Introduction

Milestones in the Understanding of HIV/AIDS Mother-to-Child Transmission in India

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At a time when the number of people, and in particular women, living with HIV/AIDS in India is increasing, the aim of this publication is to contribute to the understanding of mother-to-child transmission (MTCT) and of its prevention in India. Indian medical specialists have joined Indian and French social scientists to elucidate different aspects of this transmission and its possible prevention.

The prevention of MTCT in India and in most developing countries cannot be approached by medical efforts alone. It has not been possible to discover any specific barrier to the transmission, as for example in the case of the condom in sexual transmission. For this reason, medical specialists present here their knowledge of the HIV/AIDS epidemic and MTCT in India, as well as results from their research or accounts of their professional practices. Social scientists present their analyses of the epidemic situation in India and perspectives for studying MTCT and its prevention.

This publication has undergone various stages in its production. In the setting of Indo-French scientific cooperation, the first step was a round-table seminar jointly organized by the French Institute of Pondicherry and the YRG Centre of AIDS Research and Education, Chennai, on the 11th and 12th of April 2002 and held at the French Institute. As a second step, oral presentations were selected, a number of authors provided written papers. In a third step, additional papers were requested from selected authors in order to provide material to supplement the reflections already contained in this book. In the last step, editors shaped the contents and introduced additional documents (such as tables and appendices) so that this publication would provide a progressive treatment of the subject by offering decisive information.

Thus, the social sciences perspectives of mother-to-child transmission and its prevention in India take into account a considerable amount of knowledge and diverse analyses relating to the epidemic in India. In order to introduce these perspectives, it has been necessary to explore the variety of the factors involved in this subject. These factors are numerous and can be preliminarily identified as psychological, social, cultural, economic, geographical, and political. An exploration of these factors has been undertaken in this book and the contents offer a gradual understanding of a number of them. Certain perspectives in the social sciences will be found in the last part. But to understand the issues of this problematic and how the content of this publication was constituted, it will be worthwhile to first consider the medical, biological and epidemiological knowledge in this field and its application to the domain of public health.

Medical, Biological and Epidemiological Issues

Three routes of transmission have been identified in MTCT: through pregnancy, through delivery and through breastfeeding. Epidemiological researches – in particular that done in Africa, but also more recently in Asia – has established milestones to calculate the risk factors of these routes. These researches take into account the procedures and the practices of delivery and of breastfeeding, and also the viral load of the mother in the three suspected situations of transmission. The contamination episode of the mother – bound to other possible over-contamination episodes – still plays a role in
scientific exploration. As mentioned in all the official epidemiological data in India, transmission to women is mainly through sexual intercourse. The problematic of MTCT thus lies in the risks involved in the sexual practices of the infected women and in the different suspected physiological situations bound to maternity.

But the risk of infection of the baby is based – for each route – on an arithmetical calculation of the percentage. In other words, when the mother is HIV-positive, the transmission is not automatic.

“Epidemiologists consider that this risk is about 14% when the women have been infected before or during the pregnancy (the risk bound to breastfeeding is added to the risk of transmission during pregnancy and delivery), and about 22% when they become infected during the breastfeeding. This means that of ten babies breastfed by their HIV-positive mothers, six to eight will not be infected.” (A. Desclaux, 2000).

Public Health Issues

The situation in the field of public health is therefore complex as regards preventive measures because the risk is quite moderate and because there is no specific technique or product acting as a barrier to the virus.

Prevention is based on different measures designed to reduce the risk of transmission: antiretroviral (ARV) therapies (antenatal and post-partum periods), a good nutritional status (qualitative and quantitative) of the mother during the pregnancy and during the breastfeeding to fortify the immune system, specific techniques and practices of delivery and breastfeeding. But these expedients reduce the risk of transmission without completely eradicating it.

At the same time, all these measures have constraints and need special settings to be applied. The health system has to provide ARV therapies which have a certain cost and there must be adequate conditions for delivery. Moreover, food and breastfeeding behaviours must also be adapted to reduce the risk. These behavioural changes involve not only the mother, but also the material, social or cultural environment.

