



Control *of* Sexually Transmitted Diseases

A HANDBOOK FOR THE DESIGN AND MANAGEMENT OF PROGRAMS

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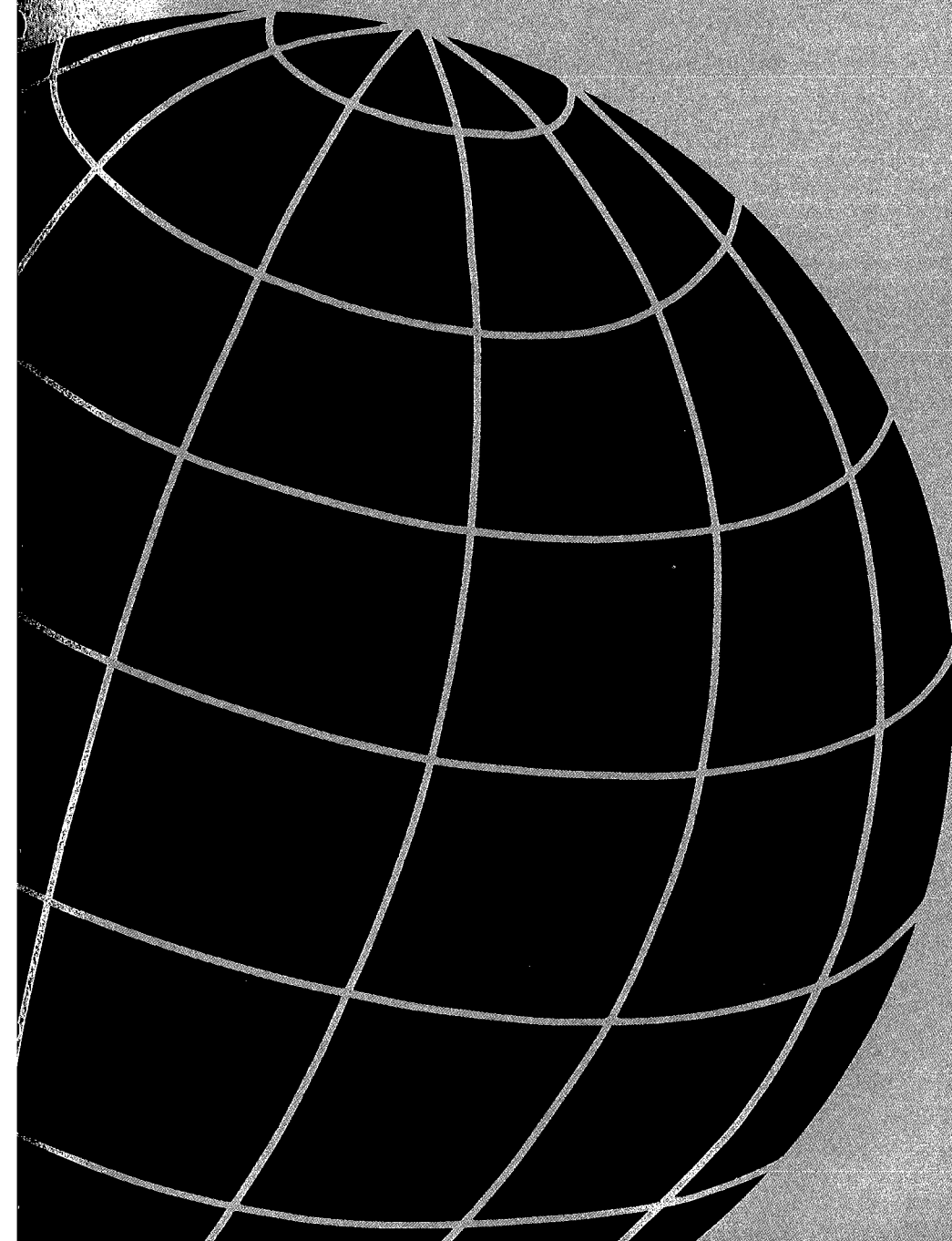
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C H A P T E R

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*Guidelines for
the Management
of STD Control
Programs*

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Guidelines for the Management of STD Programs

INTRODUCTION

This chapter describes the role and structure of STD program management and the process for planning and implementing STD control activities.

