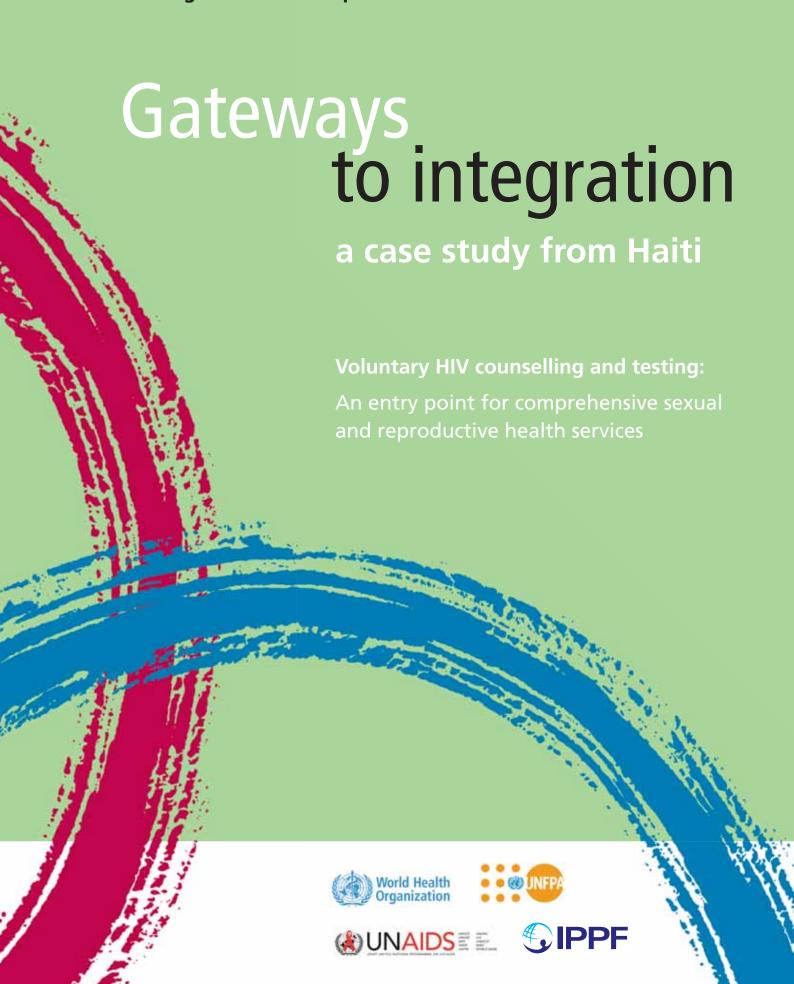
Linking Sexual and Reproductive Health and HIV/AIDS



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Main author: Susan Armstrong.

Main contributors: Peter Weis (WHO), Lynn Collins (UNFPA) and Kevin Osborne (IPPF).

Reviewers: From GHESKIO: Marie Deschamps and Jean William Pape. From WHO: Karoline Fonck, Manjula Lusti-Narasimhan, Rudolph Magloire, Michael Mbizvo, Jos Perriens, Patricio Rojas and Paul Van Look. From UNFPA: Ramiz Alakbarov, Hedia Belhadj, Christina Bierring, Michel Brun, Raquel Child, Hernando Clavijo, Jose Ferraris, Josiane Khoury, Steve Kraus, Monique Rakotomalala, Harold Robinson, Alexei Sitruk, Maria Antonia Urbina and Sylvia Wong. From UNAIDS: Anindya Chatterjee, Barbara de Zalduondo, Emma Fowlds and Mahesh Mahalingam. From IPPF: Andy Guise, Jonathan Hopkins and Ale Trossero.

#### Acronyms and abbreviations

**AIDS** Acquired Immune Deficiency Syndrome

AZT Azidothymidine – also known as Zidovudine® or Retrovir®

**GHFSKIO** Groupe Haïtien d'Étude du Sarcome de Kaposi et des Infections

Opportunistes

HIV **Human Immunodeficiency Virus** 

**IPPF** International Planned Parenthood Federation

**PAHO** Pan American Health Organization

PEP Post-Exposure Prophylaxis

**PEPFAR** President's Emergency Plan for AIDS Relief

**PLHIV** People living with HIV

**PMTCT** Prevention of Mother-to-Child Transmission

STI **Sexually Transmitted Infection** 

UNAIDS Joint United Nations Programme on HIV/AIDS

**UNFPA United Nations Population Fund** 

**UNGASS** United Nations General Assembly Special Session on HIV/AIDS

UNICEF United Nations Children's Fund

VCT Voluntary HIV Counselling and Testing

WHO World Health Organization

# Linking Sexual and Reproductive Health and HIV/AIDS

The majority of HIV infections are sexually transmitted or associated with pregnancy, childbirth and breastfeeding, all of which are fundamental elements of sexual and reproductive health care. In addition, sexual and reproductive health problems share many of the same root causes as HIV/AIDS, such as poverty, gender inequality, stigma and discrimination, and marginalization of vulnerable groups. Despite this, services for sexual and reproductive health and for HIV/AIDS still largely exist as separate, vertical programmes.

## Global commitments to strengthen linkages

#### **Building blocks**

To raise awareness of the pressing need for more widespread linkages between sexual and reproductive health and HIV/AIDS, UNFPA and UNAIDS, in collaboration with Family Care International, held a high-level consultative meeting in June 2004 with government ministers and parliamentarians from around the world, ambassadors, leaders of United Nations and other multilateral agencies, non-governmental and donor organizations, as well as young people and people living with HIV. The meeting resulted in *The New* York Call to Commitment: Linking HIVIAIDS and Sexual and Reproductive Health, which challenges the sexual and reproductive health and HIV/AIDS communities to examine how they might improve collaboration.

