

SYPHILIS CONTROL IN PREGNANT WOMEN
Clinic-Based Screening, Treatment and Counseling Services
in Nairobi, Kenya

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Francoise Jenniskens, Principle Investigator

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EXECUTIVE SUMMARY

A decentralized syphilis control program* for pregnant women was implemented in 10 Nairobi City Council prenatal clinics July 1992- August 1993. Pregnant women were screened for syphilis, treated before leaving the clinic and counselled on ways to prevent re-infection, thereby protecting their unborn babies from getting congenital syphilis.

Between 7 and 10 percent of pregnant women in Nairobi, Kenya test positive for syphilis, untreated, one-fourth of their pregnancies would end in miscarriages or stillbirths while another one-third would lead to congenital infection.

The process of screening and follow-up treatment in Nairobi for pregnant women attending prenatal care clinics (PNC) are separated by time and location. Pregnant women have had to wait up to two weeks for test results (if tested) and were usually asked to go (if they came back for test results) to a central location for treatment. Results (University of Nairobi, 1989) were predictable:

- o **60 percent** of prenatal care attenders were actually screened for syphilis,
- o **91 percent** of those who tested seropositive were treated for syphilis, and
- o **less than 30 percent** of partners of seropositive women were treated.

To address these programmatic constraints, a package of interventions was introduced in 10 prenatal clinics in the Nairobi City Commission (NCC) public health clinic system. Formative qualitative research was performed to determine knowledge, attitudes, behaviors, and beliefs of pregnant women, their male partners and their health care providers, this information was used to develop training and counseling print material and activities. Training, drug supplies and supervision were given to staff to provide all attending pregnant women on-the-spot screening for syphilis, immediate treatment, risk reduction counseling, and counseling in partner notification.

As a result of the decentralized approach, a total of 10,764 pregnant women were screened for syphilis with Rapid Plasma Reagin (RPR) test:

- o **100 percent** of prenatal care attenders were actually screened for syphilis,
- o of those screened, 735 (6.8 percent) were found to be seroreactive,
- o **85 percent** of those who tested seropositive were treated for syphilis, and
- o **over 50 percent** of partners of seropositive women were treated.

The program prevented an estimated 384 cases of congenital syphilis at a cost of approximately US\$50 per prevented case

This project shows that decentralized prevention of congenital syphilis in prenatal clinics is feasible and cost-effective, particularly in high prevalence settings, and should receive priority attention in reproductive health programs

*Collaborators on this effort included the University of Nairobi, Nairobi City Council Clinics, Institute of Tropical Medicine, European Community, University of Manitoba, WHO Collaborative Center, and funding from USAID's Office of AIDS/STD with technical assistance from MotherCare

I PROJECT SYNOPSIS

Project period	January 1992 - August 1993
Implemented by	University of Nairobi, Department of Medical Microbiology, WHO Collaborative Center for STD Research and Training (Institute of Tropical Medicine, Antwerp and University of Manitoba) in collaboration with Nairobi City Council, Department of Public Health
In country budget	U S \$143,954 00
Key project staff	Francoise Jenniskens (Principle Investigator) Stephen Moses (Principle administrator) Emily Obwaka (Field Coordinator) Sarah Kirisuah (Community Coordinator) Michael Kitabu (Laboratory Technician)
Consultants (MotherCare/ The Manoff Group-supported)	Donna Pido (Anthropologist) Mona Moore (IEC specialist) Pamela Greene (Training/IEC specialist)
Collaborating Organizations	University of Nairobi, Department of Medical Microbiology Nairobi City Council Institute of Tropical Medicine, Antwerp, Belgium University of Manitoba, Canada USAID / MotherCare / The Manoff Group European Community Aids Task Force and DG XII Central Arts Promotion Kulgraphics Colour Print Limited

II BACKGROUND OF THE PROJECT

1 Syphilis Control Activities in Nairobi

Nairobi, Kenya and its periurban surroundings have a population of approximately 2.7 million, the majority of whom live in slums. The population served by the MotherCare Congenital Syphilis Project for the most part live in single rented rooms with their entire nuclear families, in neighborhoods characterized by row after row of mud, wood or iron sheet dwellings.

The Nairobi City Council (NCC) Public Health Department is the major health care provider in Nairobi, operating 54 of the 154 registered health units within the city. All 54 health units provide prenatal, child health and family planning services and 30 of them also provide curative care. The centers are distributed evenly throughout the periurban and urban areas of Nairobi providing services to a catchment population of approximately 80,000 per clinic. Clients at NCC prenatal clinics tend to be women of low socioeconomic status who have few or no alternative health services options.

Prenatal care at the clinics is supposed to be free of charge, but the introduction of cost-sharing (women are often asked to buy syringes, drugs and other supplies due to shortages) in addition to inflation and the general deterioration of the health-care system have contributed to women's seeking care elsewhere or not seeking care at all.

Among the women attending these clinics, the syphilis infection rate varies from around two percent to eight percent. The vast majority of women attending NCC clinics are referred to Pumwani Maternity Hospital (PMH) for delivery. Seroreactivity rate for syphilis (Temmerman et al., 1986) among women delivering at Pumwani was found to be 4 percent. The average annual number of deliveries in PMH varies between 25,000 and 30,000 deliveries per year (over 70 deliveries a day).

It has been estimated that at least 60 percent of pregnant women infected with syphilis experience adverse pregnancy outcomes, principally fetal wastage (4-10 percent), low birth weight or prematurity (15-50 percent) and congenital infection (40-70 percent). With a transmission rate from mother to fetus during pregnancy of approximately 60 - 70 percent it would be expected that a third of infected mothers would have a stillborn baby or experience miscarriage, fetal death or spontaneous abortion, while one third of infected mothers would give birth to babies with congenital syphilis.

Preventing congenital syphilis by screening pregnant women for syphilis has been promoted by the Nairobi City Council for many years. A centralized system has been in place whereby women were bled for an RPR (Rapid Plasma Reagin) or Kahn test at their first clinic visit, the blood was sent to Pumwani Maternity Hospital for testing and

the results were sent back to the clinic. This procedure would take anywhere from one to two weeks. If a woman was found to be RPR-positive, and if she returned for her test results, she was referred to the Special Treatment Clinic for STDs and Skin Diseases for treatment. Treatment at this site depended not only on compliance with referral but on the availability of staff and drugs.

In 1987 Dr. Marleen Temmerman, the initial project principal investigator who had a special interest in prevention of congenital syphilis, evaluated the program and identified some major obstacles to effectiveness. The most significant initial problems were of a logistical nature, primarily the lack of transportation for the specimen and results to and from the clinics and the lack of supplies. As a result of the evaluation, the European Community AIDS Task Force then moved to improve the infrastructure by providing test kits, needles, syringes, supplies, drugs and a car.

In 1989 a second evaluation was done of the improved centralized system to assess its effectiveness. Temmerman et al. found the following:

- 60 percent of pregnant women at specified prenatal clinics were screened,
- of these, 87 percent had their results registered,
- 91 percent of RPR-positive women received adequate treatment,

Gaps in service provision identified included:

- a frequent shortages of supplies such as disposable syringes and needles needed for blood drawing and treatment. Patients who were asked to buy their own often dropped out of the process.
- b lack of reliable transportation to ferry blood specimens from the clinics to the central lab at Pumwani Maternity Hospital.
- c the interval between blood drawing and analysis. This delay meant that a woman would not receive results until often one month after the test was administered, at her next prenatal visit (if she came back for one). This meant a greater likelihood of transmission to the fetus during that month as well as of a woman's dropping out of the process.
- d shortages of essential STD medications. These shortages contributed to the inadequate treatment of syphilis-positive patients.
- e ineffective measures for notification, tracking and treatment of partners or referral of patients or partners for treatment. Once diagnosed, patients and their partners were required to present at the Special Treatment Center in central Nairobi for treatment. This added an additional transportation cost and additional time. A stigma associated

with this facility discouraged many from attendance and fees for the drugs were prohibitive for many patients

In their 1991 report for the World Bank, Health Sector Priorities Review HIV Infection and Sexually Transmitted Diseases, Over and Piot reported that among all STD/HIV-related interventions syphilis control proved to be the most cost-effective. In this demonstration project, the cost of treating one case of syphilis has been calculated to be U.S. \$25. The cost per averted adverse pregnancy outcome has been calculated to be U.S. \$50. The calculations are attached in Appendix 7.

The Government of Kenya Ministry of Health National STD Control Program promotes a policy of syphilis control in pregnant women, but so far has not yet been able to achieve much impact due to the many logistical constraints on coverage. However, in light of all the time, effort and money that had been spent on this program and the minimal impact made on the health status of pregnant women and their unborn babies, representatives of the University of Nairobi (UON) and the Nairobi City Council met to identify the gaps that existed between policy and practice and to discuss alternative, more effective ways of screening and treating pregnant women. The ineffectiveness of the centralized screening program and the fact that negative pregnancy outcomes due to syphilis can be averted (Hira et al., Zambia) gave impetus to the development of a new strategy for improving the screening and treatment of pregnant women with syphilis, to which MotherCare lent its support.

2 Development of the Program

A decentralized system was proposed, whereby nurses at the prenatal clinic would be trained to perform an RPR card test at the clinic, women would be given their results the same morning and receive treatment--a single dose of 2.4 million units of IM benzathine penicillin--before leaving the clinic that day. Clients would also be counseled about recommended behaviors to prevent reinfection and on referring their partners for treatment.

The RPR card test is a fast serological, non-confirmatory (screening) test that detects syphilis antibodies. It is a simple test that requires a short time to perform and does not require elaborate laboratory equipment (only the equivalent of a centrifuge and a rotator). It is fairly sensitive (95 percent) and specific (approximately 98 percent).

In order to implement this intervention, the following were required in each participating clinic:

- able and willing staff members, four on average, who would be trained to carry out the RPR card test,

- space within each clinic for a centrifuge and rotator,
- the collection of baseline data and the performance of a clinic assessment prior to training

In those clinics that had not been originally built as health centers space was a problem. Where no room could be allocated, a curtain screen was erected to define the screening area and a lockable cupboard provided to secure equipment.

Ten clinics out of the 54 were selected for participation in the project on the basis of location in a periurban area and the size of the indigent population served. The project aimed to reach a total population served of 600,000. The nurses in charge of each clinic were oriented on the objectives and requirements of the project.

3 Project Objectives

The objectives of the syphilis control project were as follows:

a Intervention objectives

- To develop a clinic-based model for effective screening, diagnosis and treatment of maternal/partner syphilis
- To improve the screening, treatment and counseling skills of clinic practitioners
- To increase the proportion of pregnant women screened for syphilis at the prenatal clinics from 50 percent to 90 percent
- To increase the number of clients and partners properly counseled in the prevention of re-infection with STDs
- To increase the number of partners notified and treated through intensive counseling

b Research objectives

- To study health-seeking and health-providing behavior during pregnancy, particularly those factors which influence the early use of prenatal care
- To examine the effectiveness and impact of the intervention and the feasibility of replication

III METHODOLOGY OF THE PROJECT

1 Preparatory Phase

Between September and December 1992 a baseline study was conducted in each of the 10 clinics selected for this project. The clinics were drawn by divisional distribution. The 10 clinics are Ngara, Langata, Ngong Road, Kangemi, Kariobangi, Riruta, Dandora, Mathare North, Baba Dogo and Umoja clinics. A map of the location of these health centers can be found in Appendix 1. Staff at five of the clinics (Dandora, Ngong Road, Kariobangi, Langata and Baba Dogo) had already received training in STD/HIV counseling and treatment under the Canadian International Development Agency (CIDA) project. CIDA had implemented a syndrome-based STD control program in five NCC clinics in 1990.

The baseline study consisted of a one-week assessment, performed by a trained project nurse, whereby questionnaires were administered to the sister in charge, the prenatal clinic staff (including subordinate staff), the staff in the STD clinic, the counseling staff (when available) and pregnant women attending the clinics. An observation of the physical structure of the clinic and the health education sessions was performed. The questionnaires focused on service delivery (quality of care) to pregnant women and clients with STDs. Baseline data were analyzed and compared with ongoing clinic performance data.

At the same time a community inventory was conducted by the Community Coordinator of the project. Her assessment focused on the involvement of the NCC clinics in the catchment area of the clinic. The availability of Community Based Health Workers was assessed and they were interviewed where available. Community work done by other organizations was reviewed and some major constraints for community work were outlined per clinic catchment area. Results of the inventory are found in Appendix 2.

2 Qualitative Research Phase

a Implementation

Clinic-based and community-based formative research was carried out in order to develop counseling and educational materials for use in the clinics and the communities.

A team of 9 interviewers (5 women and 4 men) were trained in interviewing techniques for focus group discussions and semi-structured in-depth interviews and weekly review meetings were conducted. All interviewers were cross-cultural.

language instructors, who doubled as translators and interviewers. During the project period they were all trained in the basics of computer use and particularly in word processing.

During the clinic-based phase of the research (October 1992 until December 1992) in-depth interviews were held with 44 clients, 47 partners and 20 STD/prenatal health care providers. To strengthen the clinical intervention, formative research was conducted to uncover both clients' and health care providers' knowledge, attitudes and practices regarding prenatal care, syphilis during pregnancy, and the interactions between the client, her partner and her health care providers that influence compliance with treatment. The findings formed a basis for developing counseling training protocols for clinic staff, counseling cards for use with clients, and take-home leaflets about syphilis in pregnancy designed to inform RPR-positive clients of the need for treatment, what treatment entails, preventing reinfection and negotiating syphilis prevention and treatment with their partners.