PROGRAM MANAGEMENT AND STRUCTURE

Program management is the organization and control of available human, material and financial resources to ensure that they are being used effectively and appropriately.

PROGRAM DELIVERY AND COORDINATION

Coordinating resources and activities within a program and with people from other groups (both private and public sectors) is an important management task that should take place at every phase of the program.

VERTICAL VERSUS HORIZONTAL PROGRAMS

STD program activities can be delivered through vertical or horizontal systems. In a vertical system, services are provided through special STD clinics; in a horizontal system, such services are provided at general health-care facilities. There are advantages and disadvantages to both.

PROGRAM PLANNING AND IMPLEMENTATION

STEPS

- A **situational assessment** is conducted to obtain a clear picture of a country's STD challenges, available resources and the political, legal and social factors that might influence the program.
- A **political commitment** makes it possible to obtain resources, promote safer sexual behavior, introduce sex education into the school curriculum and promote condom use.
- A **national STD policy** indicates a government's commitment to addressing the STD problem and provides clear policy guidelines.

- A **selection of program priorities** has to be made because STDs and resulting complications are not distributed evenly throughout a population and, in many situations, resources are scarce. Much of this depends on identifying “core groups.”
- **Setting objectives and designing strategies** is essential for effective program management. Objectives state in broad terms what the program is expected to achieve. A strategy describes how specific objectives will be met.
- **Planning the implementation** of control activities involves coordination with all the key components, such as, the Essential Drugs Program (EDP), which ensures that appropriate drugs are made available to first-level health-care facilities.
- **Support components** essential to developing and implementing an STD control program that should be included in the work plan include the following: guidelines; training; logistics (including drugs and condoms); laboratory services; research; and surveillance.
- **Resource mobilization** requires frequent advocacy and negotiations with many sectors, including national governments and international partners.
- **Monitoring** is the process of assessing how well various program activities have been implemented. It should be both quantitative and qualitative.
- **Evaluation** is a periodic assessment of whether a program is meeting its planned objectives. Evaluation results are essential to revising less successful program components, planning program expansion, or developing or implementing new strategies.

C O N C L U S I O N

Understanding the essential aspects of program management and the planning process will allow program managers to develop cost-effective STD control programs that can accommodate social, cultural, epidemiological and political variations and make the best use of existing resources.

STD control programs must be designed to address each country's unique epidemiological situation, behavioral patterns and cultures. Consequently, no standard STD program will be appropriate for every country, and even within a single country, a control program is likely to change over time to address changes in STD epidemiology, in society and in control opportunities.¹

I N T R O D U C T I O N

Despite these variations, programs inevitably share many similarities. The objectives of all STD programs are similar, and the requirements for an adequate management structure are the same, even if such programs differ in operational detail. This chapter describes the role and structure of STD program management and the process for planning and implementing STD control activities.

The objectives of STD control are the following:

- Interrupt the transmission of sexually acquired infections.
- Prevent the development of diseases, complications and sequelae.
- Reduce the risk of HIV infection.

An STD control program seeks to achieve these objectives through a management structure that delivers both education to prevent infections and clinical services to treat infections. Preventing infections involves promoting sexual and reproductive health, safer sexual behavior including condom use, and assuring that good quality, affordable condoms are available. Treatment involves promoting health-care-seeking behavior, particularly among those at increased risk of acquiring STD, and providing accessible, acceptable and effective diagnosis and treatment for symptomatic and asymptomatic STD patients and their partners.

