drop in income of almost 50% due to loss of/decrease in employment, absenteeism due to illness and the compulsions of caregiving, and the death of infected individuals. Simultaneously, there is a dramatic increase in expenditure

on rented accommodation, food and costs associated with medical care, although a large majority avail themselves of food aid from NGOs and free treatments at public hospitals or NGO-run care and support (C&S) centres. HHs affected by HIV spend a significantly greater proportion of their monthly income (51%) on food than do HHs not affected by HIV (37%), yet the actual amount of food they buy and consume is lower despite the food aid they receive. The medical costs incurred by these HHs for only the HIV+ members account for 50%-80% of their annual income and are five times higher than the costs for all members of HHs not affected by HIV. Very few have insurance - 14% have life insurance, 2.5% medical insurance, and 1% employee insurance. The consequences are severe, with the respondents/HIV+ HHs reporting food insecurity, suicide attempts, withdrawal of minor children from school, disbandment of families, high loans, lowering of lifestyle, and a fall in overall economic standing from lower middle class/poor to poor/poorer.

HIV+ HHs cope with the situation primarily by leaning on the family members, such as by having the wife and minor children take up employment. The HIV+ members may also take up additional jobs. The other means include selling assets and taking loans. An important and unique finding is the high dependence on UUI, including unrequited receipts/savings, gambling, prostitution and petty offences. This amounts to over 32 times that raised by HHs not affected by HIV.

Stigma and discrimination (S&D) against infected people remains a big issue, with over 50% of HIV+ respondents choosing non-disclosure. Nearly 14% had been dismissed by their employers despite being fit, without receiving any benefits, once their employers learnt of their status. However, those working with NGOs in the sector reported that they had received support in the form of food, care, and leave of absence after disclosure of their status.

Fear of S&D, denial and financial constraints combine to result in delays in treatment-seeking and individuals report high levels of opportunistic infections despite having been diagnosed only a year (or less) earlier. High out-of-pocket expenses, including expenditure on travel to ART centres, food, and additional medicines and services, necessitated by the lack of comprehensive care at public health facilities, add to the delays. Similarly, a majority of the respondents (75%) reported low adherence to antiretroviral treatment (ART) after just a year. This was mainly because of the long waiting time during

their visits to the ART centres, the time and costs involved in making the trip to the centres, breakdown of CD4 machines, and total lack of privacy.

An important finding is the specific and disproportionate ways in which HIV/AIDS impacts the earnings and quality of life of women as compared to men. Households headed by females reported a significantly lower annual income. They suffered a greater loss of earnings due to the death of HIV+ members. This resulted in lower spending and consumption of food, greater dependence on sponsored food, later access to ART and hospitalisation for infected women, and greater reliance on unaccountable sources for raising resources. However, there is no significant difference in episodes of illness, medical expenses, savings or the resources raised.

The author provides a raft of recommendations, which emphasise education on prevention, early diagnosis, better outreach of ART treatment and improvement in its quality, and mechanisms to address S&D in the workplace. However, these need to address the ethical imperatives of focusing on ways to effectively help women protect themselves when the only source of prevention available is the male condom; the problems related to HIV testing, given the findings on the lack of privacy (informed consent and confidentiality) and the prevalence of S&D in most healthcare settings; and the lack of adequate food in many HIV+HHs.

A striking omission is the author's failure to place the HIV/ AIDS situation in India and in Goa, over the years, in context. Although the author repeatedly refers to assumptions about the devastation that the epidemic can cause to the national economy, there is no reference to the historically low and continuously falling prevalence rates in most regions, including Goa. The same goes for the actual economic impact of the epidemic, especially in relation to other diseases such as tuberculosis. The use of jargon (eg "moderate prevalence"), without explanations, is distracting. Finally, the sample comprises a group accessing public/free facilities and this is a limitation in the calculation of the impact of the epidemic on the state/national economy. Most HIV/AIDS studies suffer from such skewed sampling and there are usually ethical problems related to their choice of research populations. Nonetheless, the findings of this book should be considered seriously to formulate more appropriate policies to improve the quality of life of individuals and HHs affected by HIV/AIDS.