The scientific understanding of the physiology of MTCT is making advances, but as of yet not all factors have been clarified. The actual preventive measures are based on current knowledge, but perspectives have changed and a number of paradoxes have arisen. During the initial period of preventive measures, suppression of breastfeeding was counselled as a means of reducing the risk of MTCT. But at the same time, other risks were identified in all the developing countries through alternative feeding: nutritional and sanitary risks in places where hygiene, water safety and accessibility to breast-milk supplements were not possible. Recent epidemiological research\(^1\) has shown that exclusive breastfeeding during four to six months could reduce the risk of transmission. This result has been adopted as a preventive measure by international public health organizations. However, the cultural and social acceptance and the material viability of exclusive breastfeeding for such a long period is questionable. The difficulty of application of this preventive measure can lead to an increase in the risk of transmission if exclusive breastfeeding is not properly done (period of alternative mixed feeding, or discontinuation of exclusive breastfeeding before the counselled minimum period).

By the same token, during an initial period, international public health organizations advised that colostrum not be given to the infant (due to its high viral load), while during a subsequent period, colostrum feeding was counselled because of its nutritional, protective and immune functions. Ethical aspects are involved in the process of prevention. According to international public health rules, all preventive measures have to be taken with the informed consent of the HIV-positive woman. The woman is to be advised, and her confidentiality respected, during pregnancy, labour and

while breastfeeding, according to an internationally standardized process called “counselling”. This concept requires that the woman be informed of all the risks of transmission to the baby and that she be helped to take the right decision and to choose the adequate kind of prevention. This ethical aspect closely links the HIV-positive woman to all the professionals involved in testing, prevention or treatment. Nevertheless, its application to local conditions and situations is questionable in India, where there is a lack of trained people to do the counselling and where the patient in the medical system rarely has an active role in the choice of her therapy.

Thus, while preventive strategies to reduce the risk of MTCT do exist, their application is complex, especially in a developing country like India.

**From Public Health Issues to Social Sciences Perspectives**

The intention of this book is to provide a bridge between the latest knowledge in the medical and epidemiological fields and the knowledge achieved in the social sciences, thereby leading to a better understanding in terms of prevention.

In view of the fact that the national policy for the prevention of MTCT is in its incipient stages, and because the issue of the HIV/AIDS infection of infants and children in Indian society is quite new, this book proposes to offer steps towards an understanding of the Indian situation and present the perspectives to be developed by the social sciences.

First of all, MTCT is an integral part of the question of the HIV/AIDS epidemic in India. The transmission from mother to child should therefore be placed in the more general context in India: the question of the infection of women and the evolution of the epidemic and its prevention.

Public, private and NGOs’ initiatives cannot be dissociated in the India’s response to the epidemic2. While the government has shown a considerable involvement in the description of and the struggle against this epidemic, NGOs are complementing the government initiatives. The government has regularly improved its policy according to the international standard. But Indian society is facing a very demanding situation. The infection is spreading throughout India, reaching the rural after the urban areas, and affecting very vulnerable populations such as the poor and uneducated, children, and especially street children, but also infants, sex workers – already very stigmatized in Indian society –, women in general, and spouses in particular. The rapid spread of the infection in India seems to follow all the expected or unexpected social and economic vulnerabilities of Indian society. The level of stigmatization is still very high and makes all the infected people vulnerable. The government has followed a significant policy to associate all the public and private initiatives in order to face the epidemic.

We have wanted therefore to present in this book governmental responses to the epidemic, as well as the endeavours of a number of NGOs or private institutions involved for a long time in the prevention the epidemic and the care of infected people. But – as has been described in all societies worldwide – the HIV/AIDS epidemic and its management are bound to numerous factors rendering the analysis of the situation complex. A description of these factors and critical issues will be offered in the first and second parts of this book.

In a second step, we then focus on the population affected by MTCT – women, infants and children. Women are biologically very vulnerable to transmission in terms of the rate of infection after unprotected intercourse with infected people. And, as a result of the general lack of autonomy of Indian women as regards sexuality or economic power, this vulnerability turns into a social one. Therefore, contributions in the third part of this book are offered so as to understand the real situation of women’s vulnerability to diseases, STDs, or HIV/infection. These contributions could be – and should be in the future – complemented by further analysis of the vulnerability and also of the

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empowerment of women and of the PLWHA in Indian society. A number of studies in the social sciences have been conducted in India from the perspective of gender, and studies continue to be undertaken. Several development activities are at present furthering the empowerment of women through microfinance projects, self-help groups, or community development. In the prevention of HIV/AIDS, peer-model prevention could be combined with an empowerment process, and this has already been initiated in different situations in the case of sex workers.