Successful management of these activities requires an STD management unit in the Ministry of Health. This unit should be responsible for the following:

- Designing strategies, setting priorities, and planning and supervising control activities
- Coordinating resources and activities within the program and with other programs or sectors of the health-care system, both public and private
- Monitoring, evaluating and revising the control program or planning its expansion

To fulfill its responsibilities, the STD unit should interact with the Ministry of Health and with health workers at various levels of the health-care system, both in the public and private sectors. The unit should collaborate with other programs, medical associations and organizations and should involve different sectors of society, including nongovernmental organizations (NGOs) and the business sector. It is particularly important to collaborate with primary health care and maternal child health/family planning (MCH/FP) programs and to establish close links or integration with HIV/AIDS programs. Such collaboration requires a well-defined management structure.

PROGRAM MANAGEMENT AND STRUCTURE

Program management is the organization and control of available human, material and financial resources to ensure that they are being used in the most effective and appropriate manner to achieve a program's objectives.

STD UNIT

An STD program should be managed by an STD unit in the Ministry of Health. This can be an independent unit, part of the national AIDS control program or part of a larger division such as the communicable diseases program. Because of the close linkages between HIV/AIDS and the traditional STDs, it is recommended that STD and AIDS programs be integrated. However, in such an integrated STD/AIDS program a manager should be responsible for STD control. If the STD and HIV/AIDS programs are not integrated, close collaboration and coordination between them are essential.

The STD unit should be headed by a full-time program manager with a public health background. This person should report to the HIV/AIDS program manager or to someone higher in the Ministry of Health who can make policy decisions and issue guidelines. The program manager represents and promotes the STD control program not only within the Ministry of Health, but also with opinion leaders, NGOs, the private sector, and donors.

In larger countries where disease control activities are decentralized to states, districts or municipalities, it is best to appoint STD program managers at each of these levels. Even if it is not possible to appoint full-time STD managers for state, district or municipal programs, staff responsible for disease control at these levels must be sensitized to the importance of STD control and involved in planning the control program. Whether full- or part-time, these regional, district or municipal STD managers should report through the appropriate channels to the national STD program manager.

In most countries, however, management and implementation of STD program activities will be integrated into the existing health-care system with no separate management structure, except for the central STD unit.

TECHNICAL STD COMMITTEE

A national technical committee should be formed to assist the STD unit in technical areas of STD control. In smaller countries there might be one technical committee for both HIV/AIDS and STD. The committee should assist in drafting a national STD policy and in developing strategies and approaches. It can also advise the STD unit on technical issues, including standardized treatment guidelines, national adaptation of patient management flowcharts, identification of research issues, review of research proposals and STD surveillance.

The national STD committee should be composed of key experts from different fields: STD specialists, microbiologists, public or community health specialists, and information, education and communication (IEC) experts. Others such as pharmacists and gynecologists can be consulted when required.

Because most STD programs will collaborate with the private and NGO sectors, it is advisable to include representatives from these sectors on the committee. A broad-based committee eases the process of obtaining peer approval for and national consensus on strategies and approaches. A broad base of support is particularly important in countries where the STD program is developing a more public-health approach, often against initial resistance from established and influential clinicians. A broad-based STD committee also strengthens the ability of the program manager to obtain a political commitment to STD control and negotiate adoption of a national STD policy.

PROGRAM DELIVERY AND COORDINATION

The STD unit should prepare a plan for STD control, ensure the implementation of planned activities, monitor and evaluate the program, and use monitoring and evaluation results to revise plans or to expand the program.

Coordinating resources and activities within a program and with people from other programs or sectors of the health-care system is an important management task that should take place at every phase of the program. An important principle of coordination is that early involvement in planning leads to greater cooperation and collaboration. For example, providing STD clinical services for women through MCH/FP and antenatal clinics (ANC) can best be planned in close consultation with those programs. Similarly, a program to control congenital syphilis should be developed with the national MCH/FP program.