During the community-based phase (June and July 1993) a total of 16 focus group discussions were held among the following groups stratified by ethnicity:

- Primiparous non-clinic users
- Primiparous clinic users
- Multiparous non-clinic users
- Multiparous clinic users

A total of 40 in-depth interviews were held with primiparous and multiparous pregnant women, both clinic users and non-users, male partners, community based health workers, traditional birth attendants (TBAs), religious leaders and non-clinic based medical practitioners providing prenatal care in the communities comprising the catchment areas of the 10 clinics. The study explored women's general perceptions of prenatal care, perceptions of prenatal care at NCC clinics, their choices among a variety of health care options outside the NCC clinics, and the barriers and motivators to early prenatal care attendance. The findings formed a basis on which a community-based promotion of prenatal care NCC services could be designed (intended as a follow-on project).

b Summary of Major Findings

Clinic-based population

Syphilis is not well known or well understood as a distinct disease by clients and their partners. Clients are unaware of the danger syphilis poses to their pregnancies, and do not associate early prenatal care with disease detection unless they feel ill. In general, clients begin prenatal care late in pregnancy (six to seven months' gestation is considered "early" prenatal care) and are motivated to do so at all either by illness

or by their need for a clinic delivery card, issued at a woman's first visit to an NCC clinic. A woman must possess a clinic delivery card in order to give birth at Pumwani Maternity Hospital or another NCC facility, even women who plan to deliver at home or elsewhere also need this card in case a complication arises and they must go to an NCC facility for delivery.

Knowledge of syphilis by clinic staff is moderately high but to some degree influenced by misinformation. The research found a widespread belief among providers that if a pregnancy is not visible, it is too early to go to a clinic. Many staff were found to refuse to provide services to women early in their pregnancies. Furthermore, clinic staff were found to be in need of more training in the foundations of quality care provision. The clinics that had not been trained previously under the CIDA STD control program needed more supervision and training than the CIDA-trained clinics.

Barriers to care include lack of information, social and economic factors that inhibit care-seeking, the stigma of having an STD, denial by clients but especially make partners that they may have a disease, fear of AIDS, fear of social and marital complications, polygamous families and reluctance to give up multiple partners, which can lead to reinfection of a treated RPR-positive client. Barriers to care for partners also included clinic hours, which tend to coincide with work hours making it difficult for partners to attend without risk of job loss. Furthermore, men are largely unwilling to use condoms, knowledge of condoms is low to begin with and willingness to use condoms is perceived as an acknowledgement that a man is active outside of his marriage, an impression which men are unwilling to give their wives.

Community-based population

Women responded that if a woman feels well and eats well, there is no reason to seek prenatal care before the sixth or seventh month. Women also criticized the poor interpersonal skills exhibited by clinic staff. The most important reason cited for going to a prenatal clinic was to obtain a clinic delivery card, although women also expressed concern about the baby's position and the need for tetanus and other inoculations. Barriers to attendance mentioned included the expense of buying drugs and supplies in short supply at the clinics, the physical challenge of getting to the clinic, the unpleasantness of the physical exam, particularly pelvic exams, and that staff are rude and do not answer questions or provide test results.

Men were aware of the range of care options and their costs, and distressed about costs and their own inability to pay. Men's concern tended to be more for the baby than for their wives but some saw the need for special care for their wives during pregnancy. TBAs expressed concern for their clients, an awareness of their own limitations and a desire for more training and ongoing interaction with the formal medical system.

Mothercare working paper #18 (*MotherCare Maternal/Congenital Syphilis Control Project Qualitative Research Report*) describes in detail the methodology, sample characteristics, findings and interpretation and recommendations following from the qualitative clinic- and community-based research

3 Start-up of the Program

Between July 1992 and January 1993 all prenatal clinic staff in the 10 selected health centers were trained in the principles and practices of syphilis control in pregnant women. Trainees were introduced to various laboratory safety measures and familiarized with the screening equipment. A demonstration of the RPR card test was followed by an opportunity for each participant to perform the test under supervision. A criteria-based assessment was held during the training period to ascertain that trainees could competently perform the RPR card test on their own.

In addition to the RPR card test procedure, an introduction was given by the counseling coordinator on basic counseling skills appropriate to the clinic setting, targeted to both prenatal clinic staff and any other interested staff members.

At the same time screening units were set up and provided with screening, treatment and counseling facilities. Equipment and supplies provided included centrifuges, rotators, test tube racks, lockable cupboards, tables, chairs, RPR kits, monovettes, serovettes, jik (bleach), tissue paper, medicated soap, and gloves.

4 Materials Development

With the completion of the draft clinic-based qualitative research report the project embarked on the materials development component of the project in the second half of January 1993. A two-day strategy formulation workshop was held with all the interviewers and the entire project staff. The key research results were analyzed according to project objectives, target audience and communication channels.

a Counseling materials

Separate counseling sets and motivational leaflets for women and men were developed for use by clinic staff with clients. A number of meetings were held with the artist, the graphic designer, the principle investigator and the IEC consultants to discuss concepts for the sets. Several ideas were worked out in sketch form by the artist and the development of the messages was initiated.

The process of materials development took more time than anticipated. By the end of April two sets of counseling cards and motivational leaflets were ready for

pretesting The interviewers conducted pretests with clients and partners as well as with clinic staff The materials were adapted and pretested again The process was repeated three times before a generally accepted version of the sets evolved

The process of colorization met with some setbacks Initially the artist colored all the images, but the quality of the color and the shades used did not appeal to the project team The colorization was ultimately done on computer

The counseling materials and motivational leaflets were produced in July 1993 (see Appendix 5) A session of the training manual is devoted to appropriate use of these materials

b Training manual

In February 1993, the team began development of a training manual to train clinic staff in RPR card testing and treatment Several meetings were held with the project team in which the content of the different sessions and possible exercises were discussed Two workshops were held with the clinic staff as a pretest for the training sessions The draft manual incorporates the lessons of the qualitative research The clinic staff contributed a great deal of enthusiasm to the program, which reflects the realities of their day-to-day work

The manual contains sessions on

- The public health importance of maternal syphilis,
- Screening and diagnosis of syphilis in pregnancy,
- Prenatal syphilis control programs,
- Components of care,
- RPR card testing technology,
- Promoting behavior change, and
- Counseling women with syphilis and their partners using the counseling materials developed by the project

Revisions are still in progress by MotherCare The final module is expected to be ready in 1994

5 Monitoring and Evaluation

A number of mechanisms were put in place and modified during the implementation phase in order to monitor and evaluate the effectiveness of the program

A system for quality control was set up with the reference laboratory of the University of Nairobi in order to compare test results found at the clinic screening units with

samples analyzed at the university lab with a blind confirmatory test. Each project clinic kept samples from one day's screening activity each week. The samples were collected by the project driver and examined at the lab of the UON. The results were matched by the project staff and sent back to the clinics.

A data collection system was designed using the following indicators:

- Number of new prenatal care (PNC) attenders,
- Number of PNC attenders with gestational age < 20 weeks,
- Number of RPR tests done,
- Number of RPR-positive tests,
- Number of RPR-positive women treated,
- Number of partners of RPR-positive women notified,
- Number of partners "spontaneous compliant,"
- Number of partners "assisted compliant," (see below)
- Total number of partners treated,
- Numbers of RPR-positive at UON lab vs clinic

Monthly tallies were collected by the project staff.

A supervisory format was designed to be filled in on a monthly basis by the project staff. Each subsequent visit to the clinic the old supervisory forms were taken so that a proper follow-up on existing problems was ensured. This form is used to monitor clinic staff performance and assess staff needs.

A system for adequate inventory was designed whereby forms were filled out by the clinic staff, sent with the project driver to the UON and supplies were carried back to the clinic by the driver.

A system for partner notification was developed. A form containing the name of the index case was filled out and kept at the clinic. A part of the form went home with the client asking the partner to come to the clinic for reasons related to the health of the fetus but making no explicit mention of STDs in order to defuse the potential for a violent confrontation between the woman and her partner. A "spontaneous compliant" partner presents for treatment following notification. "Assisted compliant" refers to partners of women whose clinic card has been withheld from her pending the compliance of her partner with treatment.

The data collected were analyzed manually by the project staff. All protocols, supervisory tools and data collection forms can be found in Appendices 3 and 4.

IV PROJECT RESULTS AND DIFFICULTIES EXPERIENCED

1 Implementation of Clinic-based Model

Ten syphilis screening units were set up providing screening, treatment, counseling, partner notification and partner treatment. This included providing required screening unit furniture (2 laboratory benches and 4 chairs), centrifuges and rotators and ensuring a working electrical socket and running water. A car was leased to the project to facilitate appropriate supervision, provision of adequate supplies and drugs and to carry out the quality control program.

Results

- All (100 percent) new prenatal clinic attenders are screened for syphilis, using an RPR screening test at the clinic level (when the project began, this figure was 60 percent). This has been consistently so in all clinics and throughout the project period. A total of 10,764 pregnant women have been tested between July 1992 and May 1993. Overall, 735 (6.8 percent) were seroreactive. Appendix 6 shows the range of RPR seroreactivity in the ten clinics.
- On the average, 85 percent of pregnant women with syphilis are treated correctly. When the project began this figure was 9.1 percent.
- Since the introduction of the partner notification form an average of 86 percent of partners are notified (meaning that the client has been counseled to tell her partner to come to the clinic and that a partner notification form was given to her).
- A quality index checklist for supervision is used on a monthly basis. A system for adequate inventory keeping was designed whereby order forms are filled out by the clinic staff, sent with the project driver to the UON and supplies are carried back to the clinic by the driver. A health information system was introduced in all clinics and the records are analyzed on a monthly basis. The indicators are recorded in a book by the prenatal clinic staff in each screening unit and the project staff then enters them onto data collection sheets.
- Quality assurance was monitored weekly by comparing clinic RPR results to gold standard RPR results at the University of Nairobi laboratory. Overall sensitivity was 82.7 percent, specificity 98.9 percent with a false negative rate of 1.1 percent and a false positive rate of 17.3 percent. These figures remained more or less unchanged throughout the project.

Problems encountered

- The project has been unable to get 100 percent of the women diagnosed as RPR-positive treated before leaving the clinic. This had partly to do with policies on partner notification in place at some of the clinics, and partly to do with drug shortages. Three clinics would not treat the woman until she brought in her partner for treatment as well. The project strongly discouraged this policy and it has since been largely abandoned.
- Initially the treatment rates approached 100 percent but during the months of December 1992 and January 1993 the rates dropped to as low as 33 percent. Some clinics, however, kept performing at 100 percent throughout the project. Later on the rates stabilized at around 90 percent. Some women still did not have time to wait for the RPR results and left the clinic before results were available.
- The quality control program proved initially to be difficult for the clinic staff as well as the university laboratory staff to comprehend. Given adequate time and training the staff were able to monitor successfully the quality of testing at the clinic level.
- Water shortages in some clinics were resolved with the provision by the City Commission of extra water tanks. Shortages of penicillin were ultimately addressed by the project.

2 Training of clinic staff in syphilis screening, treatment, and counseling of clients and their partners

Results

- All health workers working in the ten prenatal clinics (69) were trained in the theory of and procedures involved in a comprehensive congenital syphilis control program.
- A total of 68 health workers were trained in the use of the counseling sets and in counseling skills.
- A training manual was developed containing sessions on syphilis in pregnancy, methods of syphilis control, RPR screening procedures, promotion of behavior change, counseling women with syphilis and their partners and using syphilis counseling materials. The training manual will be adapted by the World Health Organization for wider use.

Problems encountered

- Initially the project met with a lot of resistance from the clinic staff to involvement in the syphilis control program. It was argued that performing lab tests was not part of their job description, that the project would increase their workload and that they should be paid for the extra work done under the project. Indeed, there had been no major salary increments in the City Commission during the previous five years. An increase in the urban population due to migration and an exodus of employees from City Commission jobs due to unfavorable working conditions had aggravated this situation. After a series of meetings with NCC policy makers and the project staff, where it was promised that the project would increase job satisfaction, a consensus was reached. The issue is still occasionally revived, but the work is done and the clinic staff are generally very happy about the fact that they are truly doing something to improve the health of women and their newborns.
- Frequent movements of staff within the NCC clinics as well as within the clinic itself presented a number of difficulties. In December 1992, for example, due to leave and general elections the clinics suddenly faced a shortage of trained staff. Additional staff had to be trained. To alleviate this problem, the project team recommends policy reform whereby all nursing staff in the NCC clinics would be trained in syphilis control, and syphilis training would be incorporated into the regular curriculum of enrolled nurses and enrolled community nurses.
- Motivation of clinic staff proved to be critical to implementation of the program. To generate more involvement of the clinic staff it was decided that three monthly meetings with members of the staff involved in the screening program would be held. Two such meetings were held and praised by the staff. This meeting is used to evaluate the clinic performance in a positive manner, to discuss the problems faced by the different clinics and initiate improvements. Furthermore, adding a session to the training on the design of an effective syphilis control program improved morale and motivation because the staff felt they had a personal investment in the program.

3 Partner Notification

Results

- A partner notification card was developed. The clinic staff were very happy with the introduction of this card, which they said facilitated their work considerably.
- Throughout the 10 clinics, the overall average of partners notified is 86 percent.

There are, however, clinics where the partner notification rates have been as high as 100 percent. This figure refers to the proportion of women who have been counseled and given a partner notification card, not the proportion of partners who have actually been notified. It is not possible to quantify how often women are actually communicating the message to their partners. However, 352 (48 percent) partners of RPR positive women were treated.

- During the project period the rate of partner treatment has been at 48 percent on average. Initially this rate was around 55-60 percent, but some measure of this compliance was due to "assisted compliance," the withholding of the clinic delivery card from the pregnant woman until she brings in her partner for treatment. Upon the introduction of a partner notification card the number of "spontaneous compliant" partners went up from around 15-20 percent to 35-45 percent. The proportion of assisted compliant partners coming in has averaged around 12 percent in the three clinics where it has been the policy. The rate of assisted compliance dropped to 0-10 percent towards the end of the project because this practice was discouraged.