In the last part of this book, these factors are organized through anthropological and socio-psychological perspectives, in the goal to analyze the complexity of the situation in terms of the risks and prevention of MTCT.

In consideration of the risks of transmission through the three routes – pregnancy, delivery and breastfeeding – these contributions offer analyses of maternity in the face of the risks of transmission in India. To open these papers, factors identified in West Africa in the socio-cultural obstacles to the prevention of MTCT through breastfeeding are presented. The comparison of different national situations proves to be very fruitful in the identification of the relevant problematics connected with the particular factors of a given society, or bound to the transmission risk itself, according to national similarities or differences. Echoes from West Africa bear numerous similarities to what is observed in the Indian situation which are discussed throughout this book. The situation as prevails in India is taken into account in all the other papers which make a point of the data pertaining to the practices of breastfeeding or delivery in terms of the risk of transmission. Beyond an assessment of current knowledge, critical analyses and conceptual constructions are proposed in order to offer research perspectives in the social sciences.

Due to the numerous factors involved in the risks of transmission, and the social and cultural complexity of maternity in India, all these contributions show the necessity of initiating and conducting research in the fields of the social sciences. Considerations as to the need of research are formulated which can be of interest to the whole domain of social sciences. These proposals – mainly perceived in the areas of social anthropology or psychology – could therefore be enlarged and adapted to such different disciplines as economy, demography, law, geography, history or sociology in combination with public health and epidemiology. These perspectives in the social sciences are an invitation to develop further research in each discipline, but also to develop multi-disciplinarity, inter-disciplinarity, or trans-disciplinarity.

Details of the Contents of the Book

The first part presents some milestones of the HIV/AIDS epidemic in India and the conditions of its prevention.

R.N. Gupta presents in his paper “an overview of HIV/AIDS prevention in India”. A historical review and epidemiological data show the evolution of the spread of this epidemic in India and the political will to combat it. After the first cases of AIDS were identified in 1986 in India, the government of India launched the National AIDS Control Society (NACO) to organize assessments and actions pertaining to the HIV/AIDS epidemic. Because of its important role in prevention and in control policies, Gupta presents all the implications of this organization.

The prevalence of the epidemic stressed by Gupta indicates that HIV/AIDS is today spreading from high-risk groups to the general population and from urban to rural areas. As concerns the HIV infection among antenatal women, three types of states could be identified: more than 1% in the states of Maharashtra, Tamil Nadu, Karnataka, Andhra Pradesh, Manipur and Nagaland, more than 5% among the high-risk groups in Gujarat, Goa and Pondicherry, less than 5% and 1% respectively, in the remaining states of the country.

The prevalence of opportunistic infections (OI) – and of the main one, tuberculosis – are detailed in this paper and will be further discussed in the following papers, especially by Frédéric
Bourdier, who stresses the fact that the government of India has chosen to provide OD and not ARV treatments. And, this is a nodal point of HIV/AIDS prevention, because all the national programmes have been built on a control policy, an IEC strategy and prevention of the infection, and not on the adequate treatment of HIV-positive people. Gupta presents the trends of NACO prevention programmes consisting of two phases (I - 1992 to 1999; II - 1999-2004); they are detailed in Appendix 2.

Through a review of social and behavioural research, he shows that different generations of studies have been constructed to understand the HIV/AIDS epidemic in India. This research is very useful for understanding the pattern of the epidemic and in helping to design prevention programmes. But there are limitations to the understanding the social and political dynamics of the epidemic in India, as developed in the following paper.

Frédéric Bourdier, in his “Critical Analysis of the HIV/AIDS Epidemic Prevention Policy In India”, offers reflections on the Indian government’s policy of HIV/AIDS prevention. He highlights the lateness of the view in India of the epidemic as a pandemic and of the necessity to face it. Two trends can be identified: the role of stigmatization in the first phase of the control policy that was directed more against HIV-positive people than toward curbing the epidemic, the role of the denial of the epidemic on the basis of the orthodox way of thinking. These reflections lead us to add political, social and cultural, as well as behavioural, dimensions to the prevention needs.