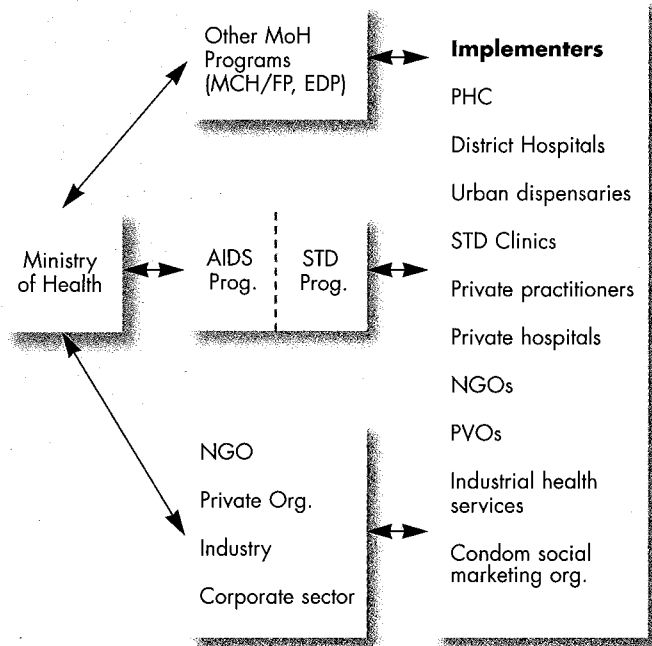
Coordination can be achieved through regular meetings with interested programs. To ensure that proper and consistent STD prevention messages are integrated into the HIV/AIDS control program, regular meetings should be held with IEC staff.

Communication between the STD unit and the Ministry of Health is usually straightforward, with an established line of reporting. Channels of communication with other programs in the Ministry of Health and with other ministries need to be established and made as simple and direct as possible.

COORDINATION WITH PUBLIC SECTOR IMPLEMENTERS

It is particularly important to communicate with and involve the actual implementers of the program—the staff at different levels of the health-care system. Depending on the program strategies that are adopted, implementers may include public sector STD specialists, public sector medical officers, paramedical staff, private sector health-care providers, NGO staff and health-care workers in industries.

Figure 1
PARTNERS IN PROGRAM IMPLEMENTATION



Health-care workers at the peripheral levels of the system are usually overworked and often reluctant to take on new tasks and responsibilities. These constraints can best be overcome by involving the first-line workers in the planning process, particularly in implementation planning.² Once implementation begins, there should be frequent supervision and communication between implementers and program managers to ensure timely feedback on problems or constraints.

Annual program review, evaluation and planning meetings may be organized. Getting regional or district managers to participate in such meetings will serve at least three important goals, which are the following:

- Provide communication opportunities about program implementation with the central STD unit (vertical communication).

- Provide opportunities for managers and implementers to share experiences (horizontal communication).
- Foster a sense of ownership of and commitment to the program.

To facilitate the involvement of regional, district, municipal and peripheral staff, job descriptions and terms of reference should be clearly defined. In addition, lines of communication for the flow of information from the center to the periphery, as well as from the periphery to the center, should be spelled out. Feedback from the central level to the peripheral levels is crucial to ensure continued commitment of the health-care workers to the program.

COORDINATION WITH THE PRIVATE SECTOR

Initially, private sector health-care providers might not see any benefits in collaborating with a national STD program. But by involving them in the planning process, the STD program manager can hear their views and, accordingly, develop approaches that are mutually beneficial. For example, getting private practitioners to adopt standard treatment regimens of proven efficacy contributes to more effective STD patient management. This, in turn, enhances the status of the private practitioner, which might increase his patient load. Finally, it contributes to achieving one of the desired outcomes of the program. Figure 1 shows the lines of communication among different partners in STD program development and implementation.