Problems encountered

- It has not yet been possible to evaluate the effectiveness of the counseling cards in bringing partners to the clinic for treatment. The refresher training where the counseling sets were introduced was held at the very end of the project.
- It is possible that partner notification systems put women at risk of abusive behavior from their partners (such as beatings or abandonment). The project tried to circumvent these negative behaviors by introducing a card that does not mention syphilis but the health of the baby as the reason for coming to the clinic. The fact that these women are pregnant may help to some degree in preventing violent behaviors, since both men and women are concerned about the health of the baby to be born. More insight is needed into the problem of domestic violence related to STDs and the fear of such violence on the part of women who have been infected with an STD.

4 Prevention of Reinfection

Results

- A female counseling card set with five cue cards and a male counseling card set with six cards have been developed in English, Kiswahili and Dholuo. The cards explain what syphilis is and emphasize the importance of adequate treatment and safer sex, highlighting the importance of condom use and sticking to one

partner. Each message is depicted pictorially and has a corresponding text which prompts the health worker as he/she is counseling, this also ensures a standard, complete message is given to all clients counseled

- Wooden penile models for counseling about condom use were developed and distributed to the clinics
- During the refresher training where the counseling sets were introduced, the health workers commented that the cards were appealing and would facilitate their work by avoiding irrelevancies and maintaining objectivity. The penile models distributed with the sets to demonstrate condom use were also very well received
- All clinic staff say that the counseling part of the program is extremely important and they enjoy the fact that they can now counsel clients
- The counseling cards will also be used as teaching aids during the morning health education sessions
- The two motivational leaflets (for women and men) were developed in the three languages as well. These leaflets serve as a reminder to the client and her partner of the key messages imparted during the counseling session

Problems encountered

- Due to time constraints the effectiveness of the counseling program has not been assessed. The project hopes that a follow-up evaluation will be undertaken

V LESSONS LEARNED AND RECOMMENDATIONS

1 Strengthening Services

Staff motivation and morale are the most important factors in the success of this program. It is the staff that actually have to implement the strengthened services and without their cooperation the program cannot succeed. There were serious obstacles to success in this respect at the outset of the project. Clinic staff wanted to be paid for their "extra" duties, partly because they had been accustomed to research projects done by the University of Nairobi in their clinics under which they had been paid for extra work. It took a lot of motivating on the part of project staff and eventually also the Nairobi City Council Public Health Department to get the program off the ground.

It soon became apparent that the clinic staff must also be involved in the process of designing the strategies to improve the health status of their clients. Building morale through participatory program design strongly encourages staff sense of ownership of the program and was a motivating factor in the implementation of this program. However, improving services at clinic level in itself also proved to be a motivating factor for the clinic staff to do their work better. They generally felt happy that they were able to deliver adequate services to pregnant women.

Regular supervision of and support for clinic staff are absolutely indispensable. In the current difficult socioeconomic conditions facing Kenyans (including the clinic staff) support for morale is an absolute necessity. The fact that someone actually cares about the quality of their work and stresses the importance of the work in preventing adverse pregnancy outcomes renews their motivation to keep going in difficult times. Other lessons learned and recommendations are that

- Workshops should be held outside the clinic setting on a regular basis to discuss difficulties, compare performance and sustain motivation.
- Clinic staff involved with the project should be furnished with monthly data for all the project clinics and encouraged to strive for higher achievement (for example, greater numbers of partners diagnosed and treated).
- Adequate provision of supplies is essential to the functioning of the program but mechanisms must be in place to insure thrifty use and timely replenishment of supplies. Contingency funds should be available at the project commencement in event of sudden need (e.g., drug shortages).
- Provision should be made for local currency depreciation in order to meet project obligations.

- It is important to bear continuously in mind the economic and social realities of the communities served by the project. Sometimes these factors can affect the feasibility of attaining some research objectives

Due to time constraints the project has not been able to implement a study to assess the impact of the intervention on pregnancy outcome. A study has been designed by the Institute of Tropical Medicine staff and will be implemented in 1994.

Even though this program is relatively inexpensive to implement it still may be too expensive for the Government of Kenya to support in its entirety. There remains a need for the donor community to support these activities to prevent the collapse of this simple, cost-effective intervention.

2 Promoting Behavior Change

The time frame of this project was too tight to evaluate the effectiveness of the information, education and communication (IEC) materials. Moreover it takes time to change peoples' behavior. IEC interventions are often perceived as expensive and not effective. Staff of the clinics mentioned that they had found it difficult to talk about recommended behaviors in Kiswahili and commented that the counseling sets helped them a lot in phrasing the messages correctly. There is an urgent need to demonstrate how IEC materials can help both clinic staff and clients to change their behaviors. The project found that

- Inadequate communication skills and language gaps are significant barriers to behavior change as well as to efficient service delivery. It was found that very few clients and partners fully understood what syphilis was, how it could be prevented and how it could affect pregnancy outcome. Very few clients knew words for syphilis in their own language and/or Kiswahili.
- The qualitative research components of this program emphasize that clients respond better to quality services delivered in a considerate and culturally appropriate manner.
- The human sexuality issues at the heart of this project are often sensitive and controversial and efforts should be made to sensitize both providers and policy makers in this regard. Quick solutions for these problems cannot be found.
- Due to time constraints the community-based research has not led to the development of IEC materials for use in the community. The program has not yet been successful in getting women to prenatal care earlier in their pregnancies. Only 25 percent of women visit the clinic before 20 weeks of pregnancy. *Early prenatal care attendance remains a fundamental problem and must be addressed at the community level as well as at clinic level.*

3 Enhancing Policy Dialogue

The time spent on networking with policy makers and other donors ensured collaboration with the Nairobi City Council, the Ministry of Health and others. It was through this collaborative effort that the MOH adopted the intervention strategy followed by this project. Mothercare also contributed in this arena by allowing the project to print more of the counseling sets for distribution in the six districts earmarked by the MOH for syphilis control in pregnant women, which created good will.

- Discrete projects need to be considered in their relation to the broader context of women's health as part of a comprehensive strategy. The outcomes of this project need to be discussed at a higher policy-making level than the STD control unit of the MOH alone.
- Training-related policy is most effective at the pre-service level, since it is often difficult to change the mindset of workers who have worked in a particular environment for a long time.
- The team further recommends policy reform whereby all nursing staff in the NCC clinics would be trained in syphilis control, and syphilis training would be incorporated in the regular curriculum of enrolled nurses and enrolled community nurses. This would insure the continuous presence of trained staff in the clinics despite frequent staff movement.

4 Recommendations for Further Program Development

Both the Kenyan counterparts as well as Mothercare have shown interest in renewing the collaboration under Mothercare II. Recently several donor agencies have also become increasingly involved in STD/AIDS Control in Kenya. The most significant donors in this area are the European Community, CIDA, UNICEF, USAID-funded AIDSCAP, the Government of Belgium and possibly the World Bank, each having a fairly well demarcated area of intervention. However there are still some gaps and questions that remain:

- a How can the syphilis control program be decentralized further?
- b The European Community is implementing a program in Nairobi and Mombasa to strengthen STD control activities through the strengthening of two referral clinics for STDs and possibly strengthening primary health clinics in STD control. There is an urgent need to develop IEC materials specifically targeted at the population with STDs, who are at high risk of acquiring HIV infection.

- c How can the private sector become involved in STD control?
- d Further streamlining of donor involvement is needed and could be organized in the form of a workshop with representation from the most important donors and the Ministries involved in the implementation of the different programs
- e How can a scaled-up program be administered, what logistical inputs are needed and how can linkages with the USAID mission and AIDSCAP be established?

VI PRESENTATIONS AND PUBLICATIONS

PRESENTATIONS

- 1 VII International Conference on AIDS/II STD World Congress, Amsterdam, The Netherlands 19-24 July 1992
Syphilis Control in pregnancy an opportunity to improve adult reproductive and child health Temmerman M, Fransen L
- 2 VIIth International Conference on AIDS in Africa, Yaounde, Cameroun, 8-11 December 1992
Strategies for the control of syphilis in pregnant women in Nairobi, Kenya E Obwaka, M Temmerman, S Moses, JO Ndinya Achola, A Oyoo, P Piot, L Fransen
- 3 Combatting Childhood Communicable Diseases Meeting, Dakar, Senegal, 29 March until 2 April 1993 *Syphilis control in pregnant women in Nairobi City Commission Clinics, Kenya* Jenniskens F, Obwaka E, Temmerman M
- 4 Mothercare Technical Advisory Group Meeting, Washington, USA, 18-21 May 1993 *Presentation of decentralised syphilis control programme in Nairobi Kenya* Francoise Jenniskens
- 5 IXth International Conference on AIDS/IVth STD World Congress, Berlin Germany, 6-11 June 1993 *Factors contributing to user hostility in antenatal/STD clinics in Nairobi City Council health care delivery systems, Kenya* Obwaka E, Jenniskens F, Temmerman M, Pido O, Ndinya Achola JO, Mohamedali F et al
- 6 IXth International Conference on AIDS/IVth STD World Congress, Berlin Germany, 6-11 June 1993 *Qualitative Research on Syphilis KAP among Nairobi City Council clinic users and staff* Donna Pido, Francoise Jenniskens, JO Ndinya Achola, Mona Moore
- 7 WHO, informal technical group meeting on prevention and control of congenital syphilis, Geneva, 11-13 October 1993 Presentation of the project by Emily Obwaka

PUBLICATIONS

- 1 *Mothercare Maternal/Congenital Syphilis Control Project Qualitative Research Report* Working Paper 18, August 1993 Donna Pido and Francoise Jenniskens

APPENDIX 1

MAP OF NAIROBI INDICATING SYPHILIS CONTROL CLINICS

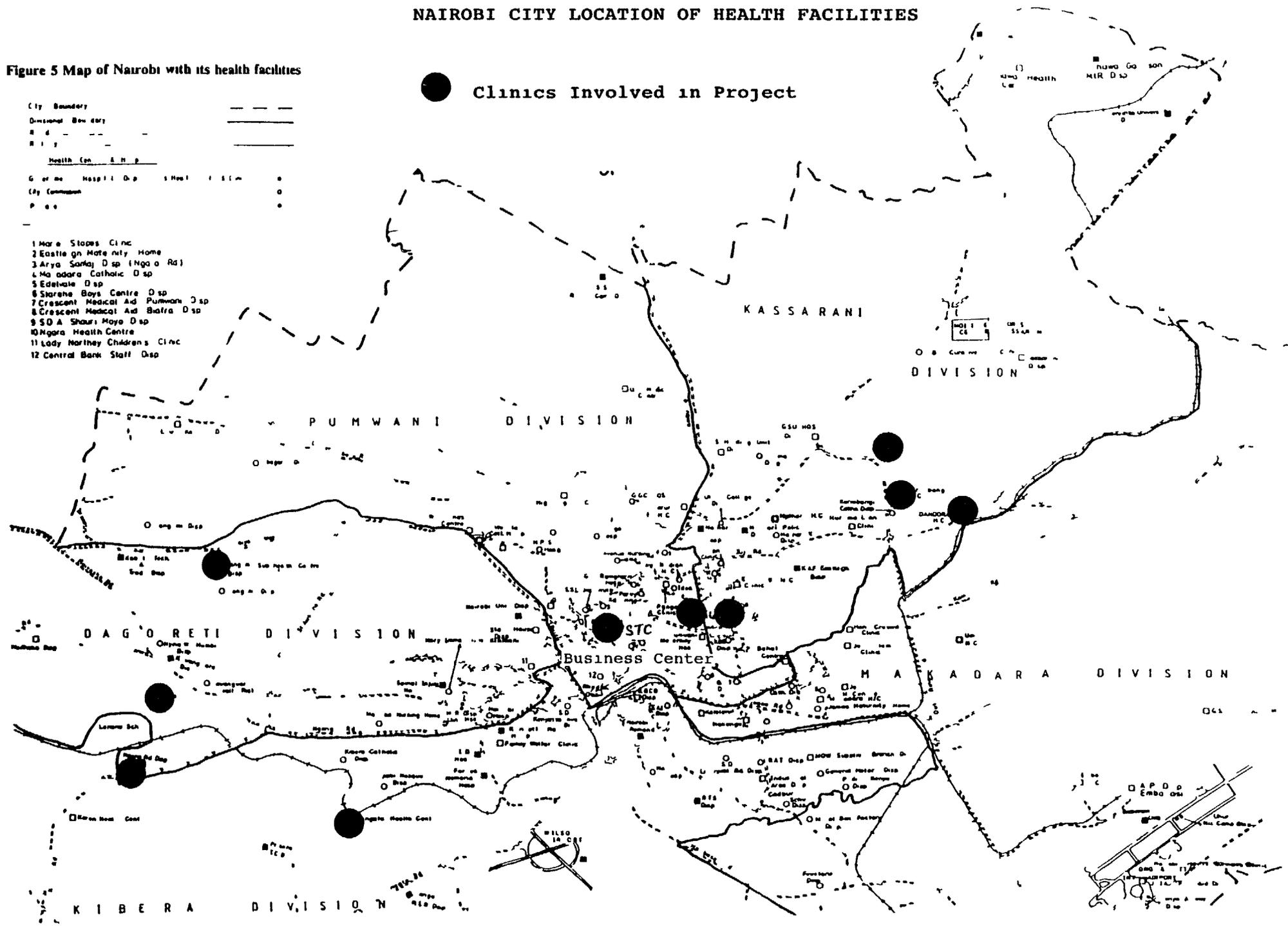
NAIROBI CITY LOCATION OF HEALTH FACILITIES

Figure 5 Map of Nairobi with its health facilities

City Boundary	---
Divisional Boundary	---
Road	---
Rail	---
Health Cent. S.M.P.	
General Hospital Disp. S.M.P. Disp.	○
City Dispensary	○
Private	○

● Clinics Involved in Project

- 1 Mare Stages Clinic
- 2 Eastleigh Maternity Home
- 3 Arya Sanjay Disp (Ngara Rd)
- 4 Madara Catholic Disp
- 5 Edendale Disp
- 6 Shauri Moyo Boys Centre Disp
- 7 Crescent Medical Aid Pumwani Disp
- 8 Crescent Medical Aid Madara Disp
- 9 SDA Shauri Moyo Disp
- 10 Ngara Health Centre
- 11 Lady Martha's Children's Clinic
- 12 Central Bank Staff Disp



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APPENDIX 2
RESULTS OF COMMUNITY INVENTORY

APPENDIX 2 COMMUNITY LINK INVENTORY

* baseline information

NCC involvement

The CBHW working in this clinics are referred to as community based distributor (CBD) This is because they were trained mainly to distribute contraceptives at community level

Each of the CBDs has an area to serve in the community assigned to them These areas are quite large and sometimes are hard to access especially in the rainy season

The CBDs work at the clinic in the mornings and do their community visits in the afternoon The work done at the clinic consists of admission and pre-selection of patients, weighing, giving health talks and issuing contraceptives

A number of these CBDs do not actually live in the community they serve

The CBDs report to Lady Northey, the divisional headquarters, once every month, here they give a summary report of their activities to their supervisors They do not report directly to the clinic and therefore their activities in the community are not monitored at clinic level Their supervisors visit them once monthly in the community Lady Northey does not have a formal relationship with the clinics

They have not been trained in STD management and are not used in partner tracing.