In order to introduce the role of the NGOs in the response to the HIV/AIDS epidemic, we have chosen to present the development of the activities of one of them that has been involved in this area for a long time. “Milestones of the Social and Medical Treatment of AIDS by the NGOs in India” is therefore presented by Suniti Solomon. On the basis of her experience of this NGO, she has presented the different stages in the social and medical aspects of HIV/AIDS by NGOs in India. This is one of the first specialized NGOs to be created in India, and the different steps of its activity allow one to understand the evolution of NGO involvement in the field of HIV/AIDS. NGO activities complement public activities and – especially YRG CARE – some have preceded the latter. The author explains how this NGO organized new activities to confront new needs in the fight against the HIV/AIDS epidemic. One of these activities is the organization of special consultation with HIV-positive women and the prevention of HIV transmission from mother to child. This NGO is networking with a number of public and private institutions in India to improve prevention, treatment and research.

But one of the core aspects in the prevention of the HIV/AIDS epidemic is the political choices made in India as concerns ARV treatments. The very recent policy of the government (2004) to provide these treatments free of charge should not cause one to forget the previous decision to provide only prevention and treatment of opportunistic infections, but not ARV. A comparison with a very different national policy in a similar developing country – Brazil – adds to our understanding of the national options. Frédéric Bourdier, in his paper “Management of the HIV/AIDS Epidemic in India: Geo-anthropological and Political Comparison with Brazil” provides an analysis of Indian and Brazilian national policies to confront the HIV/AIDS epidemic. As anthropologist and geographer, he conducted research on the social, cultural and political aspects of the HIV epidemic in South India (Tamil Nadu) and in Brazil. He highlights in his paper the opposite choices made by these two nations. In a prevention policy, Brazil is providing free ARV drug treatment to all HIV-positive people. India has focused the prevention policy on activities for the prevention of the infection and on treatment of opportunistic diseases, but nothing was done until 2004 to provide ARV treatment on a large scale.

This text will complement others that have already been published on this question. A presentation of the role of the NGOs in India in HIV/AIDS awareness and control will be found in Ashoke Chatterjee and Kusum Sahgal, Chapter 3, in S. Panda, A. Chatterjee & A.S. Abdul-Quader (eds.), 2002: 62-76. The role of the NGOs in India is discussed by social scientists, in Frédéric Bourdier (ed.), 1999. Of research and Action – Contribution of Non Governmental Organizations and Social Scientists in the Fight against the HIV/AIDS Epidemic in India, ANRS, French Institute of Pondicherry Publisher, 460 pp.

This very recent policy is presented in the last chapter by Patrice Cohen.
Part two presents different approaches to the prevention of HIV/AIDS transmission from mother to child in India.

Suniti Solomon presents in her paper “Prevention of MTCT: A Medical Perspective” the various types of prevention of HIV/AIDS transmission from mother to child. The assessment of the risks of transmission are complex because they are based on a plurality of connected factors. The risks are here discussed according to risk factors: maternal factors (inadequate nutritional status, recent infection, STD, lack of ARV treatment), obstetrical factors (pre-term delivery, inflammation of placenta membranes, use of instruments during labour and delivery), post-partum factors (breastfeeding and its duration, health status of the breasts). The preventive strategies are presented and discussed: ARV drug treatment, proper nutritional diet, relevant breastfeeding according to the risk factors, proper delivery methods, and vaginal bath.

At the national level, initiatives by the public sector as well as by the private sector or NGOs have led to different studies to assess medical protocols and counselling for the prevention of MTCT (AZT, Nevirapine) in India.

The NACO – National AIDS Control Organisation – has conducted an extensive national pilot study that was begun in 2000 in eleven medical centres of excellence in different States with high incidence. The details of these studies and results are available in Appendix 6.1. The proposed protocols have been identified as successful by the NACO. On this basis, a new national programme for the prevention of MTCT, called “prevention of parent-to-child transmission”, and counselling were launched in 2002 by NACO in collaboration with UNICEF. P. Kuganathan – as head of the project for UNICEF – presents in his paper the application of this programme in Tamil Nadu. In this recent policy, new “PPTCT teams” are formed for antenatal counselling and care and are to be established in institutions in the medical public and private sectors all over the State. The first assessment done here shows a notable improvement in the PPTCT.

At the same time, the private sector – on a smaller scale – is also involved in the assessment of MTCT protocols. In Appendix 6.2, Sheila Shyamprasad, from Rainy Hospital, Chennai, describes a pilot study done in 1999 in collaboration with YRG CARE and Brown University, USA.