VERTICAL VERSUS HORIZONTAL PROGRAMS

STD program activities can be delivered through vertical or horizontal systems. In a vertical system, clinical services for management of STD patients are provided through special (dedicated or categorical) STD clinics; in a horizontal system, such services are provided at general health-care facilities. In an integrated, horizontal program, most patients are managed at the first level of the health-care system; in a vertical system, patients are usually referred to specialist STD clinics.

Box 1

A COMBINATION OF VERTICAL AND HORIZONTAL COMPONENTS ENSURES PROGRAM DELIVERY

STD programs are best delivered through a combination of vertical and horizontal program components.

- A vertically organized central STD unit is responsible for planning, coordination, preparation of guidelines, development of new strategies and approaches, quality control and supervision.
- Program implementation at the district and peripheral levels is integrated into the existing health-care system.

Both approaches have advantages and disadvantages. The advantages of a vertical system with categorical STD or dermato-STD clinics are that these clinics are usually well-equipped and well-staffed, often with an STD specialist. Laboratory services are often available, and the clinics offer quality patient management. The disadvantages are that most of these clinics are located in major urban areas, making them inaccessible to the majority of the population; special STD clinics in most countries are perceived as stigmatizing; and they are relatively costly. Utilization rates by women may be low.

A horizontal system of service provision, with STD care integrated into primary health care, is more accessible and less stigmatizing, increasing acceptability, particularly by women. The quality of patient management, however, varies greatly. Often staff members are poorly trained and overworked, and specific STD drugs and even rudimentary laboratory services are not available. In the public sector, staff attitudes toward STD patients may be negative.

VERTICAL AND HORIZONTAL COMPONENTS IN ONE PROGRAM

In many countries components of both a vertical and a horizontal system coexist. Usually the program is best managed by a vertically organized STD unit at the central level, with program implementation integrated into existing structures at the district and peripheral levels. This is the ideal situation, assuming that the primary health-care system functions.

Categorical STD clinics already exist in many countries, especially in the larger cities. In this situation, rather than dismantling the clinics they could be transformed into referral and training centers as a component of upgrading STD case management in primary health-care clinics. It is often best to pilot-test new approaches and strategies using a vertical approach. But wider implementation requires integration of control activities into the existing health-care system.

Interventions with and service delivery for specific target groups might require a vertical approach to management and implementation. In the long run, however, integration usually offers better prospects for both acceptability and sustainability.

PROGRAM PLANNING AND IMPLEMENTATION

Planning is the process of outlining how to implement, monitor and evaluate a program. Monitoring and evaluating, in turn, influence further planning, creating an ongoing cycle of response (*see Chapter 14*).

STEPS IN STD PROGRAM PLANNING AND IMPLEMENTATION

Planning and implementing STD control activities involve the following steps or phases:

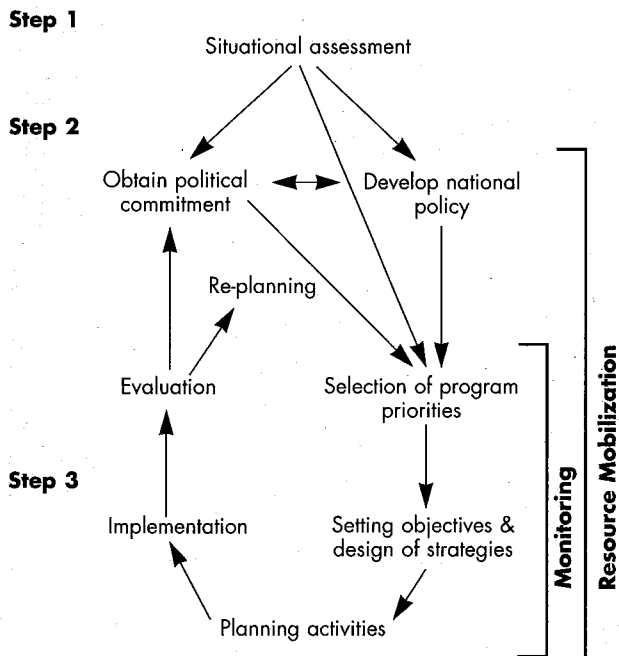
- Conduct a situational assessment.
- Obtain political commitment.
- Develop a national STD policy.
- Select program priorities.
- Set specific objectives and design strategies.
- Plan implementation.
- Plan support components.
- Mobilize resources.
- Monitor and evaluate.
- Revise a plan or plan to expand the program.