An earlier meeting, held in Glion, Switzerland (May, 2004), and initiated by WHO and UNFPA, took a close look at the role of family planning in reducing HIV infection among women and children. This conference resulted in The Glion Call to Action on Family Planning and HIV/AIDS in Women and Children.ii

In December 2005, a global partners' meeting was convened to discuss progress in implementing a comprehensive approach to prevention of mother-to-child transmission. This consultation also stressed the importance of linking

sexual and reproductive health and HIV/AIDS services, and led to a Call to Action: Towards an HIV-free and AIDSfree Generation, iii as did the most recent PMTCT consultation in Johannesburg November 2007, resulting in a Consensus Statement: Achieving Universal Access to Comprehensive Prevention of Mother-to-Child Transmission Services.<sup>™</sup>

Linking HIV/AIDS and SRH was included as one of the Essential Policy Actions for HIV Prevention in the UNAIDS policy position paper on Intensifying HIV Prevention, which was issued in 2005.<sup>v</sup>

#### Framework for universal access

The above commitments culminated in the Political Declaration on HIV/AIDS arising from the 2006 Review of the United Nations Special Session on HIV/AIDS (UNGASS), which also stressed how vital it is to link HIV/AIDS with sexual and reproductive health.vi Following the commitment by G8 members1 and, subsequently, heads of states and governments at the 2005 United Nations World Summit, the UNAIDS Secretariat and its partners have been defining a concept and a framework for Universal Access to HIV/AIDS Prevention, Treatment and Care by 2010.vii Efforts towards universal access underline the importance of strengthened linkages between sexual and reproductive health and HIV/AIDS.

<sup>&</sup>lt;sup>1</sup> G8 summits: Since 1975, the heads of state or government of the major industrial democracies have been meeting annually to deal with the major economic and political issues facing their domestic societies and the international community as a whole, G8 countries are France, United States, United Kingdom, Germany, Japan, Italy, Canada and Russian Federation.

The potential benefits of linking sexual and reproductive health and HIV/AIDS include:

- improved access to sexual and reproductive health and HIV services
- increased uptake of services
- better sexual and reproductive health services, tailored to meet the needs of women and men living with HIV
- reduced HIV/AIDS-related stigma and discrimination
- improved coverage of under-served and marginalized populations, including sex workers, injecting drug users and men who have sex with men
- greater support for dual protection against unintended pregnancies and sexually transmitted infections, including HIV
- improved quality of care
- enhanced programme effectiveness and efficiencyviii

Another aim of linking sexual and reproductive health and HIV/AIDS is to accelerate progress towards achieving the goals agreed at the International Conference on Population and Development<sup>ix</sup> and the Millennium Development Goals,\* especially those that aim to reduce poverty, promote gender equality and empower women, improve maternal health, combat HIV/AIDS, and attain universal access to sexual and reproductive health.

# Identifying and meeting the challenges

Linking sexual and reproductive health and HIV/AIDS policies and services presents many challenges for those on the front line of health care planning and delivery. These include:xi

- making sure that integration does not overburden existing services in a way that compromises service quality, by ensuring that integration actually improves health care provision
- · managing the increased workload for staff who take on new responsibilities
- allowing for increased costs initially when setting up integrated services and training staff
- combating stigma and discrimination from and towards health care providers, which has

the potential to undermine the effectiveness of integrated services no matter how efficient they are in other respects

- adapting services to attract men and young people, who tend to see sexual and reproductive health, and especially family planning, as 'women's business'
- reaching those who are most vulnerable but least likely to access services, such as young people
- providing the special training and ongoing support required by staff to meet the complex sexual and reproductive health needs of HIV-positive people effectively
- motivating donors to move from parallel to integrated services, and sustaining support for integrated policies and services.

# Tools to make it happen

Several tools prepared by IPPF, UNFPA, UNAIDS and WHO offer guidance on how to link sexual and reproductive health with HIV/AIDS. These include:

- Sexual and Reproductive Health and HIVIAIDS - a framework for priority linkagesxii
- Linking Sexual and Reproductive Health and HIVIAIDS - an annotated inventoryxiii
- Sexual and Reproductive Health of Women Living with HIV/AIDS guidelines on care, treatment, and support for women living with HIVIAIDS and their children in resource-constrained settings xiv
- Integrating HIV Voluntary Counselling and Testing Services

into Reproductive Health Settings stepwise guidelines for programme planners, managers and service providers\*\*

- Meeting the Sexual and Reproductive Health Needs of People Living with HIVxvi
- Gateways to Integration a series of case studies of country-level experiences on how to link and integrate servicesxvii
- Reproductive Choices and Family Planning for People Living with HIV - Counselling Toolxviii
- Rapid Assessment Tool for Sexual & Reproductive Health and HIV Linkages: A Generic Guidexix

## **Turning theory into practice**

The process of linking sexual and reproductive health and HIV/AIDS needs to work in both directions: this means that traditional sexual and reproductive health services need to integrate HIV/AIDS interventions, and also that programmes set up to address the AIDS epidemic need to integrate more general services for sexual and reproductive health. While there is broad consensus that strengthening linkages should be beneficial for clients, only limited evidence is published regarding real benefits, feasibility, costs and implications for health systems.

This publication presents one of a series of country experiences, set against a different public health, socio-economic and cultural background, embedded in radically different legal and health care environments and using different entry points as they strive to strengthen linkages between sexual and reproductive health and HIV/AIDS.

The case studies featured in this series have been chosen to demonstrate this two-way flow and to reflect the diversity of integration models. While these case studies focus primarily on service delivery components, structures/systems and policy issues are also important ingredients of the linkages agenda. The case studies are not intended to be a detailed critique of the programmes or to represent 'best practice' but to provide a brief overview that shows why the decision to integrate was taken, by whom, and what actions were needed to make it happen. The intention is to share some of the experience and lessons learned that may be useful to others who wish to consider actions to strengthen the integration of these two health care services. They are real experiences from the field, with important achievements but also with real limitations and shortcomings. One of these shortcomings lies in the nomenclature currently being used. There is currently no globally accepted definition of the terms 'linkages', 'mainstreaming' and 'integration' in the context of sexual and reproductive health and HIV. At times in these case studies the terms are used by different organizations in a variety of settings in different ways. While we propose the following definitions, it should be noted that the different implementing partners have not used these consistently:

### **Mainstreaming:**

Mainstreaming HIV/AIDS means all sectors and organizations determining: how the spread of HIV is caused or contributed to by their sector, or their operations; how the epidemic is likely to affect their goals, objectives and programmes; where their sector/organization has a comparative advantage to respond to limit the spread of HIV and to mitigate the impact of the epidemic and then taking action.