All these new protocols are connected with counselling and question its application in India. Shyamala Natarajan, in her paper “Bridging Counselling and Care in the HIV/AIDS Epidemic: General Perspectives and the Case of the Women”, presents some critical issues in prevention and focuses particularly on the concept of “counselling” and its uses in India. On the basis of her background – trainer of counsellors for HIV prevention throughout South India, and especially for the prevention of mother-to-child transmission –, she assesses the difficulties involved in counselling in India. She observes deleterious applications of the counselling concept, lack of counsellor training, difficulties for the counsellors to adapt their counselling to the various risk behaviours, inordinate pressure by medical institutions to make home visits, even if patient stigmatization could be involved. This paper lays stress on the difficulties involved in application in India, but should not conceal the positive experience in counselling made by the well-trained medical centres in Tamil Nadu. These include, for example, the centres participating in the NACO protocol and also in the PPTCT programme. Shyamala Nataraj and her NGO are in fact now (since 2003) involved in training for the PPTCT in Tamil Nadu, and this shows the increasing networking of the different institutions involved in HIV/AIDS prevention.

The third part emphasizes the vulnerability of Indian women in terms of health and the HIV/AIDS epidemic.

K. Shanti, in her paper “Gender and Health in India”, offers an assessment of the vulnerability of Indian women in the health domain and presents the imperatives for initiating health policy, administration and research. She lays stress on all levels of gender discrimination: the valorisation of the male in Indian society and the burden of the dowry for the family in the marriage their girls, the discrimination of girl babies, violence against women in the household, the high maternal mortality
(pregnancy, nutritional status, reproductive care, caesarean, abortion, professionalization and migration of the women), mental problems of women (distress, stress and strain, feeling of helplessness), discrimination of women in the health care system, health problems of ageing women. In addition, women facing HIV/AIDS are in a vulnerable situation: most of those infected are monogamous women infected by their husbands and they are especially stigmatized. The infection is often associated in the popular mind with prostitution, which is very stigmatized in India, and there are many problems as concerns the safety of the sex workers. Education in sexuality is quite absent in India, and women are facing a high degree of Reproductive Tract Infection (RTI), which is a neglected dimension of maternal health care. The social pressure is very high on both the woman and the husband according to Indian values of fertility: women have to have babies and the model of breastfeeding is quite compulsory. All these factors have to be taken into account for the prevention of MTCT.

K. Geetha, in her paper “HIV/AIDS Infection: Perceptual Studies on Urban Women Commuters”, considers the vulnerability of the urban working women in Chennai through their perception of HIV/AIDS. She indicates with her geographic research how the mobility of women can be related to the incidence of HIV infection. Due to urbanization and industrialization, the mobility of women is increasing and the status of women is changing. Women’s vulnerability is enhanced by the inequalities and discrimination they are facing in Indian society: they are seen as the subordinate sex and relegated to a second-class status, and are they kept uneducated or under-educated, dependent, isolated and confined to their homes. The mobility of working women is linked to stigma and the perception of vulnerability to AIDS.

Part four explores social and cultural dimensions of the risk practices in the HIV transmission from mother to child. As has been developed in the first three parts of this book, the prevention of MTCT appears to be bound to political, economic, social and cultural factors which interfere in medical provision and accessibility.

Observations made in other countries provide very interesting issues for reflection that could be adapted to the Indian situation. As regards the contribution of the social sciences to the prevention of MTCT, we should note the foundational research directed in West Africa by the French anthropologist Alice Desclaux. In her paper “Socio-cultural Obstacles to the Prevention of HIV Transmission Through Breastfeeding: Results in West Africa to be Applied in India?”, which introduces this part, she highlights the socio-cultural dimensions that would affect the prevention of HIV transmission through breastfeeding. According to the references of UNICEF, UNAIDS, and WHO recommendations, she presents the results of a multi-disciplinary research programme completed in West Africa in 1998 and 1999. The conclusions reveal the difficulties encountered in the application of preventive behavioural measures: social and economic limitations (cost of the milk formulae or of the other alternative options, father’s attitude, normative value of breastfeeding), difficulties in making a choice (ambiguous information delivered by the health centres, perceptions of the symbolic and nutritional values of human milk, accessibility to the various alternative options, psychological burden of the choice), limitations bound to the health system (promotional campaigns for breastfeeding by all mothers, failure of the exclusive breastfeeding campaign, the lack of knowledge among the medical professionals, rejection of the use of alternative milks in the health centres, stigmatization of the non-breastfeeding mothers in the preventive messages). The failures of the health services respective of the preventive policy are here described through the social history of the promotion of breastfeeding, the social organization of the promotion programmes and the under-estimation of the cultural values of human milk.