* constraints in work of CBDs

Lack of CBDs to effectively cover the areas assigned to them

Poor salaries: they work fulltime for the clinics and therefore have no time to engage in other economic activities They are paid 1200 Ksh a month

they feel insecure because their salaries are from donors who may stop their assistance anytime (initially trained and payed by Family Planning International, now being paid by Path Finders).

Community work by other organisations

In many of the catchment areas of the clinics volunteer CBHWs operate. They don't report to the clinics as such, but use the clinic once a month to meet with their colleagues and to discuss various topics.

NGO's operating in the catchment areas of the clinics

Redeemed Gospel Church

Nutrition rehabilitation centre. CBHWs involved in home visits, health education and referring patients to the centre.

Action AID

Multipurpose CBHWs involved in disability prevention and rehabilitation.

World Vision

Feeding programme in cooperation with Redeemed Gospel Church and AIDS awareness programme.

Roman Catholic Mission

CBHWs involved in education and home nursing care for AIDS patients.

Provide International

Mainly operating in Korogocho. Providing school fees for children from poor families, rehabilitating young drug addicts and running dispensaries.

Community groups

Vunja ukimwi (fight aids)

Korogocho Self Help Group (womens group)

Wakwetu womens group

Muungano na maendeleo Grogan group (womens group)

Most of these groups are involved in economic activities. The youth groups are both economic and rehabilitative.

* staff involvement in the community

The sister in charge at Dandora, Baba dogo, Karlobangi, Riruta, Kangemi, Ngara and Ngong Road were visited to examine the relationships between the clinic staff and the community.

At Riruta and Dandora there is a NCC employed nutritionist who visits malnourished children in the community on a daily basis. They report directly to a supervisor at the City Commission and not to the sister in charge at the clinic.

The community nurses used to visit the community for giving health education especially family planning, for follow up of malnourished children and to trace defaulters especially T B patients. This however stopped in all the clinics except for Ngara.

The sisters gave the following reasons why these community visits stopped.

Integrated system whereby patients are seen on a daily basis as compared to the former system whereby one day a week was designated for ANC, another for FP etc. Since the introduction of the integrated system in the clinics, the staff members find no time to visit the community.

because the flow of patients into the clinic continues until closing time

Shortage of staff most of the clinics report shortage of staff and therefore no time can be spent on community activities

Poor facilities the staff at Ngara who visit the community at least once a week complained that it is frustrating to refer patients to the clinic just to be sent back to buy drugs, syringes, gloves which are not available at the clinic Some of the patients cannot afford these things Since the clinics do not offer adequate services, it works against the people referring patients to the clinic

Low morale all the sisters said that there is a general lack of motivation among the nurses and this is attributed to poor pay and poor working conditions at the health facilities.

Security the sister in charge at Baba dogo said that due to increases in thuggery in the area the members of staff would not venture into the community for security reasons

APPENDIX 3

DATA COLLECTION AND OTHER FORMS
USED BY THE PROJECT

CLINIC _____

SUPPLIES REQUESTED	SUPPLIES RECEIVED
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9

ORDERED BY _____ DATE _____

RECEIVED BY _____ DATE _____

.

(TO BE RETAINED AT THE UNIVERSITY LAB)

MOTHER CARE SYPHILIS CONTROL PROJECT

CLINIC _____

SUPPLIES REQUESTED	SUPPLIES RECEIVED
1.	1
2	2.
3	3.
4.	4.
5.	5.
6.	6.
7	7.
8	8.
9.	9.

RECEIVED BY: _____ DATE _____

SUPPLIED BY _____ DATE _____

MOTHECARE SYPHILIS CONTROL PROJECT

QUALITY INDEX CHECKLIST FOR SUPERVISORY VISITS

SUPERVISOR _____

CLINIC _____

DATE _____

TIME SPENT _____

PERSONS SPOKEN TO (POSITION) (1) _____
(2) _____
(3) _____
(4) _____
(5) _____

VISIT OBJECTIVES

ACCOMPLISHED

(1) _____
(2) _____
(3) _____
(4) _____
(5) _____

Y / N
Y / N
Y / N
Y / N
Y / N

TOPICS DISCUSSED

ISSUES ARISING

35

FUNCTION INDEX CHECKLIST

CLINIC _____

PERSONS IN THE LAB _____

PI SCORE _____

<p>I CLEANLINESS</p> <p>a) Bench/ working surface clean y/n b) Lab equipment clean y/n c) floor clean y/n d) disposal bucket being utilised y/n e) old cards and tubes disposed y/n</p> <p style="text-align: center;">total checked "yes" _____</p>	<p>II LAB UTILITIES</p> <p>a) fridge in working order y/n b) rotator functional y/n c) centrifuge functional y/n d) vxe control in lab y/n e) functional locks y/n</p> <p style="text-align: center;">total checked "yes" _____</p>	<p>III SUPPLIES</p> <p>a) requisition forms available y/n b) returns being kept in supplies file y/n c) person responsible for ordering supplies y/n d) person responsible for receiving supplies y/n e) secure storage of supplies y/n</p> <p style="text-align: center;">total checked "yes" _____</p>	<p>IV STAFF</p> <p>a) person in lab trained by UOM y/n b) any dropouts from original y/n c) additional in -trained y/n d) has duties outside the lab y/n e) assisted y/n</p> <p style="text-align: center;">total checked yes _____</p>
<p>V RPR TESTING</p> <p>a) reagent adequate not expired y/n b) cards correctly numbered y/n c) reagent correctly dispensed y/n d) centrifuge & rotator timed y/n e) cards correctly read y/n</p> <p style="text-align: center;">total checked "yes" _____</p>	<p>VI RECORD KEEPING</p> <p>a) all information collected y/n b) writing legible y/n c) records up to date y/n d) column headings clearly /correctly marked y/n e) books in correct place y/n</p> <p style="text-align: center;">total checked "yes" _____</p>	<p>VII QUALITY CONTROL</p> <p>a) protocol visibly displayed y/n b) all specimen collected on specified day y/n c) quality control forms available y/n d) QC forms utilised correctly y/n e) QC results recorded correctly in lab record book y/n</p> <p style="text-align: center;">total checked "yes" _____</p>	<p>VIII PARTNER TRACING</p> <p>a) partner notifications available y/n b) duplicate retained in yellow folder y/n c) spontaneous return marked blue y/n d) assisted compliance marked black y/n e) correct treatment being recorded y/n</p> <p style="text-align: center;">total checked yes _____</p>

ISSUES/PROBLEMS/COMPLAINTS ARISING FROM CHECKLIST

**ATTITUDINAL OBSERVATIONS/ISSUES
LAB STAFF**

OTHER STAFF

OBSERVATIONS AND COMMENTS:

ACTION AND FOLLOW UP

Action planned	Action steps	target date
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

PARTNER NOTIFICATION CARD

NAME OF PARTNER. .. . NO

DATE.

NAME OF CLINIC ATTENDEE

CLINIC No. . . . ISSUING CLINIC . . .

RESIDENCE.PLOT NO.

OTHER CONTACTS.

(To be left in the clinic)

.....

KADI YA KUMJULISHA MWENZAKO

JINA LAKO.

TAREHE

No. YA KLINIK KLINIK

Tafadhali njoo klinik tarehe

<i>centrifuge</i>									
<i>rotator</i>									
<i>tube rack</i>									
<i>buckets</i>									
<i>RPR kits</i>									
<i>serum</i>									
<i>vials</i>									
<i>pipettes</i>									
<i>+ve</i>									
<i>control</i>									
<i>-ve</i>									
<i>control</i>									
<i>juk</i>									
<i>tissue</i>									
<i>dettol</i>									
<i>soap</i>									
<i>gloves</i>									
<i>lab coats</i>									
<i>syringes</i>									
<i>needles</i>									
<i>benz</i>									
<i>penicillin</i>									
<i>cotton</i>									
<i>wool</i>									
<i>water for</i>									
<i>injection</i>									

APPENDIX 4
PROTOCOLS USED BY THE PROJECT

PROTOCOL (FOR USE BY COUNSELLER / HEALTHWORKER)

- 1) Briefly explain why the test is being done
- 2) Give the results simply and clearly

RPR -VE (early and late)

- a) Record the RPR result on the card and in the record book
- b) Place a white sticker on patient's card and a red mark against the patient's name in the book
- c) Give appointment for the 2nd RPR test
- d) Give the RPR -ve card (go through the points with the patient)
- e) Issue condoms or inform the patient where she can get them

**** OMIT (b) and (c) for late attender (over 20 weeks)**

RPR + VE

- a) Record the RPR result on the card and in the record book
- b) Ensure treatment (2.4 mu benzathine penicillin IM, STAT)
- c) Give the RPR +ve card (go through the points with the patient)
- d) Give the partner notification card (leave a copy of this at the clinic for use if need arises to trace the partner)
- e) Issue condoms or inform the patient where she can get them

PARTNERS OF RPR + VE PATIENTS

- a) Ensure treatment (2.4 mu benzathine penicillin IM, STAT)
- b) Record this in the record book.
 - 1) If a partner returns spontaneously place a blue mark against their treatment information
 - 2) If a partner returns after follow up, place a black mark against their treatment information
- c) Issue condoms or inform the partner where he can get them

DEFAULTERS

If a partner does not show up after two weeks contact, contact the community health worker for follow up.

CLINIC: _____

QUALITY CONTROL

IT IS IMPORTANT THAT YOU REMEMBER TO SAVE ALL YOUR SAMPLES CLEARLY MARKED WITH THE ANC NUMBER AND CLINIC ABBREVIATION EVERY:

THESE WILL BE COLLECTED AT 1:00PM. ON THE COLLECTION DAY (ABOVE) BY A UNIVERSITY DRIVER. IF NOT COLLECTED, STORE THEM IN THE REFRIGIRATOR UNTIL THEY ARE COLLECTED.

BE SURE TO CLEARLY MARK ALL THE NUMBERS ON THE QUALITY CONTROL FORM TO ACCOMPANY THE SAMPLES.

DON'T FORGET TO ENTER THE RESULTS YOU GET FROM THE UNIVERSITY LAB. INTO THE LAB. RECORD BOOK.

THE LIST RECEIVED SHOULD BE KEPT IN THE YELLOW FOLDER PROVIDED WHEN ALL THE RESULTS ON IT ARE RECORDED.

W

RPR TESTING

1. COLLECT THE VENOUS BLOOD SAMPLE
2. WRITE DOWN THE PATIENTS INFORMATION IN THE LABORATORY BOOK
3. BALANCE THE BLOOD TUBES BEFORE CENTRIFUGATION. USE THE TUBES WITH WATER TO PAIR OFF WITH THE BLOOD TUBES
4. BE SURE TO INCLUDE THE POSITIVE AND NEGATIVE CONTROLS FOR EVERY RUN
5. SPIN THE BLOOD TUBES IN THE CENTRIFUGE. USE A SETTING OF '3' FOR 5 MINUTES
6. REMOVE THE BLOOD TUBES FROM THE CENTRIFUGE
7. WRITE THE CLINIC NUMBER ON THE RPR CARD
8. ADD 1 DROP OF SERUM TO THE RPR CARD CIRCULARLY SPREAD
9. ADD 1 DROP OF ANTIGEN TO THE CIRCLE
10. ROTATE THE CARD FOR 8-10 MINUTES
11. COMPARE THE RESULTS OF THE PATIENTS SERA TO THE POSITIVE AND NEGATIVE CONTROLS
12. RECORD THE RESULTS IN THE BOOK
13. ADD JIK TO THE BLOOD TUBES UNLESS THEY HAVE TO BE SENT TO THE UNIVERSITY LAB FOR QUALITY CONTROL
14. SAVE ALL THE POSITIVE SERUM SAMPLES IN SMALL TUBES FOR RETESTING AT THE UNIVERSITY LABORATORY. LABEL THE SMALL TUBES WITH THE DATE AND THE PATIENT NUMBER.

APPENDIX 5 IEC MATERIALS

Counseling Cards for Use with Women
Take-Home Leaflet for Women
Counseling Cards for Use with Men
Take-Home Leaflet for Men

Counselling Cards

for

Syphilis Control

in Pregnancy



Designed by

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How to use The Counselling Cards

There are

5 cards for the pregnant woman

6 cards for the partner

PREGNANT WOMAN CARDS

- Card 1 is to be used with a pregnant woman who has been found RPR positive. It provides basic information about syphilis.
- Card 2 describes partner notification, how the woman can negotiate with her partner to go for treatment, and the options for her partner to abstain from sex for a period of time or use a condom.
- Card 3 explains sexual networking. For example, it explains how the disease is spread from one person to another.
- Card 4 describes behaviour expected of men with outside partners - to either stick to one partner or use condoms.
- Card 5 suggests options for a woman to negotiate with a difficult partner.