It may not always be possible or even desirable to adhere to the sequence of steps outlined above. For example, in many countries a situational assessment will indicate a lack of epidemiological data on STD prevalence or incidence or on the antibiotic susceptibility of a common STD. Yet planning of STD control measures should not be delayed until comprehensive studies have been completed. Instead, these measures should be based initially on expert opinion and, possibly, on experiences in neighboring countries. Figure 2 illustrates the planning process for an STD program. It should be noted that monitoring and resource mobilization are continuing activities.

Situational assessment

The objective of assessment is to obtain a clear picture of the STD situation in a country, the resources available for STD control and the political, legal and social factors that might influence the program. This information is required to set priorities,

Figure 2
STEPS IN PROGRAM PLANNING



decide on strategies and plan implementation. The assessment should be **rapid**, and as much information as possible should be collected from existing sources (see Chapter 15).

Information is needed on STD epidemiology, existing services, available resources, health-seeking behavior, patient knowledge, attitudes and perceptions of STDs (see Chapter 13), and factors influencing program development and implementation. Sources of information for a rapid assessment are the following:

Key informants. Ministry, district and municipal health and administrative officials; NGO staff; public and private health-care providers; target populations

Documents. Laws and regulations; Ministry of Health plans and reports; national HIV/AIDS plan; job descriptions of health-care staff; clinic and laboratory records

Publications. Scientific publications on prior STD research; publications on studies in neighboring countries; and it is worth noting that some of the most useful sources of information are often unpublished.

Epidemiology of STD

To set control program priorities and direct interventions at groups most likely to become infected with STD, managers should ask the following epidemiological questions:

- Which clinical syndromes are most common?
- Which STD pathogens are most prevalent?
- What is the sensitivity of these pathogens to available antibiotics?
- Which populations are at greatest risk? And for each group, what is its approximate size and where is it located?

Based on the available epidemiological information, the initial estimate of the size of the STD problem will be used for two purposes. First, this information will help convince decision makers that STDs are indeed a serious problem in the country. Second, it will guide program managers in setting control program priorities.

Existing services

To make optimal use of existing resources, managers must assess the available sources of STD clinical care. These include the public sector—either through specialized STD facilities or general health facilities—the private sector and the informal sector. The latter includes pharmacists and untrained providers such as drug vendors. Nonallopathic medicine may be part of the formal system in countries where formalized training and registration of such practitioners exist, but in most countries such systems are considered informal.

As much as possible, the accessibility, acceptability and quality of private and informal sector care providers should be assessed to identify potential service provision partners and locate any weaknesses that

need to be addressed. For example, in countries in which a majority of STD patients prefer private practitioner care over government services, improving case management by private clinicians might be the most efficient way of controlling STD in a community. If most STD patients self-medicate, following the advice of a local pharmacist, a feasible approach might be to train pharmacists to take a simple history and sell drugs to treat the reported syndrome.

Available resources

The STD program manager should know what resources are available and whether additional resources are likely to be available in the future. For example, there might be donor interest in funding STD control activities, or a political commitment to STD control might lead to a reallocation of funds within the Ministry of Health.