These results obtained in African societies reveal a number of issues that exist in Indian society. These points are discussed in the following papers which provide analyses of the Indian situation and propose perspectives to be developed in the social sciences in India.

and evaluate research studies from a gender perspective. The synthesis of breastfeeding and infant feeding practices in India was undertaken after a study of 100 research papers. As micro-research focused on limited samples, a macro view of behaviour was obtained through data collected by the National Family Health Surveys 1 and 2. In the first section, the authors present the types of knowledge relating to the prevalence of breastfeeding, the initiation of breastfeeding, prelacteal feeding, colostrum feeding, exclusive breastfeeding, types of supplements and bottle-feeding, contraceptive effects of breastfeeding, support and information, breastfeeding and HIV/AIDS. In a critical review, they stress that epistemology is lacking in these areas of research and that this makes it difficult to refer to results of good quality, as well as underscoring the insufficiency of analyses, especially regarding gender perspectives.

Pascale Hancart-Petitet, in her paper “Anthropological Perspectives on HIV/AIDS Transmission During Delivery”, highlights the fact that even if the theoretical risk of transmission from mother to child through delivery is estimated to be 1/3, very little has been done to assess the delivery practices in terms of increasing or decreasing risks. Very little has been done to understand, for instance, how the obstetricians or birth attendants have integrated preventive measures in their practices, how women discuss their positive status with the birth attendant, or how the women understand the Nevirapine treatment at the time of delivery. Her paper provides a conceptual setting in cultural anthropology on the HIV transmission from mother to child through a consideration of the approaches of reproductive anthropology. In discussing the different delivery practices, the author points out the gaps or appropriateness between international recommendations and possible practices. Other approaches, such as the so-called medical approach and the social change or political approaches, are considered in order to open new perspectives in research.

Florence Pittolo-Rageade, in her paper “Psycho-Sociological Perspectives of HIV/AIDS: Finding a Balance between the Differences, Equality, Rights and Individual Needs”, undertakes to highlight some of the challenges recognized in the round-table discussions: the identification of the primary, secondary and tertiary prevention of HIV/AIDS and of MTCT, the proper HIV/AIDS treatment and its availability, the importance of the maternity processes in the face of the HIV/AIDS infection. Based on this list, she lays stress on psycho-sociological concepts in the study of MTCT in order to improve prevention, and considers especially how this discipline can provide an understanding of the social and psychological aspects of HIV/AIDS processes through cognitive dissonance or social representations. Considering the change of habits in connection with prevention needs she introduces further approaches in the study MTCT: the role of conflict and negotiation, the importance of the understanding of Indian women in general and of the HIV-positive women in particular by means of their biography linked with medical, infection or social events.

Patrice Cohen, in the last chapter, “Mother-Child and AIDS in India: Social Sciences Perspectives”, offers concluding remarks on the different aspects of the role of social sciences in MTCT and its prevention. Observations on a number of lessons drawn from this book are made, taking into account the new government policy (to be launched in 2004) that is to provide free ARV drug therapies: the absence until 2003 of a government policy on ARV drug therapy for PLWHA, even if a government policy on the prevention of MTCT through ARV drug therapy was launched in 2002, the debate on local applications of counselling and on the concepts bound to MTCT prevention. After this assessment, the role of perspectives of the social sciences is considered: through the challenges to the Indian public health policy and especially to the prevention of the HIV/AIDS epidemic, through the analysis of the vulnerabilities related to the infection, and through the analysis of behaviours connected with the routes of transmission (delivery, infant feeding and breastfeeding). These aspects are approached from different perspectives so as to deepen the social and cultural analysis of MTCT in its gender, psychological, social, cultural, economic and political aspects.

This book is a preliminary approach in which milestones in the understanding of the dynamics of MTCT and its prevention in India are presented. Since these texts have been written, new situations have evolved – the most central of which is the free access to ARV therapy launched by the Indian
government in 2004 – and new studies in the social sciences have been undertaken. This is, therefore, a chronicle that is written from day to day and we hope new material will soon be available to provide additional and detailed data on this subject.

References