PARTNER CARDS

- Card 1 is to be used with partner of woman who is RPR positive. It provides basic information about syphilis.
- Card 2 informs the partner of the need to abstain, to use condoms and to encourage the woman to attend antenatal clinic to ensure delivery of a healthy baby.
- Card 3 explains sexual networking. For example, it explains how the disease is spread from one person to another.
- Card 4 describes the need for the partner to inform all his outside partners. It offers options to stick to one partner, reduce the number of sexual partners, or to use condoms with outside partners.
- Card 5 explains the advantages of the condom and encourages the partner to use condoms with the pregnant partner or with outside partners.
- Card 6 demonstrates condom use.

The counselling cards should be used in communicating correct information to the client. In order to use them effectively the counsellor must

- 1 Select the appropriate set of cards for the client - male or female
- 2 Hold the card in front of him/herself with his/her left hand so that the illustrations face towards the client and close enough so that the client can see the images clearly. He/she should make sure she does not obscure his/ her face with the card.
- 3 Refer to each image with one hand as he/she explains the text written at the back of the card.
- 4 **Pause from time to time to give opportunity for the client to ask questions. He/she should respond even if the question is out of order.**
- 5 At the end of each card, ask the client to summarize, then give the summary provided.
- 6 Select the next card when the client is ready for more information, or as appropriate.
- 7 At the end of the counselling session, put the cards back in order for use with the next client.





1A You just had a blood test as part of your routine antenatal care. This test shows that you have a disease called syphilis. Syphilis is common among pregnant women in Kenya.

Syphilis is a sexually transmitted disease, but it is not like AIDS or gonorrhoea. You have not been tested for either AIDS or gonorrhoea. Your syphilis has been treated by the injection you have just received.



1B Any woman can get syphilis, whether she is pregnant or not. You can get syphilis by playing sex with someone who has syphilis.

The first sign of syphilis is a painless sore in the genital area. The second symptom can be a rash anywhere on the body. These symptoms disappear after some time. If the person is not treated, he/she can still have syphilis for many years without feeling sick or noticing any symptoms.

Your partner may also look and feel healthy, but since you have syphilis, he probably has syphilis too.

Ask How do you feel about this?

Many people feel shocked or embarrassed when they find out that they have syphilis, especially pregnant women. Some women feel guilty, ashamed or embarrassed when they are first told. You are not alone and you have not done anything wrong.



1C In pregnant women, syphilis can cause serious health problems for the pregnancy and the baby. Pregnant women with syphilis who are not treated can lose the pregnancy (have a miscarriage).

Or

The baby can be born alive, but born too early.

The baby can be born dead.

Syphilis can pass on to the unborn baby if you are not treated early in the pregnancy. A baby born with syphilis can

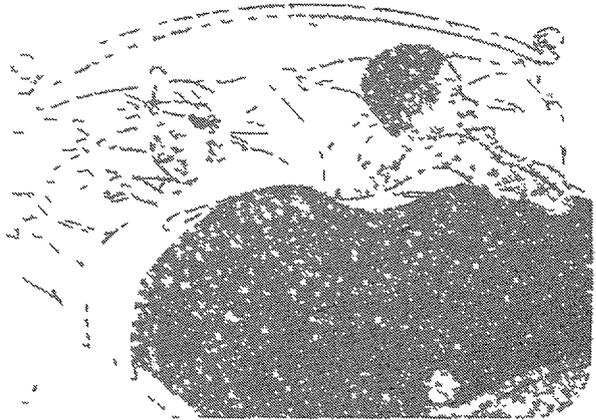
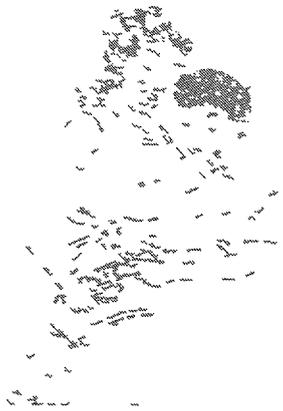
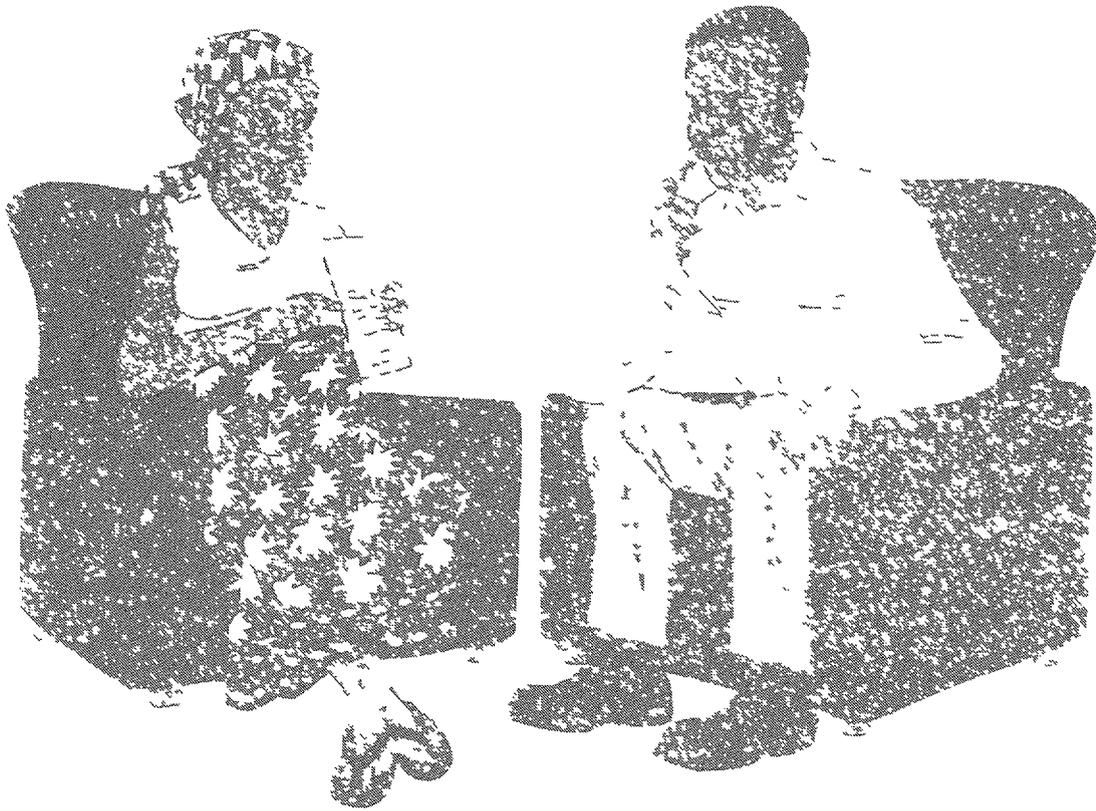
- die soon after birth
- grow up to become deaf or
- develop permanent defects to the bones, nose and teeth as he/she grows up.



1D Don't worry! The medicine takes some time to work, but after seven days you will be completely cured.

But it is easy to get syphilis again. You can protect yourself from getting syphilis again by

- 1 making sure your partner(s) get treated adequately
- 2 abstaining from sex until your partner is treated and for seven days after his treatment
- 3 using condoms
- 4 sticking to one partner



- 2A Your partner needs to know that he may have syphilis. It is your responsibility to tell him to come to the clinic for treatment. You can do this by giving him this notification card. Women who have more than one partner should inform them all. You may have more than one card if you need them.



Give the partner notification cards to the client

Give your partner this card and tell him to come to the clinic so that we may be sure that he has been treated properly.

It will be easier to tell him to come to the clinic for treatment if you explain what can happen to the pregnancy and the baby.

Some women find it easier to tell their partner after a good meal or in bed.

If you cannot convince him to come to the clinic, tell him the doctor has told you that you cannot play sex until he goes to the clinic for treatment.

Ask How will you tell your partner to come to the clinic for treatment?



- 2B C Remember the right medicine for syphilis is found only in the clinic.



- 2D If you and your partner play sex during the seven days from now until seven days after his treatment, you can re-infect each other with syphilis. From the time your partner is treated, you just wait one week and then you can play sex again without worrying about reinfection. Neither of you should play sex with anyone until one week after treatment is finished in order to be cured.



- 2E Many people cannot abstain from sex for a whole week. If you cannot abstain, you must use a condom every time you play sex.

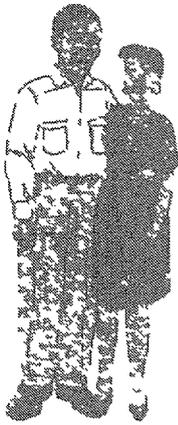
Explain to your partner that using condoms protects the pregnancy, the baby and his own health. The condom prevents the syphilis germ from passing between you and your partner in the same way that gumboots protect your feet from getting wet.

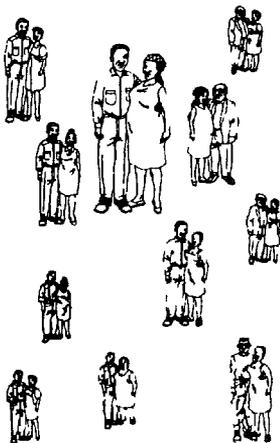
Ask Have you or your partner ever used a condom before? Let me show you the best way to use a condom. (Demonstrate condom use)

Ask How will you convince your partner to use condoms?

Review If you want to be sure that you and your baby do not get syphilis again.

- Make sure that all your partners get treated. Do not play sex with your partner until one week after he has been treated. If you must play sex during that time, use a condom each and every time.
- Do not play sex with any other person without using a condom until the baby is born.





Syphilis is passed on in two ways. One way is from the pregnant woman to her unborn baby. However, the most common way is by playing sex with someone who has syphilis. A person who has syphilis infects his/her partner when the syphilis germs pass from one body to the other while playing sex.

Most people who have syphilis do not know they have it. You cannot tell if someone has syphilis by looking at him or her. Most people who have syphilis look and feel healthy.

In the whole world and also in Kenya today, the number of people who have syphilis is growing. The more partners a person has, the greater his/her chances of getting syphilis and passing it on to others without knowing it.

Demonstrate If only one person has syphilis, many others are in danger of getting infected. This picture shows how syphilis can spread to many people.

Point to a person in the picture and ask
If this person has syphilis, who else in the picture will be infected?

Ask Now that you have seen how easily syphilis can spread when people play sex with many others, can you think of any way you could change your own life, so that you will not get syphilis again?

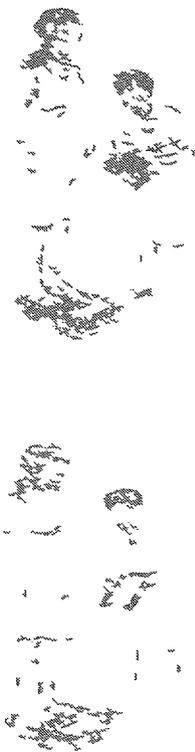
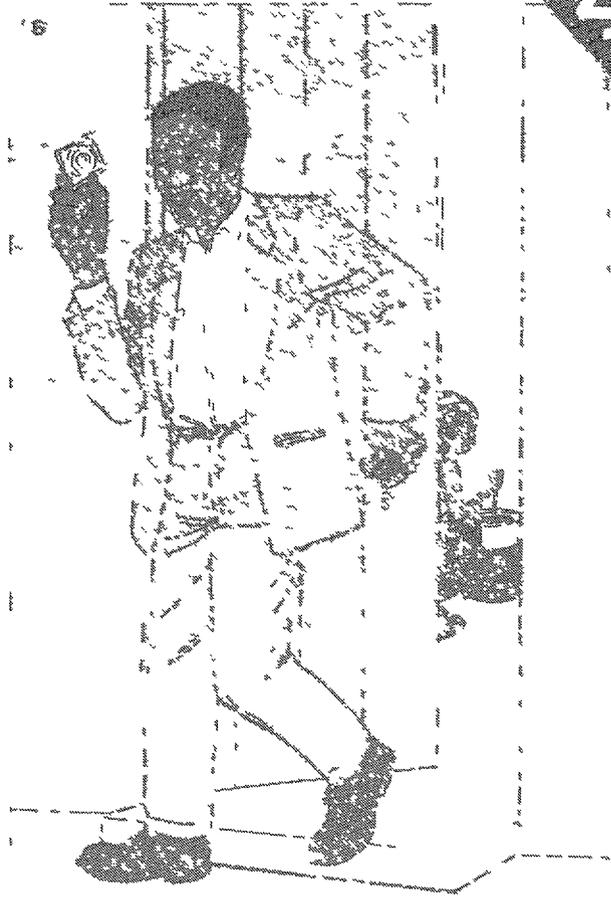
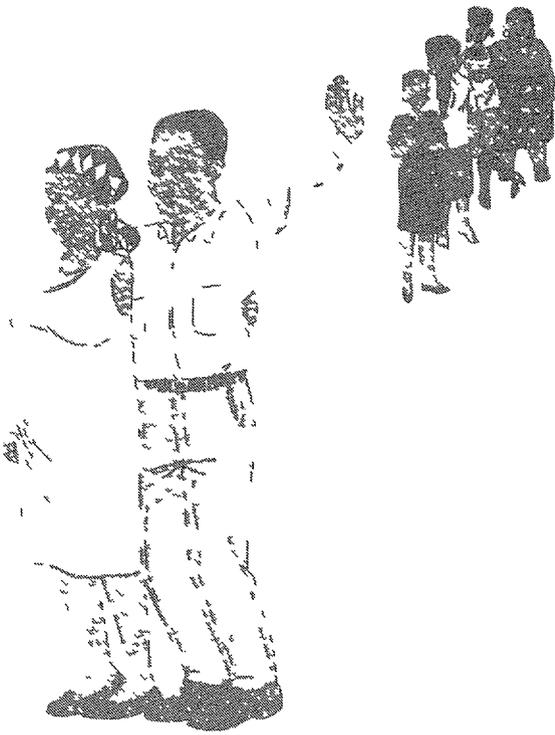
Many people believe that only certain types of people can have syphilis, such as prostitutes and unmarried men. But we know now that anyone can have syphilis, no matter how he/she looks, no matter what type of work he/she does, no matter which part of the country he/she comes from. Nowadays, even housewives and married men have syphilis. But remember syphilis is not like AIDS; it can be cured.