In addition to financial resources, program managers should assess the available personnel, infrastructure, materials and drugs. Examples of resource assessments include:

- The staffing levels in a few representative rural and urban primary health-care (PHC) facilities or outpatient departments, which will indicate the available human resources
- The availability of appropriate STD drugs in health facilities, which will show whether drug logistics or drug policy constrains program implementation
- The physical structure of health facilities, which might need improvement in order to provide acceptable services
- The staffing level, equipment and operations of a university STD clinic, which might reveal an important resource for referral, training and research

Influencing factors

Finally, an STD program manager should be aware of the political, legal and cultural factors that influence STD control activities. Since these factors could signifi-

cantly hinder the program, they should be confronted and, if possible, remedied. The following are examples of such constraints:

Political. Lack of political commitment, due either to lack of knowledge or fear of cultural sensitivities

Legal. A requirement that STD patients be reported by name, rather than by case, which drives STD patients underground; laws that do not allow non-physicians to prescribe antibiotics, even though they may be the sole health care providers at clinics; requirements that forbid sex workers from continuing to work for several days if an STD is identified, which keeps these women from seeking care

Cultural. Stigmatization of persons with STDs, especially women, leading to poor healthcare-seeking behavior and difficulties in partner notification; the community perception of STDs may be quite different from the medical perception and may lead to poor communication (*see Chapter 13.*)

Attempting to change political attitudes, laws, perceptions and cultural norms is a lengthy process. Nevertheless, identifying these factors is the first step.

Political Commitment

Unless a political commitment to STD control is obtained, only limited resources will be available for the program. Also, in most countries it will be difficult to promote safer sexual behavior, introduce sex education into the school curriculum or promote condom use without political commitment.

The preliminary estimate of the STD problem's severity, made from the situational assessment, often convinces policy and decision makers that they must take action. What also must be emphasized is the increased risk of HIV infection associated with STD. When possible, a calculation or estimate of the economic cost associated with STD should be made. This information will further advance the case that the STD problem has broad societal consequences.

The national STD committee, national medical associations, NGOs and other pressure groups can contribute to raising awareness of the STD problem, and they should be involved in advocacy of a commitment to STD control.

In countries in which STD control is a sensitive issue for cultural or religious reasons, it might not be possible to obtain political commitment immediately. But often a commitment can be achieved by demonstrating success. A successful intervention project, with quantitative information on the costs and the outcome, will in most instances convince decision makers that STD control activities are feasible and politically sound.

In other cases, an acceptable entry point can be used to place STD control on the public health agenda. For example, a congenital syphilis control program might be perceived as less politically threatening than an STD control program. As the program is being implemented, staff could collect information on levels of syphilis infection that could then be used to win support for a more comprehensive STD control program.

Developing a National STD Policy

A national STD policy stating the STD control program's strategies and approaches toward achieving its objectives puts the program in a formal framework. The policy statement shows the government's commitment to addressing the STD problem and provides clear policy guidelines as well.

For example, the following STD policy statement from India indicates a commitment to a primary healthcare approach to STD control:

The Ministry of Health and Family Welfare strives to integrate comprehensive STD control efforts in the existing health care system, both public and private. Integration of comprehensive STD case management at the primary level of the health care system will receive special attention, so as to provide as much as possible nonstigmatizing services with a high level of accessibility and acceptance by the consumer. This will involve an emphasis on nonspecialized, integrated services. Principles of privacy and confidentiality, essential to the success

Box 2

GUIDELINES FOR PRIORITIZING STD PROGRAM STRATEGIES

The following are the main criteria for deciding what strategies should be given highest priority:

Efficacy or the extent to which the strategy contributes to addressing the problem. Questions that should be asked are the following: How relevant is the strategy? What is the size of the population covered? What is the acceptability?

Example: Prevention is more relevant than provision of curative services. Yet prevention activities are usually accepted by a population only when curative health care needs are also being met.

Feasibility or the extent to which it is possible to implement the strategy. What financial, human and material resources are available? Are there political, cultural or legal constraints? How sustainable is the strategy?

Example: An intervention with sex workers will not be feasible if it leads to increased stigmatization and harassment by police. Similarly, condom promotion is still difficult in many countries because of religious, cultural and political sensitivities.