#### Linkages:

The policy, programmatic, services and advocacy synergies between sexual and reproductive health and HIV/AIDS.

### **Integration:**

Refers to different kinds of sexual and reproductive health and HIV/AIDS services or operational programmes that can be joined together to ensure collective outcomes. This would include referrals from one service to another. It is based on the need to offer comprehensive services.

# A case study from Haiti

Vital statistics at a glance

## **Estimated population (2005)** 8,528,000 Adult population aged 15 to 49 years (2005) 4,358,000 Life expectancy at birth: Men 53 years Women 56 years Crude birth rate (2005) 29.8/1,000 population Total fertility rate (2004) 3.9 HIV prevalence rate in adults aged 15 to 49 years (2005) 3.8% (2.2-5.4%) Estimated number of PLHIV (2005) 190,000 Estimated number of adults aged 15 years and over living with HIV (2005) 180,000 Estimated number of women aged 15 years and over living with HIV (2005) 96,000 Deaths due to AIDS (2005) 16,000 Estimated number of adults in need of antiretroviral therapy (2005) 32,000 Estimated number of people receiving antiretroviral

Sources: Haiti: Epidemiological Fact Sheets on HIV/AIDS and Sexually Transmitted Infections. UNAIDS, UNICEF, WHO, 2006 Update. Available at www.who.int and www.unaids.org/en/CountryResponses/ Countries/haiti.asp: UNAIDS Haiti Country Situation Analysis, June 2007xx (Check UNAIDS website for updated data available from end of July 2008).

## **Evolution of** service provision: Meeting the needs of under-served communities

Haiti has one of the oldest AIDS epidemics and one of the highest rates of HIV infection in the world outside of sub-Saharan Africa. In the early 1980s, Haitians en masse were subjected to stigma and discrimination with reports of people being met at international airports by immigration officials in full protective clothing, shunned by colleagues and friends alike, with children of HIVpositive parents being turned away from schools.

In May 1982, a group of doctors, who became aware of AIDS through the unusual illnesses they were seeing among their patients, started **GHESKIO** initially as a research institute with support from the Ministry of Health. (GHESKIO is the acronym for Groupe Haïtien d'Étude du Sarcome de Kaposi et des **Infections Opportunistes –** the Haitian Study Group on Kaposi's Sarcoma and **Opportunistic Infections.)** 

7,000

28.1%

24%

therapy (2005)

Contraceptive prevalence rate (2000)

Births attended by skilled health personnel (2000)

In 1985, GHESKIO began providing voluntary HIV counselling and testing (VCT) services and treatment for opportunistic infections in Cité de Dieu, one of the poorest neighbourhoods of Port au Prince, where health problems, including HIV/AIDS, are widespread. GHESKIO gradually integrated a wide range of sexual and reproductive health services, including family planning, and expanded coverage to the two adjacent neighbourhoods, both equally poor, of Cité Eternel and Cité Soleil.

VCT is now the gateway to a full range of clinical sexual and reproductive health and HIV/AIDS services introduced sequentially as the needs became apparent and operational research showed what was feasible (see Figure 1).

Today, the GHESKIO centre, with some 230 staff, serves a population of around 1.5 million in Cité de Dieu and the two neighbourhoods of Cité Eternel and Cité Soleil. Services include VCT, treatment for sexually transmitted infections (STIs), tuberculosis, diarrhoeal diseases and malaria, and sexual and reproductive health care. Services are open to adults, infants and young people.

In 1985, the year that VCT was introduced, around 100 clients came for HIV testing, most of whom were referred by hospitals. In 2004, 23,313 clients attended the voluntary counselling and testing clinic, the great majority on their own initiative and not referred via the health system. On average, 70% of clients are self-referred and 20% are referred by public institutions. About 100,000 clients a year now use the GHESKIO centre for a whole range of services, although 90% of clients initially visit GHESKIO for VCT. Of the 24,000 new individuals who visit the centre annually, 60% are women, 90% are of reproductive age, 16% are HIV-positive and 10% have syphilis. In addition, 8,000 of them are adolescents or young adults aged 15 to 24 years. The centre also offers services and support for women who have been raped.

The conditions under which GHESKIO operates are daunting, characteristic of a country beset by poverty and political instability.

## Integrating sexual and reproductive health and **HIV/AIDS** services

Introduction of additional **GHESKIO** services:

- 1985 VCT and treatment for opportunistic infections
- 1988 Distribution of condoms to prevent STIs including HIV
- 1989 Diagnosis and treatment of tuberculosis
- 1991 Diagnosis and treatment of
- 1993 **Family planning**
- Antiretroviral therapy and maternal health programme, including PMTCT
- 2000 Care for survivors of sexual violence and youth programme

Figure 1: Voluntary counselling and testing: the gateway to a range of sexual and reproductive health and HIV/AIDS services

#### **VCT** registration: **HIV-positive pregnant** • 1985: 100 clients, mostly women: hospital referrals Referred for PMTCT: • 2004: 23,313 clients, 66% social worker self-referrals • nurse **Pregnant women:** doctor Same day results and paediatrician post-test counselling **HIV pre-test counselling:** Questionnaire to evaluate: • HIV/AIDS knowledge **HIV-negative pregnant** • behaviour women: health status Referred for routine ante-natal care **HIV** testing: In addition, screening for: • syphilis • tuberculosis, if a cough persists for more than three weeks **Other HIV-positive** clients: Referred for: antiretroviral treatment (if eligible) • home care – education of family care-givers • nutritional support **Return within two** weeks for: • HIV post-test counselling HIV test result **Doctor Other HIV-negative** clients: Family Information about: planning vaccine trials youth programme

## All services under one roof: Rationale for integration

GHESKIO's decision to offer sexual and reproductive health services integrated with its existing HIV/AIDS programme, all under one roof, was motivated partly by the following factors:

- the great majority of HIV infections in Haiti are contracted sexually
- without intervention, about a third of infants born to women living with HIV become HIV-positive themselves, and, in Haiti, AIDS is responsible for 20% of infant deathsxxi
- although improving, stigma and lack of necessary professional skills result in many PLHIV being denied access to sexual and reproductive health care in other health facilities
- people do not have the time or money to go from one place to another to meet their different health needs.