These days, everyone needs to be more careful about who he/she plays sex with.

Anyone who finds out that he/she has syphilis has a responsibility to let all his/her other partners know that they may have syphilis, so that they can go for treatment. This helps to stop syphilis from spreading.

Demonstrate This picture shows who each person should inform if he/she has syphilis.

Point to a person in the picture and ask
If this person has syphilis, who should he/she inform about going for treatment?





4A The best way to avoid catching syphilis again is not to play sex at all until after the baby is born. Most couples cannot do this. If it is difficult for you and your partner to stop playing sex, use a condom each time you play sex.

Try also to convince your partner that he should play sex only with you and should leave all outside partners. Both of you should stick to one partner.



4B Use condoms if you and your partner cannot give up having sex with others. A condom keeps you safe and protects you from re-infecting each other. Because the condom comes between the penis and the vagina, it prevents the syphilis germs from passing from one person to the other.

You and your partner can show respect for each other by agreeing to use condoms with all outside partners in order to protect the life and health of the unborn baby and your family.



4C All pregnant women should come to the antenatal clinic regularly until they give birth. Now that you have had syphilis, it is even more important that you continue to come for ANC, to be sure that you and your baby will be healthy.



4D **Review** The first thing that you need to do when you go home is to notify your partner that he must come to the clinic.

After you have both been cured, you and your partner can prevent reinfection with syphilis if you both

stick to one partner

use a condom every time you play sex

make sure that you continue to attend antenatal clinic regularly





5A Many women find it difficult to notify their partners that they need to be treated for syphilis

ASK Will it be difficult to tell your partner? Why?

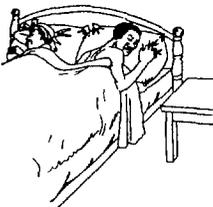
PROBE

Can you find your partner?

If you cannot then tell him when you see him again but do not play sex with him until he is cured

Are you afraid that your partner may be angry or violent or that he may blame you for being infected with syphilis? *

If yes do not mention syphilis to him Just tell him that the doctor wants to see him at the clinic and give him the notification card



5B Many women find that they cannot refuse to play sex with their partner especially when they are staying together But it is important that you do not play sex until both of you have been treated and cured

Some things you could do if it is difficult to abstain are

Use condoms every time

If you must stay in the same place sleep separately

many male partners argue very well against using condoms Here are some of the points they come up with and some points that other women have successfully used in reply

MAN

- 1 You are my wife so I don't have to use a condom
- 2 Condoms are childish
- 3 I won't feel anything its like wearing a raincoat
- 4 I'll lose my erection by the time I put it on I won't be in the mood
- 5 Condoms are dirty
- 6 Just this once
- 7 I don't have any condoms
- 8 Condoms are unnatural and a total turn off
- 9 You have never asked me to use a condom before!

WOMAN

- 1 As husband and wife we must protect our unborn child
- 2 Sexually transmitted diseases are worse than childish These days even elders and wives can get syphilis
- 3 I know you will feel enough You will last longer and I like it that way Haraka har aka haina baraka
- 4 I have been shown in the clinic how to put on a condom I will help you
- 5 Reinfection with syphilis is worse than dirty
- 6 Once is all it takes to get reinfected
- 7 I have been given some at the clinic
- 8 Syphilis is a turn off too it takes away enjoyment
- 9 Now is the time to be responsible for ourselves and the baby



5C Many women think they cannot talk to their partners about limiting the number of other partners or using condoms with outside partners

If your partner is unwilling to stick to one partner or use condoms you can

Ask someone else to help you by talking to your partner This person could be a friend a relative or a church leader Your partner can talk to one of the health workers when he comes to the clinic for treatment



5D Sometimes no matter how hard a woman tries it is impossible to convince her partner that he must do all the things we talked about today If your partner refuses to co operate to protect the health of your baby, the responsibility falls on you You can consider doing this

Go home and explain to the family what has happened

If the family cannot help you so that you can return to your partner then you can stay with the family until the baby is born and you have recovered fully

I am going to give you this leaflet to take home with you and some condoms to give to your partner

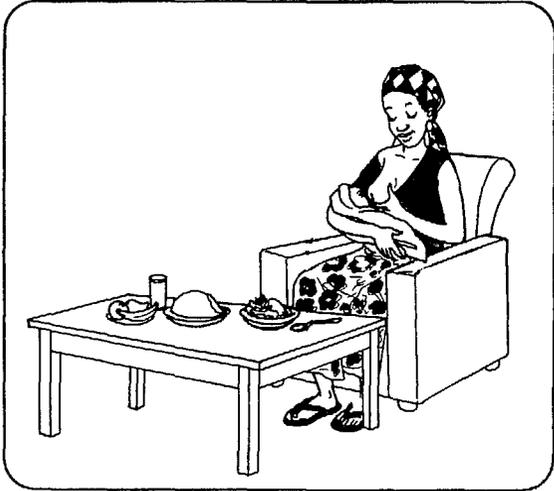
Transition to Condom Demonstration

I have already shown you how to use a condom Now as a review you show me how to use it

Is there anything else that you would like to talk about before you go home?

See you next (week/month) for your next ANC visit

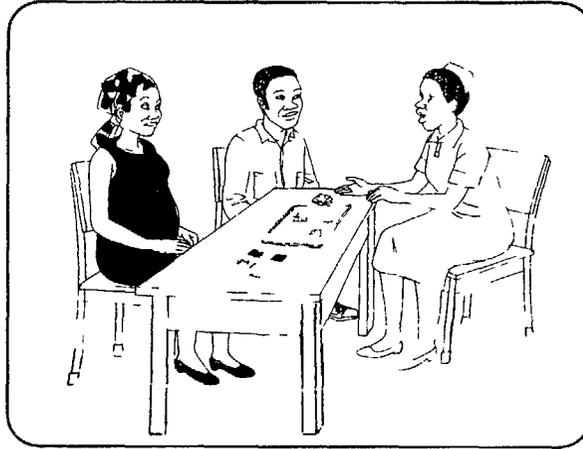
AFTER THE BABY IS BORN



Take good care of yourself and the baby



Bring your baby to the clinic for examination two weeks after birth



- Read this leaflet with someone you trust
- Ask your partner to read it too
- You can get more copies of this leaflet at the nearest clinic



Mother Care

Produced by
 The University of Nairobi
 for
 the Nairobi City Council
 and the Ministry of Health

PROTECT YOUR FAMILY'S HEALTH



NOW THAT YOU HAVE BEEN TREATED



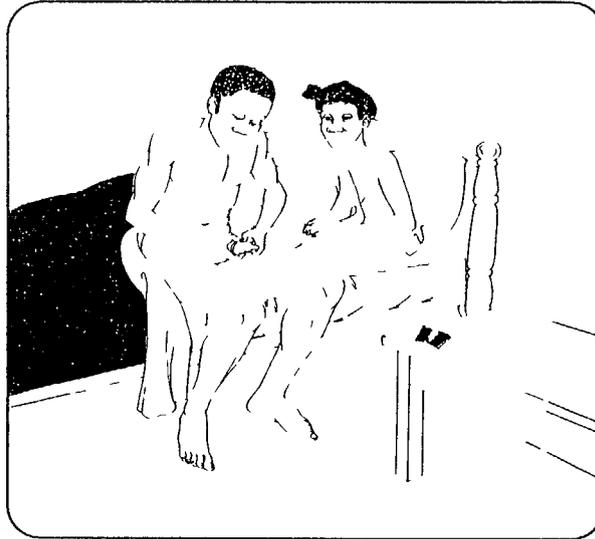
Notify your partner today Tell him to come to the clinic right away



You can tell him yourself that he needs treatment or we will tell him when he comes to the clinic

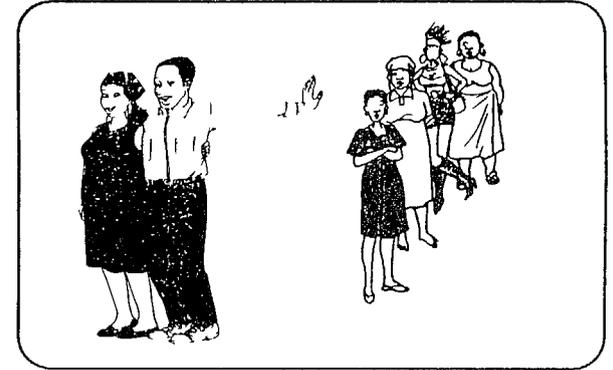


Do not play sex with anyone until one week after you and your partner have been treated



If you must play sex, use a condom each and every time

UNTIL THE BABY IS BORN



Stick to one partner



Use a new condom whenever you play sex



Continue to come regularly for antenatal clinic

Counselling Cards

for

Syphilis Control

in Pregnancy



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Project #936-5966**

How to use The Counselling Cards

There are

5 cards for the pregnant woman

6 cards for the partner

PREGNANT WOMAN CARDS

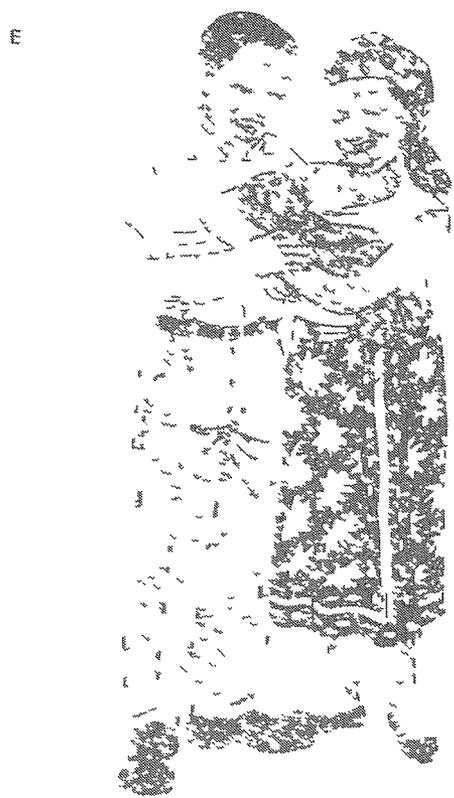
- Card 1 is to be used with a pregnant woman who has been found RPR positive. It provides basic information about syphilis.
- Card 2 describes partner notification, how the woman can negotiate with her partner to go for treatment, and the options for her partner to abstain from sex for a period of time or use a condom.
- Card 3 explains sexual networking. For example, it explains how the disease is spread from one person to another.
- Card 4 describes behaviour expected of men with outside partners - to either stick to one partner or use condoms.
- Card 5 suggests options for a woman to negotiate with a difficult partner.

PARTNER CARDS

- Card 1 is to be used with partner of woman who is RPR positive. It provides basic information about syphilis.
- Card 2 informs the partner of the need to abstain, to use condoms and to encourage the woman to attend antenatal clinic to ensure delivery of a healthy baby.
- Card 3 explains sexual networking. For example, it explains how the disease is spread from one person to another.
- Card 4 describes the need for the partner to inform all his outside partners. It offers options to stick to one partner, reduce the number of sexual partners, or to use condoms with outside partners.
- Card 5 explains the advantages of the condom and encourages the partner to use condoms with the pregnant partner or with outside partners.
- Card 6 demonstrates condom use.

The counselling cards should be used in communicating correct information to the client. In order to use them effectively the counsellor must

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- 2 Hold the card in front of him/herself with his/her left hand so that the illustrations face towards the client and close enough so that the client can see the images clearly. He/she should make sure she does not obscure his/ her face with the card.
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- 5 At the end of each card, ask the client to summarize, then give the summary provided.
- 6 Select the next card when the client is ready for more information, or as appropriate.
- 7 At the end of the counselling session, put the cards back in order for use with the next client.



- 1A** Your wife had a blood test as part of her routine antenatal care. This test showed that she had a disease called syphilis, so we treated her. These days, many pregnant women in Kenya also have syphilis.



Since your wife has syphilis, you probably have syphilis too.

Syphilis is a sexually transmitted disease but it is not like AIDS or gonorrhoea. Your wife has not been tested for AIDS or gonorrhoea.

Any man or woman can get syphilis. You get syphilis by playing sex with someone who has it. The first sign of syphilis is a painless sore in the genital area. The second symptom can be a rash anywhere on the body. These symptoms disappear after some time. If a person is not treated he/she can have syphilis for many years before feeling sick or noticing any symptoms.

- 1B** Syphilis can cause serious health problems for the pregnancy and the baby. Pregnant women with syphilis who are not treated can lose the pregnancy (have a miscarriage) or the baby can be born alive, but too early or it can be born dead.



Syphilis can pass on to her unborn baby if it is not treated early in the pregnancy. If you and your wife are not both treated, your baby can be born with syphilis.

Babies born with syphilis can

- die soon after birth,
- grow up to become deaf, or
- develop permanent defects to the nose and teeth and bones as they grow up.

Men who have syphilis can also have health problems. Syphilis can cause serious and permanent damage to your brain and heart. If men with syphilis remain untreated for many years, it can result in paralysis, mental illness and death.