## Multi-skill approach

In order to meet the diverse needs of its clients in the most efficient and holistic manner, GHESKIO has chosen to use the 'multi-skill approach' which means that all medical staff are trained to be able to work in any of the Centre's clinics. Not only does this mean that staff can, and do, stand in for each other if necessary, but it also helps enormously by promoting understanding among colleagues and has been the key to successful integration of services at the Centre.

Capacity building is also a core part of GHESKIO's mission. All colleagues are encouraged to undergo training, with an emphasis on continuous education. An important aspect of training, in addition to providing clinical knowledge on HIV/AIDS and sexual and reproductive health, is building the capacity to address issues about stigma and discrimination, and the skills needed for outreach work. People living with HIV are also involved in training activities, and become peer counsellors or take on other roles.

## Influencing policy and practice

GHESKIO has played a major role in influencing policy and practice in the Haitian national health system. This is particularly apparent in the way it has developed its model of integrated services targeting the endemic and most common diseases, such as tuberculosis, HIV, STIs, diarrhoeal diseases and malaria. Integrating sexual and reproductive health services into the voluntary counselling and testing network - to prevent unintended pregnancies and prevent mother-to-child transmission of HIV has significantly increased access to services. This model of service provision is now being used in 22 public and private health centres and hospitals nationwide.

Through its operational research and training unit, GHESKIO plays a major role in developing guidelines, treatment protocols, and strategic plans to fight endemic diseases, as well as training medical and paramedical personnel. It is one of the main referral centres for training on HIV, STIs, tuberculosis, diarrhoeal diseases, and HIV counselling and testing. Curricula are updated annually with technical assistance from national and international partners. GHESKIO also offers services outside its main Centre through a network of health institutions created in partnership with the Ministry of Health, with the support of UNFPA, the Global Fund to Fight AIDS, Tuberculosis and Malaria, the United States' President's Emergency Plan for AIDS Relief (PEPFAR) and the French Government.

GHESKIO supports outreach activities to follow up PLHIV after they have received their HIV test results. Those who are HIV-negative but at risk – for example, people with syphilis or other STIs, and people with an HIV-positive partner – are also monitored and encouraged to return to the clinic regularly for follow-up counselling, and treatment if necessary. Outreach workers are trained at GHESKIO and then monitored by an outreach team which includes a field worker, nurse and social worker, under the overall supervision of a Community Advisory Board.

## **HIV testing: A gateway to access** other services

Since GHESKIO is a dedicated centre for VCT, HIV testing is the gateway to access other services. Clients who decline HIV testing receive care for the condition that brought them to the clinic, but are then formally referred to other institutions for continued care, and provided with further information about the advantages of HIV testing. Once clients are registered with GHESKIO and have been tested for HIV, they can continue to use the other services as necessary. Around 70% of VCT clients are self-referrals; the remaining clients are referred from other health services. All HIV testing is performed strictly on the basis of informed consent, and pre- and posttest counselling sessions are extremely thorough. Pregnant women and rape survivors receive their results and post-test counselling on the same day; the timing for providing HIV test results and posttest counselling for all other clients is within a week.

Disclosure of an HIV-positive test result to the client is always done during face-to-face individual counselling. The goal is to manage the clients' stress and assist them to accept their status and to return for services, preferably with his/her partner. Around 5 to 10% fail to return within two weeks for their test result. If the clients agree to disclose their HIV status to their sexual partner(s) or members of their family, GHESKIO staff offer to assist with face-to-face disclosure support.

All GHESKIO's clinical services are underpinned by information and education aimed at increasing awareness and knowledge of HIV and other infections, and promoting healthy behaviour. Young people who attend the clinic are encouraged to join the youth programme, where they are offered intensive sexual and reproductive health education and free condoms.

## **Condoms: Promoting correct** and consistent use

Condom use is promoted at all GHESKIO clinics, and female and male condoms are readily accessible to clients (both adults and sexually active adolescents). Post-test counselling includes information and motivation to use condoms correctly and consistently. Promoting condoms has increased the contraceptive prevalence rate from 6% up to 24% among the GHESKIO catchment population. Condoms, with or without other contraceptive methods, are the most common family planning method used. The Centre offers services and condoms free of charge.

# **Sexually** transmitted infections: **Assessment** and screening

Apart from providing free condoms, the first services for sexual and reproductive health to be integrated with VCT in 1991 were diagnosis and treatment of STIs. Now, anyone coming to the **GHESKIO** Centre is routinely offered screening for syphilis. In addition, anyone with symptoms of an STI, or anyone who is assessed during HIV pre-test counselling to be at high risk of an STI, is offered an appointment the same day with a doctor and counselled and/or treated accordingly. This service has been extended to clients who have been sexually abused or raped.

## **Integrating family planning services:** A compelling need

In the early 1990s, the need to offer family planning services on-site also became compelling, for two main

- Women living with HIV referred by GHESKIO to family planning clinics were being turned away because of stigma and discrimination as well as lack of competence to meet their special needs.
- Using pre-test counselling records as a baseline showed that contraceptive prevalence among people who registered with GHESKIO increased within a period of six months. Condoms, alone or in combination with other contraceptive methods, were offered to women living with HIV,xxii but evidence suggested that a significant number of these women became pregnant, and that most pregnancies were unintended.

It became clear that family planning clinics were refusing to take referrals from GHESKIO, fearing that the stigma of AIDS would affect their business. The denial of family planning services to women living with HIV was a clear abuse of women's reproductive rights, which include the right to freedom from discrimination. At the same time, a vital opportunity to prevent HIV infection in children by preventing unintended pregnancies among women living with HIV was being lost. GHESKIO added family planning to its voluntary counselling and testing services through a pilot programme supported by UNFPA. Four doctors and two nurses received specialist training from Pro Famil, the IPPF Member Association in Haiti. Clinics were subsequently rearranged to provide counselling rooms with the necessary privacy, and protocols were developed for the new programme.

From the beginning, the family planning service had a marked effect on encouraging people, especially women, to come for voluntary counselling and testing. Its obvious success led to the training of other staff in family planning as well.

## Family planning for people living with HIV: Issues about reproductive rights

All GHESKIO health workers are now trained to meet the special family planning needs of PLHIV, as well as the routine needs of other clients. Family planning counselling for PLHIV covers a full range of services and includes, for example:

- providing information and counselling about reproductive rights, including fertility intentions and options – this includes infertility services, advice on planning a pregnancy for discordant and sero-concordant HIV-positive couples, and contraception
- dual protection the use of condoms alone or in conjunction with other modern contraceptives for optimal protection against both unintended pregnancy and STIs
- PMTCT for those who wish to become pregnant and for women who are already pregnant when they consult the clinic
- prevention of sexual transmission of HIV to partners.

The duty of the family planning counsellors is to inform and educate clients about the services that are available, to help the woman or couple explore their own feelings about childbearing and its implications, and to respect and support them in the choices they make. There is no coercion to avoid pregnancy, whatever a woman's HIV status. Group discussions are organized, and information, education and communication

materials are distributed to all women, encouraging them to return with their partner(s). Sixty per cent of the clients for this service are female and 40% are male. Only 15 to 20% of clients return to the clinic with their partner(s). Generally, more men agree to come back with their female partner than the reverse.

GHESKIO is reaching out to address the needs of people who may not have access to sexual and reproductive health services, partly due to stigma: this includes PLHIV, unmarried

adolescents, sex workers and men who have sex with men. This brings family planning providers face-to-face with issues of stigma and discrimination issues that have many implications in HIV/AIDS care and which remain a central focus in the training of all GHESKIO staff. The Centre uses a variety of techniques such as drama and role play to encourage staff to examine their own attitudes and rethink them if necessary to ensure clients' rights are respected.

## Face to face with prejudice: One nurse's story

"Family planning counselling for people living with HIV presents many challenges," says a nurse who works in the clinic. She remembers the specific instance of a young woman who was already on antiretroviral therapy but who had kept her HIV infection secret, even from her husband. The couple wanted to start a family, but the intense fear of disclosure of HIV status and lack of openness between wife and husband made it extremely hard to explore their options. The young woman was referred to the GHESKIO resident psychologist for help.

The nurse also tells how she had to confront her own anxiety over HIV/AIDS when starting work in the GHESKIO family planning clinic. In the early days, she was afraid to pick up her own baby when she got home at night in case she had been 'contaminated' by her work. "It was very hard," she says, shaking her head at the memory. She remembers, too, the difficulty she had at first in working with men who have sex with men. During training, all GHESKIO colleagues are required to explore their feelings about HIV/AIDS and to confront their prejudices. The nurse smiles when she recalls being given the part of an HIVpositive woman in a role play where she had to put herself in the HIV-positive woman's shoes. Having a brother who died of an HIV-related illness also encouraged her to overcome her fears and intolerances.

## Maternal health services: Issues about childbearing

GHESKIO soon realized there was a need to provide maternal health services too, for several reasons:

- An annual pregnancy rate of 11% was observed at the HIV clinic regardless of the HIV status of the women. A significant proportion of women living with HIV are pregnant when they first come for voluntary counselling and testing.xxiii
- A proportion of women living with HIV who come for reproductive health counselling wish to become pregnant.
- Unintended pregnancy remains a significant issue. The majority of women who test positive for HIV do not access family planning services or use contraception. Some of the women who become pregnant do so primarily at their male partner's request, or because they are afraid to lose their partner. There is a need to empower women to make their own choices.
- Pregnant HIV-positive women need services to minimize the risk of HIV transmission to their babies and protect their own health.

The PMTCT Unit is part of the GHESKIO Centre, and care is offered by GHESKIO staff (gynaecologists, midwives, social workers and field workers). Babies are also seen at the Centre by a paediatrician.

Meeting the needs of HIV-positive pregnant women, however, presented huge challenges to GHESKIO. Until the late 1990s, the only regimen that was being used to prevent mother-tochild transmission - a course of monotherapy with AZT, including intravenous administration of the drug during childbirth – was not feasible in Haiti where around 80% of women deliver at home, often without any professional care during pregnancy, labour and delivery. GHESKIO did not have the space or capacity to get involved in the delivery of babies.

However, service providers in Thailand had been piloting a much simpler regimen with AZT. Though its effects were still not well understood, the Haitian Ministry of Health approved an 18-month trial with funding from UNFPA. This was the first setting in which women would be responsible

for their antiretroviral prophylaxis and treatment without supervision. In cases where pregnant women living with HIV were at an advanced stage of disease, they received highly active antiretroviral therapy instead of the monotherapy used for prophylaxis. The trial turned out to be a success – women were compliant and were returning to GHESKIO with their child after giving birth to follow up on treatment. The quality of the counselling was vital to this success.

## The key to expanding services: Innovative nurse-midwife role

An idea for spreading responsibilities and easing the workload of doctors is being tested in some PMTCT programmes. Nurse-midwives with specialist training in HIV/AIDS are working under the supervision of GHESKIO gynaecologists to see how many of their duties they are able to handle effectively and safely on their own. If the idea proves a success, specially trained nurse-midwives, backed up by good referral systems, will be the key to expanding maternal health services – considered a priority by the Ministry of Health to address high maternal mortality despite the chronic shortage of doctors. Such services will be equipped to provide voluntary HIV counselling and testing, and to meet the sexual and reproductive health needs of all women in Haiti, regardless of their HIV status.

## **Protecting women and children from HIV: Global strategies**

Comprehensive global strategies for preventing HIV infection in women and infants encompass four key elements:

- 1. Primary prevention of HIV infection in girls and women
- 2. Prevention of unintended pregnancies in women living with HIV
- 3. Prevention of transmission from women living with HIV to their infants
- 4. Provision of care, treatment and support for women living with HIV and their families. xxiv

Financial crises among donors have interrupted funding from time to time, and GHESKIO has had to find support from elsewhere to keep the maternal health services going. Nevertheless, the Centre's PMTCT programme has succeeded in gradually reducing the rate of vertical HIV transmission from around 30% to 9% among GHESKIO's clients.

The interventions which contribute the most to this decrease are the education sessions (including breastfeeding counselling), the antiretroviral therapy and the formula for infant feeding. Pregnant women who present too late for the education sessions do not have the opportunity to comply and are at higher risk of transmitting the infection.