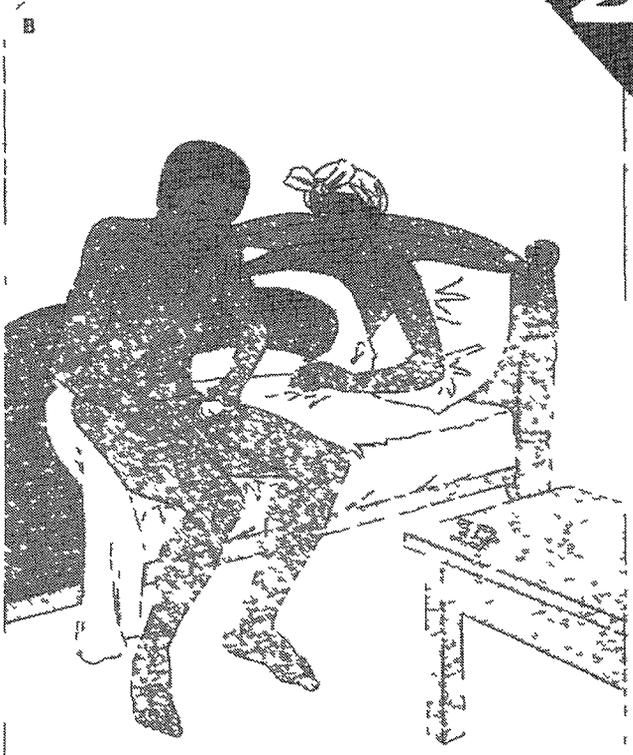
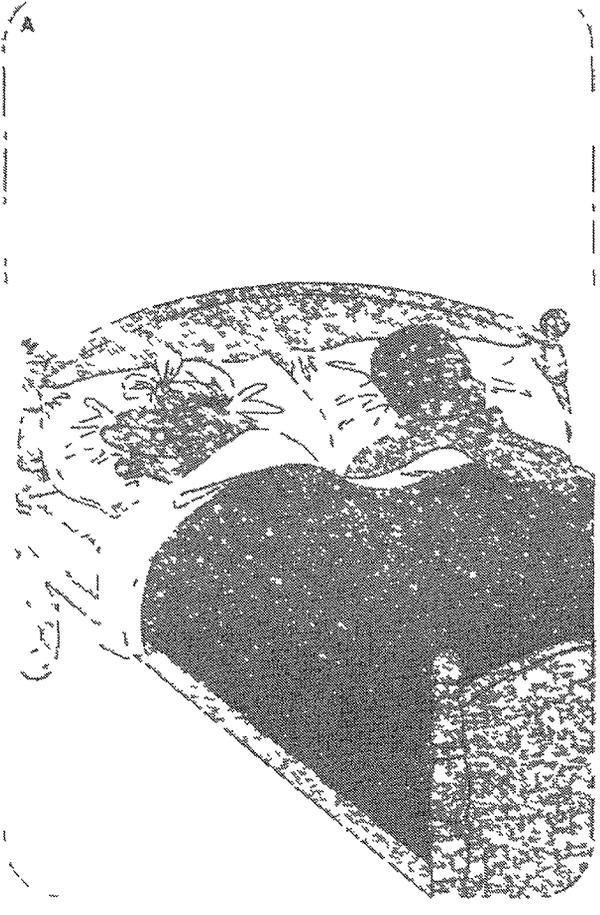
- 1C,D** We treated your wife immediately and asked you to come for treatment as soon as possible.



- 1E** Don't worry! If you are treated today, seven days later, you will also be cured. The medicine takes some time to work. After your wife's treatment, no more damage from syphilis will happen to her or the unborn baby, as long as she is not re-infected with syphilis. We are glad you came to this clinic, so we know you both have been treated.



Even after you have been treated, it is very easy to get syphilis again. There are some things you must do which will protect you from getting syphilis again, and infecting others.





2A You should not play sex with your wife from the time she was treated until 7 days after your treatment. You should not play sex with any other person until one week after your treatment. If you play sex with anyone else during this time, you can get syphilis again and pass it on to your wife and baby. If you have played sex with your wife between the time she was treated and now without using a condom, please tell me so that we may treat her again.

Some men find it difficult not to play sex with anyone for a week especially if they do not feel sick.



2B If you cannot stop playing sex for one week after treatment, you must use a condom each time you play sex, even with your wife. The condom prevents the syphilis germs from passing between you and your partner in the same way that gumboots protect your feet from getting wet.

Some men haven't tried condoms yet.

SAY I will show you the best way to use a condom.



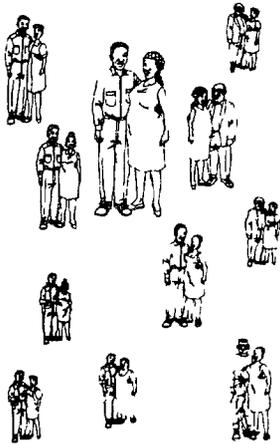
2C All pregnant women should come to the antenatal clinic regularly until they give birth. Now that your wife has had syphilis, it is even more important that she continue to come for ANC, to be sure that she and the baby are well.



2D Only you can protect your family by making sure that you and your wife do not get syphilis again. Do these simple things to show that you care about the baby's life, and your family's health.

Review

- Do not play sex with anyone for a week after you have been treated for syphilis
- If you must play sex, use a condom every time even with your wife
- Make sure your wife continues to come to the antenatal clinic regularly



Syphilis is passed on in two ways. One way is from the pregnant woman to her unborn baby. However, the most common way is by playing sex with someone who has syphilis. A person who has syphilis infects his/her partner when the syphilis germs pass from one body to the other while playing sex.

Most people who have syphilis do not know they have it. You cannot tell if someone has syphilis by looking at him or her. Most people who have syphilis look and feel healthy.

In the whole world and also in Kenya today, the number of people who have syphilis is growing. The more partners a person has, the greater his/her chances of getting syphilis and passing it on to others without knowing it.

Demonstrate If only one person has syphilis, many others are in danger of getting infected. This picture shows how syphilis can spread to many people.

Point to a person in the picture and ask
If this person has syphilis, who else in the picture will be infected?

Ask Now that you have seen how easily syphilis can spread when people play sex with many others, can you think of any way you could change your own life, so that you will not get syphilis again?

Many people believe that only certain types of people can have syphilis, such as prostitutes and unmarried men. But we know now that anyone can have syphilis, no matter how he/she looks, no matter what type of work he/she does, no matter which part of the country he/she comes from. Nowadays, even housewives and married men have syphilis. But remember syphilis is not like AIDS; it can be cured.

These days, everyone needs to be more careful about who he/she plays sex with.

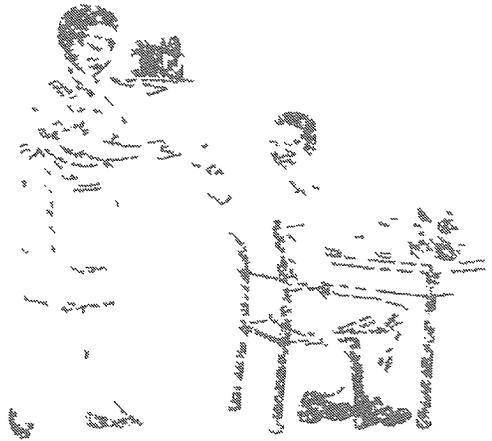
Anyone who finds out that he/she has syphilis has a responsibility to let all his/her other partners know that they may have syphilis, so that they can go for treatment. This helps to stop syphilis from spreading.

Demonstrate This picture shows who each person should inform if he/she has syphilis.

Point to a person in the picture and ask
If this person has syphilis, who should he/she inform about going for treatment?



B

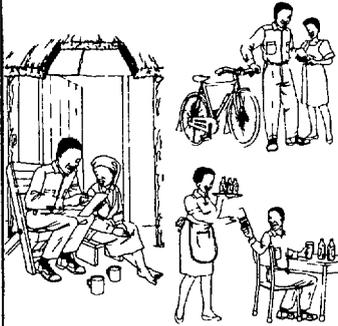


C



4

4A If you have more than one wife you must make sure that they are treated for syphilis. You should not play sex with any of your wives until one week after each of them is treated.



Some men in Kenya have other partners in addition to their wives. If you have any other partners, you should inform them all about the need to be treated for syphilis as soon as possible. If they are nearby, they can come to this clinic for treatment.

I will give you several cards for your wives and outside partners. They can present this card wherever they go for treatment and a doctor will know what to do.

* (this must be a partner notification card which specifies diagnosis of syphilis)

Give As many partner notification cards as the client requests

4B To be sure you do not get syphilis again, do not play sex with any regular outside partner until you are sure she has been treated for syphilis also. Do not play sex with any casual outside partner.



Once you all have been treated, playing sex with only your steady partner (or trusted co-wife if you have one) is the best way to avoid catching syphilis or other STDs again. After you and your wives have all received treatment and been cured, you can only be sure you will not catch syphilis again if you all do not have any other sexual partners.

Even if your other partners are treated for syphilis, it is difficult to be sure that they are not playing sex with other men.

ASK How will you try to stick to one steady partner?

4C After the 7 days treatment period, you may not want to use a condom with your wife until the baby is born. This you can only do if you use a condom every time you play sex with anyone else. Because the condom comes between the penis and the vagina, it prevents the syphilis germs from passing from one person to another.



It is difficult to talk truthfully with your partner about playing sex with other people. Men often deny that they have other partners, even if they know they do have. Sometimes women also deny that they have other partners.

Show respect for each other by agreeing to use condoms with all outside partners.

ASK How will you make sure that you always use a condom with outside partners?

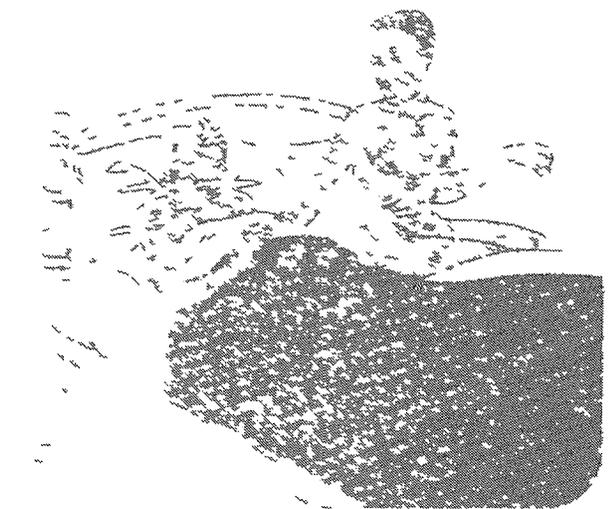
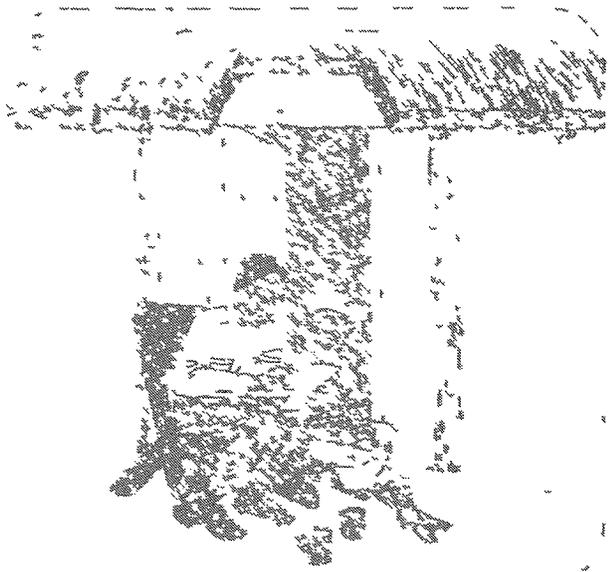
Review After you are treated, you and your partner can prevent re-infection with syphilis if you both

Notify all outside partners (including your co-wife if you have one) of the need to be treated for syphilis.

Stick to one partner.

Use a condom every time you play sex with anyone else.

Make sure that your wife attends antenatal clinic regularly.



**5A Be safe!**

Condoms provide the best protection against syphilis, AIDS and other diseases which you can catch from playing sex. Why worry? Always use condoms when playing sex with outside partners.

**5B Be responsible!**

Only you can protect your baby, your wife and yourself.

- Stick to one partner
- Use a condom every time you play sex with anyone other than your wife
- Make sure that your wife attends antenatal clinic regularly

**5C Be trustworthy!**

Make sure that your other partners are informed and treated.

**5D Be modern!**

More men are using condoms these days now that they realize the protection a condom provides. Condoms are not childish - men who use them are better men.

**5E Be satisfied!**

Playing sex can still be a pleasure when you use condoms. In fact, many men enjoy sex more because they know they do not have to worry about getting syphilis or other STDs.

It takes time to get used to anything new. Don't give up after trying condoms only once. Each time you use a condom, it becomes easier and feels more comfortable.

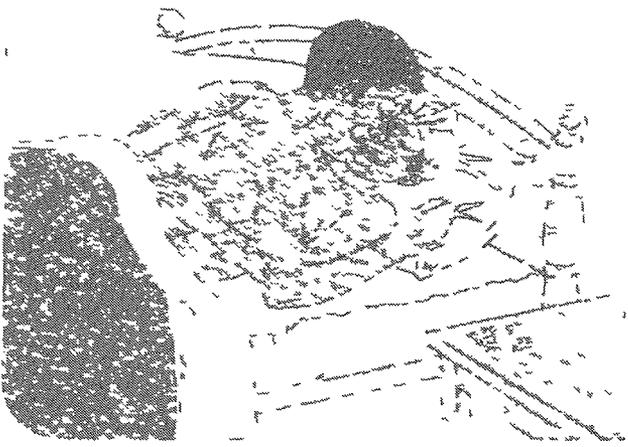
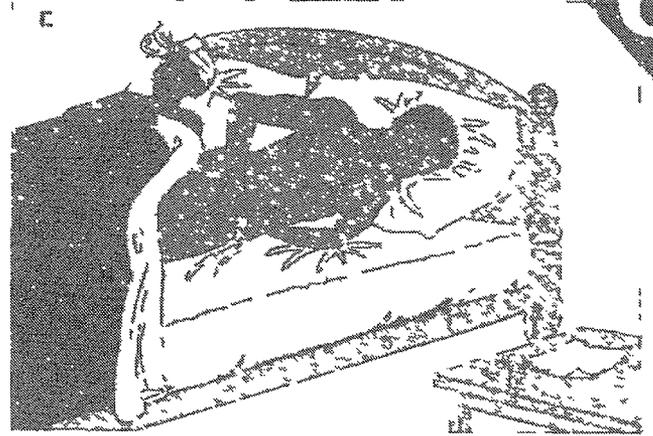
**5F Be prepared!**

Condoms are easier to get now. You can get them at hospitals and clinics, small shops, kiosks, chemists, and supermarkets.