Furthermore, since the start of the maternal health programme, the average number of pregnant women seeking voluntary HIV counselling and testing has risen from around seven per month in 1999 to 120 per month in 2003 - a clear indication that, in a country with frighteningly high maternal and infant death rates, women are keen to have professional care in pregnancy if it is user-friendly. The fact that women living with HIV who attend GHESKIO's maternal health services have access to longterm antiretroviral therapy (for themselves, their partners and their children if needed) is an added incentive.

## Women and child centred care: Addressing stigma and fear effectively

Mireille,xxx a frail young woman resting a tiny baby on her lap, sits among others who have gathered for group counselling in the PMTCT clinic and tells her story.

She tested HIV-positive in 2000 and, like most of the others in the group, fear of stigma and abandonment by her partner has prevented her from disclosing her HIV status to anyone beyond the group. Mireille is raising six children. She is on antiretroviral therapy, and managed to take her pills to prevent HIV infection in her youngest child as secretively as she manages her regular treatment (not all women share their HIV status with their partner(s) or with other family members). It is hard, but she is determined. And she tells inquisitive family and neighbours that she is forced to bottle-feed because of a breast problem.

A young woman sitting nearby tells how she managed to hide the fact that she was bottle-feeding by clasping her baby to her bosom beneath a blanket. She had told the woman who delivered her baby that the pills she took regularly were for anaemia. Another tells the group she could not resist the social pressure to breastfeed and has lost a baby to AIDS. It is in dealing with issues like these - directly related to HIV and to stigma - that specialist training is essential for staff working in GHESKIO's maternal health unit.

GHESKIO addresses these issues through its policy of training staff about stigma and discrimination, and how to deal with them, as well as employing PLHIV as counsellors. In addition, procedures are in place to deal with client complaints about stigma and discrimination should any arise. Remedial strategies include staff meetings and further staff training to ensure that counselling to clients is absolutely stigma-free. Counsellors provide knowledge about issues related to HIV/AIDS, reproductive health and sexuality during HIV pre- and post-test counselling which aims to decrease fear and stigmatization and which encourages the client to come back with his or her partner. GHESKIO offers services free of charge to most of the private and public institutions, and gives regular refresher training. There is no legal referral structure in Haiti to deal with cases of stigma and discrimination.

## Survivors of sexual violence: Skilled specialist services

As increasing numbers of women treated for STIs began to report incidents of rape - particularly in times of political turmoil - GHESKIO won support from UNFPA in 2000 to set up a specialist programme for survivors of sexual violence. The wounds inflicted during sexual assault facilitate the transmission of HIV, and 46% of the rapes reported to GHESKIO up to the end of 2004 involved multiple rapists. Moreover, in the poverty-stricken community served by the Centre, HIV prevalence is much higher than the national average. In 1999, for example, it was 30%, six times the national HIV prevalence rate. GHESKIO also collaborates with the Ministry of Women's Affairs, civil society and various funders on its programme for survivors of sexual violence.

The clinic offers antiretroviral drugs for post-exposure prophylaxis (PEP), together with emergency contraception, for rape survivors who arrive within 72 hours of the incident, as well as treatment or prophylaxis for STIs (around 46% of clients for this service present within 72 hours). Until

2003, GHESKIO was the only place where PEP was available, but this service is now offered more widely in VCT centres. A national protocol for providing care to the survivors of rape has been developed. In addition, GHESKIO is part of a roundtable on violence against women which plays a technical role, under the coordination of the Ministry of Women's Affairs.

Women who arrive at GHESKIO too late to prevent possible HIV transmission and/or pregnancy are treated for STIs and psychological trauma. Tremendous shame and stigma are attached to rape in Haiti, so a psychologist skilled at handling sensitive cases and post-traumatic stress works alongside the doctors, nurses and social workers on the team. Each client is assigned a field worker to accompany her through the system to protect her from further trauma and ensure she is fast-tracked through voluntary HIV counselling and testing, other laboratory tests and dispensary, and that she understands all care and treatment that is offered. All clients are encouraged to attend a weekly

support group. The number of women who sought treatment and care at GHESKIO following sexual violence increased from around 10 in 2000, when the special programme opened, to well over 250 in 2004. GHESKIO is an important centre for sharing its medical experience and expertise when treating survivors of rape.

In general, violence against women, and abandonment or fear of abandonment, can have an impact on HIV status disclosure and access to services. Unfortunately, there is no reliable information or studies available about the relationship between domestic violence, HIV status and access to HIV counselling and testing in Haiti.

## Sexual and reproductive health services for young people: **Building trust**

By 2000, GHESKIO was seeing increasing numbers of young people aged 10 to 19 years presenting for VCT and other health care. As a result, the centre set up specialist adolescent health services to cater for their needs. The programme developed educational materials, gave specialist training to social workers in counselling young people and set up a support group for clients.

Young people are referred to the programme when they come for VCT, and are asked to fill in a questionnaire. This was originally designed to test their knowledge

and awareness, but it was soon recognized that there was also a need to gather information about individual behaviour, since this was pertinent to their risk of STIs (including HIV) and to identify their special counselling needs. Responses to the expanded questionnaires have revealed, for example, that:

- the great majority of young people attending the clinic have multiple sexual partners
- the young women and girls in GHESKIO's programme often have sexual partners much older than themselves and little power in these relationships

• around 44% of young women and girls always have sex without condoms, compared to 19% of boys.

In counselling, a non-judgemental attitude is essential to gain the trust of young people, since the great majority who attend the clinic are involved in recreational drug use (over 70%) and other stigmatized or illegal behaviour. Since the special service was introduced, the numbers of young people seeking VCT have escalated.

## Measures of success: Effect on demand for services

It is very hard to measure the impact that integration of services has had on reproductive health and on the AIDS epidemic, especially given the limits in coverage, but the following data give an indication of the effect on demand for services.xxvi

- There was a 62-fold increase in the number of clients seeking voluntary HIV counselling and testing between 1985 and 1999 - the period during which sexual and reproductive health services were progressively introduced.
- There was a 30-fold increase in the number of pregnant women

- seeking voluntary counselling and testing at GHESKIO between 1999 and 2004 when the PMTCT programme was introduced.
- Of 6,700 new adults seeking voluntary counselling and testing in 1999, 18% received treatment for
- One in five of those who tested HIV-positive that year referred their sex partners for VCT.
- In 1999 alone, 19% (1,274) of the 6,700 VCT clients became new contraceptive users, and returned to the Centre for at least three family planning visits. Of these,
- 70% (494 men and 408 women) chose to use condoms alone. Thirty per cent (372 women) became users of other modern contraceptives (for example, pills, injectables and spermicides), and half of these also used condoms regularly.
- In 1999, 110 HIV-discordant couples were identified and provided with specialized counselling. Of the 85 couples who returned for follow-up testing around 18 months later, no partner had become HIV-positive (25 couples were lost to follow-up).