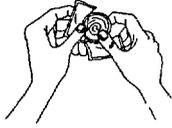
Keep a supply on hand. Think about having condoms with you before you are ready to play sex.

Here are some condoms to take with you

ASK Do you have any questions about where to get more condoms when you need them?



Condoms are easy to use Here are some simple guidelines



- 6A Tear open the packet and remove the condom carefully Do not unroll the condom before putting it on



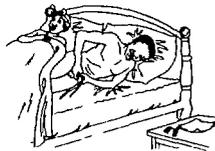
- 6B Pinch the end of the condom to leave some space without air and place the rim of the condom over the head of your erect penis If you are not circumcised, pull back the foreskin first



- 6C Roll the condom all the way down the shaft of your penis Do not try to put it on like you pull a sock onto your foot

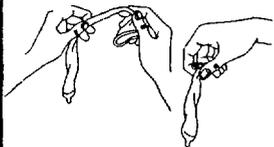


- 6D Enjoy playing sex with your partner! Be sure to use a fresh condom each time before putting your penis inside the vagina

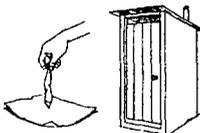


- 6E After finishing, be sure to remove your penis from the vagina before it becomes soft to prevent the condom from slipping off

Remove the condom from your penis being careful not to spill any fluid



- 6F Tie a knot in the condom and push the knot as close to the top as possible This is to make sure that children cannot open the condom if they find it



- 6G Wrap the condom in a piece of paper or a plastic bag kept near your bed and dispose of it then or later in a latrine or other place far from the reach of children **ALWAYS DISPOSE OF USED CONDOMS FAR FROM THE REACH OF CHILDREN!**

Remember

- Use a condom each and every time you play sex with outside partners
- Use each condom only once
- Don't use grease, oil or Vaseline to lubricate the condom These cause condoms to break
- Don't use condoms that are spoilt or old
- Don't use a condom if
 - Its packet is already torn
 - the condom is hard or dry
 - the colour has changed or it has spots
- Dispose of the condoms far from the reach of children



Be modern!



Be satisfied!



Be prepared!



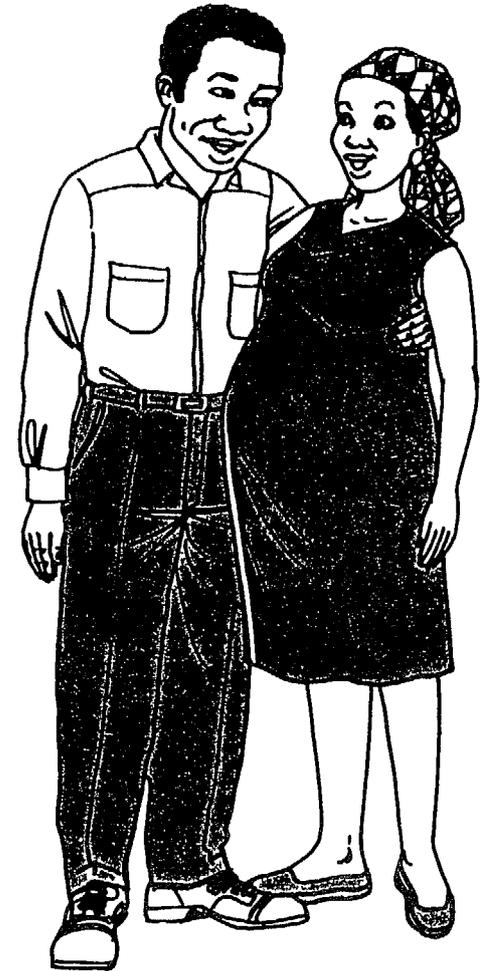
- Read this leaflet with someone you trust
- You can get more copies of this leaflet at the nearest clinic



MotherCare

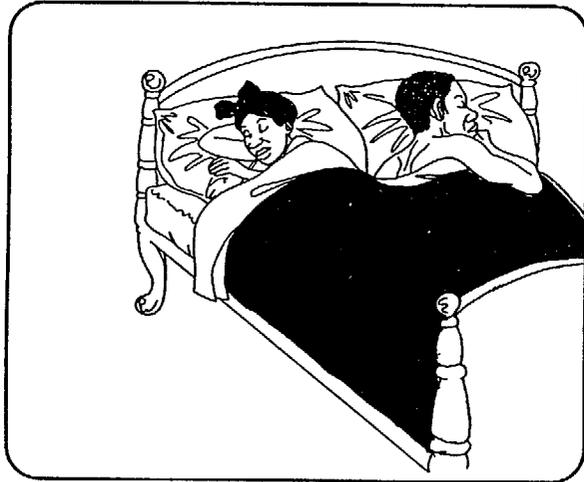
Produced by
 The University of Nairobi
 for
 the Nairobi City Council
 and the Ministry of Health

PROTECT YOUR FAMILY'S HEALTH

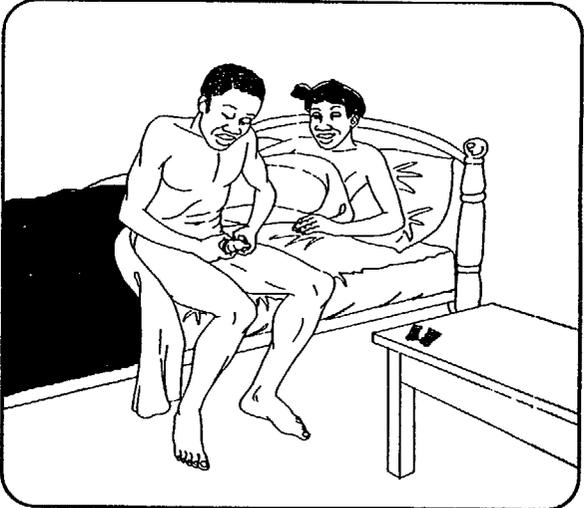


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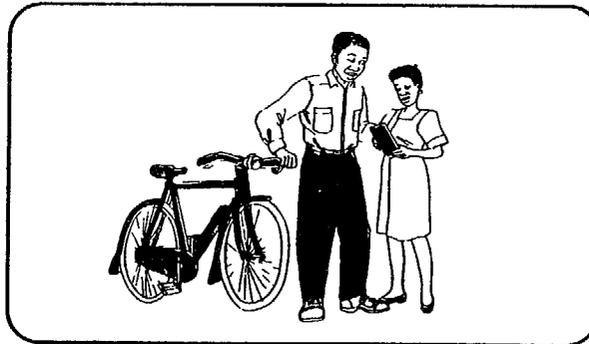
NOW THAT YOU AND YOUR PARTNER HAVE BEEN TREATED



Wait for one week after treatment before you play sex with anyone



Use a condom each time, especially with your pregnant partner, if you cannot abstain for one week



Notify all other partners that they should be treated, especially your other wives



Stick to one steady partner



Use a condom every time you play sex if you cannot stick to one steady partner

REMEMBER



Be safe!



Be responsible!



Be respectful!

APPENDIX 6
SUMMARY OF DATA COLLECTED IN THE TEN CLINICS

A SUMMARY OF DATA COLLECTED FROM THE 10 CLINICS FROM JULY '92 TO MAY '93

MONTH	N NEW ANC VISITS	N < 20 WEEKS (%)	N RPR DONE (%)	N RPR POSITIVE (%)	N RPR POSITIVE AND TREATED (%)	PARTNER NOTIFICATION				QUALITY CONTROL			
						N NOTIFIED	N SPONTANEOUS RETURN (%)	N ASSISTED RETURN (%)	N TREATED (%)	N RPR POS CLINIC (%)	N RPR POS UON (%)	N FALSE NEG (%)	N FALSE POS (%)
JULY	386	77/376 (20.5)	386 (100)	34/386 (8.8)	31/34 (91.2)	34/34 (100)	8/34 (23.5)	15/34 (44.1)	23/34 (67.6)	18/201 (9.0)	14/201 (7.0)	0/201 (0)	4/201 (2.0)
AUG	550	86/550 (15.6)	550 (100)	38/550 (6.9)	29/38 (76.3)	36/38 (94.7)	3/38 (7.9)	17/38 (44.7)	20/38 (52.6)	30/411 (7.3)	20/411 (4.9)	0/411 (0)	10/411 (2.4)
SEPT	706	125/573 (21.8)	706 (100)	65/706 (9.2)	61/65 (93.8)	61/65 (93.8)	27/65 (41.5)	12/65 (18.5)	39/65 (60.0)	21/190 (11.1)	18/190 (9.5)	0/190 (0)	3/190 (1.6)
OCT	770	144/768 (18.8)	770 (100)	65/770 (8.4)	60/65 (92.3)	64/65 (98.5)	28/65 (43.1)	12/65 (18.5)	40/65 (61.5)	15/241 (6.2)	15/241 (6.2)	0/241 (0)	0/241 (0)
NOV	996	173/948 (18.2)	996 (100)	46/996 (4.6)	32/46 (69.6)	36/46 (78.3)	12/46 (26.0)	3/46 (6.5)	15/46 (32.6)	25/519 (4.8)	28/519 (5.4)	3/519 (0.6)	0/519 (0)
DEC	983	233/887 (26.3)	983 (100)	48/983 (4.9)	44/48 (91.7)	46/48 (95.8)	17/48 (35.4)	2/48 (4.2)	19/48 (39.6)	17/416 (4.1)	19/416 (4.6)	2/416 (0.5)	0/416 (0)
JAN	1097	262/945 (27.7)	1095 (99.98)	69/1095 (6.3)	58/69 (84.1)	58/69 (84.1)	16/69 (23.2)	17/69 (24.6)	33/69 (47.8)	24/369 (6.5)	26/369 (7.0)	2/369 (0.5)	0/369 (0)
FEB	1248	256/997 (25.7)	1248 (100)	87/1248 (7.0)	74/87 (85.1)	71/87 (81.6)	27/87 (31.0)	12/87 (13.8)	38/87 (43.7)	29/411 (7.1)	36/411 (8.8)	7/411 (1.7)	0/411 (0)
MAR	1397	292/1296 (22.5)	1397 (100)	99/1397 (7.1)	80/99 (80.8)	80/99 (80.8)	43/99 (43.4)	0/99 (0)	45/99 (45.5)	13/335 (3.9)	17/335 (5.1)	4/335 (1.2)	0/335 (0)
APRIL	1320	218/1025 (21.3)	1320 (100)	106/1320 (8.0)	83/106 (78.2)	89/106 (84.0)	38/106 (35.8)	0/106 (0)	44/106 (41.5)	26/315 (8.3)	16/315 (5.1)	0/315 (0)	10/315 (3.2)
MAY	1311	268/1056 (25.4)	1311 (100)	78/1311 (5.9)	613/735 (83.4)	59/78 (75.6)	36/78 (46.2)	0/78 (0)	36/78 (46.2)	31/391 (7.9)	21/391 (5.4)	0/391 (0)	10/391 (2.6)
TOTAL	10 764	2134/9421 (22.7)	10762/10764 (99.98)	735/10762 (6.8)		634/735 (86.3)	255/735 (34.7)	90/735 (12.2)	352/735 (47.9)	249/3799 (6.6)	230/3799 (6.1)	18/3799 (0.5)	37/3799 (1.0)

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APPENDIX 7
COST-EFFECTIVENESS CALCULATIONS

APPENDIX 7 CALCULATIONS OF COST EFFECTIVENESS OF THE PROGRAM

Indicators of the program on which calculations are based (through September 1993)

Indicator	Number (%)
Total number of women screened	13,628 (100)
Total number RPR pos	927 (6 8)
Total number of women treated	770 (83 1 of 927)
Total number of partners treated	434 (46 8 of 927)
Total number of Quality control	4,789 (35 1)

Cost of screening (U S \$1 00 - HFL 2 00)

Activity	Cost per activity in HFL (Dutch Guilders)	Total cost in HFL
RPR test	0 25	
Needles, swabs, syringes	0 20	6,200 -
Treatment pregnant women	1 20	1,000 -
partners	1 20	520 -
Quality Control	0 25	1,200 -
Refresher training	1,400 -	1,400 -
Personnel		
Technician	5,000 -	5,000 -
Supervisor	10,000 -	10,000 -
Clinic staff	12,500 -	12,500 -
Total		37,820 -

- Cost calculated over a time frame of one year
- Prices calculated according to IDA price list in Dutch Guilders (HFL)
- Clinic staff involvement is calculated as 12 months, 10 clinics, at half time salary This arbitrary, it is staff already available in the clinic and paid by the Nairobi City Council It gives the "real" cost of screening
- The total cost *excluding* clinic staff is Hfl 25,320

The cost of the program are calculated as per *recurrent* cost The financial inputs for the development of the IEC materials, the initial training and the development of the training module are excluded from the calculations The refresher training once per year is included, since this is vital for the sustained motivation of the clinic staff

Adverse pregnancy outcome prevented by this screening program

Stillbirth and prematurity	15%
Congenital Syphilis	30%

770 women RPR pos
 256 normal birth
 128 preterms and stillbirths
 256 congenital syphilis
 Total prevented 384 bad pregnancy outcomes

Cost effectiveness calculation

Total cost per treated case	Hfl 49 - (37820/770)	USD 25 -
Total cost per treated case (excluding staff cost)	Hfl 33 - (25320/770)	USD 16 -
Total cost per averted bad pregnancy outcome	Hfl 98 - (37820/384)	USD 50 -
excluding staff cost	Hfl 66 - (25320/384)	USD 33 -

APPENDIX 8
PROJECT PERSONNEL AND CONTACTS

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APPENDIX 8 PERSONNEL AND PROJECT CONTACTS

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