# Integrated services under one roof: Conclusions and lessons learned

Building on the solid foundations of its research programme, the Centre has succeeded in providing a wide range of quality primary health care services free of charge. It has also demonstrated what is possible. However, the Centre in Port au Prince caters for only a tiny proportion of those in need, and GHESKIO - in collaboration with the Ministry of Health and **UNFPA**, and with support from USAID, the European Union and the Global Fund to fight AIDS, Tuberculosis and Malaria, among other partners – has embarked on a training and expansion programme that aims to establish services based on its model in 27 sites nationwide.

As a pioneer of integrated sexual and reproductive health and HIV/AIDS services, GHESKIO has valuable lessons to share from its experience.

Stigma and discrimination toward PLHIV are serious handicaps to successful integration of sexual and reproductive health and HIV/AIDS services and require constant, purposeful action to overcome them.

In this programme, stigma was a motivating force for integration of services - the fact that PLHIV were experiencing discrimination from mainstream sexual and reproductive health programmes led to the decision to provide sexual and reproductive health services within an HIV programme. This points to the need for sexual and reproductive health programmes to recognize their responsibility toward all people, regardless of their HIV status, and to take active steps to identify and remove discriminatory barriers and create a stigma-free environment.

Experience shows, however, that stigma and discrimination continue to be hurdles that must be overcome. Non-judgemental attitudes in service providers are particularly important, and staff should be required during training to confront personal fears and prejudices (especially with regard to HIV/AIDS) and helped to overcome them. Messages challenging stigma and discrimination should be reinforced during staff support and supervision.

Providing the opportunity to access other health services at the same time and under the same roof greatly enhances the uptake of HIV counselling and testing.

The uptake of HIV counselling and testing is adversely affected by the stigma and fear surrounding infection. Moreover, people are reluctant to be tested if they see no obvious benefit to knowing their status. When voluntary and confidential HIV testing is offered under one roof with other health services, the benefits are clear and attendance increases. Convenience and user friendliness are also vital considerations in encouraging people to attend voluntary counselling and testing and sexual and reproductive health clinics; having related services, including laboratories and dispensaries under one roof, is a huge advantage.

**Counselling sessions for clients** seeking HIV tests are an ideal opportunity to assess their other sexual and reproductive health needs, to counsel for safer sex and to offer them referral for specialist services as necessary.

GHESKIO has developed a questionnaire for VCT clients to be filled in by the counsellor during pre-test counselling that takes a detailed history of the client's sexual relationships and practices. It includes questions about contraceptive practice, fertility intentions and pregnancy and helps the counsellor with their referrals them to their medical colleagues on-site for other sexual and reproductive health services, if necessary.

GHESKIO had an advantage over many conventional VCT services in that it was set up by doctors, so the non-medical counsellors always had medical back-up for clinical issues, and vice versa. This possibility of referral for specialist medical services was part of the system from the start. Linking services for HIV counselling and testing and sexual and reproductive health is an effective way of reaching some important target populations – for example men, young people and PLHIV - with sexual and reproductive health care.

Sexual and reproductive health tends to be seen as 'women's business', which can inhibit men and young people from attending clinics. But even women, if they are HIV-positive, may be deterred by their status and fear of discrimination from seeking sexual and reproductive health services directly. If there is advocacy for, and automatic access to, family planning and other sexual and reproductive health services on the same site as VCT and other HIV prevention, treatment and care services, many of the practical and psychological barriers to access are removed.

Discordant couples who may also be reluctant to attend a sexual and reproductive health clinic are more likely to get the counselling they need to prevent HIV transmission if HIV and SRH services are integrated.

Having multi-skilled staff in the fields of HIV and sexual and reproductive health enhances understanding among colleagues and gives maximum flexibility in organizing clinics.

There is much to be gained by requiring specialist staff to broaden their training and share their skills and expertise with their colleagues. This helps to build team spirit, encourages a holistic approach to the provision of care that is a great advantage in broad-based services, and allows staff to take over from or fill in for each other when necessary.

# Some recommendations for health planners and service providers: Potential for scaling up

- GHESKIO to consider relaxing the insistence on VCT as prerequisite to access to the wider range of sexual and reproductive health and HIV/AIDS services. There is a sufficient range of sexual and reproductive health and HIV/AIDS services at GHESKIO but it could be argued that it might be more beneficial for clients to have multiple entry points for services, and not be limited to accepting HIV testing as a condition to continued access to other services. VCT as a gateway to other services can be construed as a pressure for clients to undergo testing in order to gain access to the full range of services.
- Consider undertaking a quantitative measure on the cost-effectiveness of integration, as this would help evidence-based advocacy at donor level by government and/or civil society.
- Scale up client coverage while maintaining quality. GHESKIO coverage is limited, and the challenge is to scale up services. At present, GHESKIO is transferring its experience and expertise to other institutions, working in collaboration with the Government of Haiti and non-governmental organizations. GHESKIO's capacity to transfer knowledge should be reinforced.
- Encourage operations research on the relationship between domestic violence and HIV status and access to HIV counselling and testing in Haiti.

- Undertake a study to determine the most effective ways to better mitigate stigma and discrimination. Health care personnel should be given adequate training and supervision, including through values clarification, to eliminate stigma and discrimination against clients in all health care settings.
- Evaluate male and female condom acceptability (by men and women), use and impact.
- Find better ways to engage men in sexual and reproductive health and HIV/AIDS programmes, since these services are still predominantly used by women.
- Support health and HIV education and information of young people, so that they are more fully aware of their needs and rights.
- Ensure reproductive health commodity security and increase efforts to alleviate shortages. (When political instability threatened the central warehouse, it had to be moved, which disrupted logistics management).
- Continue to assess issues of confidentiality, informed consent and quality of services, especially counselling services, which may be at risk if time pressure due to scaling-up becomes untenable.
- Engage in capacity building on a continuous basis, to offset the shortage of skilled personnel which is exacerbated by poverty, insecurity and political turmoil.
- Advocate for the creation of a legal referral system for people affected by stigma and discrimination.

#### **Partners and supporters:** Collaborative alliances

Crucial to GHESKIO's effectiveness and sustainability are the collaborative alliances it has had with research institutes abroad since the beginning, and the diverse network of partnerships it has cultivated locally and internationally over the years. However, lack of collaboration among its many partners and supporters who all have their own agendas, and the often inflexible conditions that come with funds, are regular frustrations.

Local partners: Ministry of Health, **Haitian Foundation Against Endemic** Diseases, Partners in Health, Haitian Medical Association and GRET.xxvii

Foreign academic institutions: Cornell, Vanderbilt, Johns Hopkins and Vermont Universities, and Harvard School of Public Health in the USA; Institut Alfred Fournier, Institut Pasteur and Université d'Amiens in France.

International agencies: USAID, UNFPA, UNICEF, PAHO, Global Fund to Fight AIDS, TB and Malaria, **European Union, US National** Institutes of Health, World AIDS **Foundation and Fogarty** International. Assistance was also provided by the Governments of Canada, France and Japan.

## Contact details for more information:

Groupe Haïtien d'Étude du Sarcome de Kaposi et des **Infections Opportunistes** (GHESKIO)

#### Directors:

Dr Marie-Marcelle Deschamps and Dr Jean William Pape

33 Blvd Harry Truman **BP 164** Port-au-Prince Haiti

Phone: + 509-222-0031

+ 509-222-2241

Fax: + 509-223-9044

#### **Endnotes**

- The New York Call to Commitment: Linking HIVIAIDS and Sexual and Reproductive Health, UNFPA & UNAIDS, 2004.
- " The Glion Call to Action on Family Planning and HIVIAIDS in Women and Children, UNFPA & WHO, 2004.
- iii Call to Action: Towards an HIV-free and AIDS-free Generation, Prevention of Mother to Child Transmission (PMTCT) High Level Global Partners Forum, Abuja, Nigeria, 2005.
- iv Achieving Universal Access to Comprehensive Prevention of Mother-to-Child Transmission Services, High Level PMTCT Global Partners Forum, Johannesburg, South Africa, 2007.
- V Intensifying HIV Prevention: UNAIDS Policy Position Paper, UNAIDS, 2005.
- vi Political Declaration on HIV/AIDS, United Nations General Assembly Special Session on HIV/AIDS. New York, United Nations, 2006.
- vii For example see the background paper on the concept of Universal Access prepared for the Technical Meeting for the Development of a Framework for Universal Access to HIV/AIDS Prevention, Treatment and Care in the Health Sector, WHO, Geneva, 2005.
- viii Sexual and Reproductive Health and HIVIAIDS: A Framework for Priority Linkages, WHO, UNFPA, UNAIDS & IPPF, 2005.
- ix Programme of Action adopted at the International Conference on Population and Development, Cairo, 1994.
- x Resolution adopted by the General Assembly, United Nations Millennium Declaration, New York, 2000.
- xi See also Family Health International. Integrating services. Network, 2004,23(3) p8.
- xii WHO, UNFPA, UNAIDS & IPPF, Op. cit.
- xiii Linking Sexual and Reproductive Health and HIVIAIDS. An annotated inventory. WHO, UNFPA, UNAIDS & IPPF, 2005.
- xiv Sexual and Reproductive Health of Women Living with HIVIAIDS, Guidelines on care, treatment and support for women living with HIV/AIDS and their children in resourceconstrained settings, UNFPA & WHO, 2006.
- \* Integrating HIV Voluntary Counselling and Testing Services into Reproductive Health Settings, Stepwise guidelines for programme planners, managers and service providers, UNFPA & IPPF, 2004.

- xvi Meeting the Sexual and Reproductive Health Needs of People Living with HIV. Guttmacher Institute, UNAIDS, UNFPA, WHO, Engender Health, IPPF, ICW & GNP+, In Brief, 2006 Series, No. 6.
- xvii Gateways to Integration, UNFPA, IPPF, UNAIDS, WHO, forthcoming.
- xviii Reproductive Choices and Family Planning for People Living with HIV - Counselling Tool, WHO, 2006.
- xix Rapid Assessment Tool for Sexual and Reproductive Health and HIV Linkages: A Generic Guide, ICW, GNP+, IPPF, UNAIDS, UNFPA, WHO, Young Positives, 2008.
- xx Haiti: Country Situation Analysis. UNAIDS, 2007. http://www.unaids.org/en/ CountryResponses/Countries/haiti.asp
- xxi Jean S.S., Pape J.W.; Verdier R-I.; Reed G.W.; Hutto C.; Johnson W.D. & Wright P.F., The natural history of human immunodeficiency virus 1 infection in Haitian infants. Pediatric Infectious Disease Journal, 1999, Vol 18 Issue 1, pp 58-63.
- xxii Deschamps MM. Impact of MTCT-Plus on PMTCT, and Survival of HIV Positive Pregnant Women and Infants at GHESKIO Center, Poster presentation, XIII International AIDS Conference, Durban, South Africa, 9-14 July 2000.
- xxiii Observation at GHESKIO: of the 496 HIV positive pregnant women who took part in the prevention of mother-to-child transmission pilot programme from 1999 to 2004, N=56 (11%) knew that they were HIV positive, desired pregnancy and became pregnant, and were followed up at the HIV clinic.
- xxiv Glion Consultation on Strengthening the Linkages between Reproductive Health and HIV/AIDS: Family planning and HIV/AIDS in Women and Children, WHO & UNFPA, 2006.
- xxv Name has been changed to protect confidentiality.
- xxvi Peck R., Fitzgerald D.W., Liautaud B. et al. The feasibility, demand and effect of integrating primary care services with HIV voluntary counselling and testing. Evaluation of a 15-year experience in Haiti, 1985-2000. Journal of Acquired Immune Deficiency Syndrome, 2003, 33(4) pp 470-475.
- xxvii GRET is an organization that works to contribute to sustainable, fair development and alleviate poverty and structural inequalities. See www.gret.org