Efficiency or the extent to which the strategy is cost-effective. Which strategy makes optimal use of the available resources and delivers the highest yield for a given input?

Example: The syndromic approach to STD case management is more cost-effective than case management by specialists with laboratory confirmation of etiological diagnosis.⁴

of any attempt to deal with STDs, will strictly be adhered to. Cooperation from and collaboration with the private sector and NGOs will be promoted.³

Selection of Program Priorities

STDs and their complications are not evenly distributed throughout a population. To make optimal use of often scarce resources, managers should give priority to interventions targeting groups most likely to be affected by STD. These priorities should be based on the results of the epidemiological assessment.

Studies and key informant interviews will help managers identify groups of individuals with higher rates of infection than the general population. Since they can perpetuate an infection in a community, targeting groups such as symptomatic STD patients as well as those sometimes called the “core groups” should be a program’s highest priority. However, care should be taken that such targeting does not lead to further stigmatization of these groups.

Most programs cannot reach all these groups at the same time. The following criteria can be used to set priorities:

- Estimated STD prevalence (or incidence) in the group
- Extent to which individuals in the group contribute to further transmission of STD (largely dictated by the estimated number of sex partners per individual for a given period of time)
- Size of the group
- Group awareness of the problem and interest in an intervention
- Feasibility of an intervention, based on geographical accessibility, acceptability and availability of resources

Other groups that should be targeted are those whose members frequently suffer STD complications, particularly women. In most societies women have little control over sexuality and limited access to STD care. In addition, they often suffer from asymptomatic or symptomatic infections that are not recognized as abnormal.

The group or groups targeted will influence the strategies and approaches chosen to meet program objectives. For example, in a society in which women with STD are easily stigmatized in STD clinics and outpatient departments, an effective strategy might be to integrate STD clinical services into MCH/FP clinics.

In setting program priorities, managers should choose the disease problems that are amenable to cure and that are associated with increased HIV transmission. Strategies that can be implemented easily without major investments in the health-care system should be selected.

Setting Objectives and Designing Strategies

There is often considerable confusion about the definition of these terms, yet a clear understanding of objectives and strategies is essential for effective program management.

Objectives

The general objectives of an STD control program state in broad terms what the program is expected to achieve. The three general objectives of STD control programs are listed in the introduction to this chapter. Specific objectives state in detail what is to be accomplished in a given period of time in order to make progress toward achieving the program’s larger objectives. They should be formulated in the following way:

- The **outcome** expected from the intervention
- The **population** targeted by the intervention
- The **geographic or socioeconomic area** targeted by the intervention
- The **time frame** for reaching the stated outcome
- The **target** for the intervention

The target is usually expressed as a proportion of the target population in which an expected outcome is achieved. For example—

- **90 percent of STD patients** attending public facilities in the capital will be managed according to national diagnostic and treatment guidelines by the end of year two.

STD programs cannot be evaluated effectively unless specific objectives, including a statement of measurable targets, are clearly formulated (*see Chapter 14*).

Strategies and activities

A set of activities undertaken to meet a specific objective constitute a strategy. There may be one or more strategies implemented to meet an objective. The relationship between specific objectives, strategies and activities is illustrated in Box 3. A generic list of strategies and program activities for a typical STD control program is included in Appendix 1.

Designing strategies

Strategies need to be designed for the following program components:

- Behavior change communication (BCC) to promote safer sexual behavior, consistent and correct condom use, and appropriate health-care-seeking behavior
- Delivery of services for management of STD patients and their partners
- Condom programming

In this chapter the emphasis is on designing strategies for service delivery, which includes aspects of BCC and condom provision. These three components must be developed in a coordinated fashion. For example, if the BCC program recommends early treatment of STD, then such services should be available. Similarly, if condoms are promoted, they should be accessible.

A cornerstone of STD control is effective STD patient management. This includes diagnosis and treatment combined with individual counseling, health education, condom promotion and provision, and partner notification. Patient management is provided through clinical services, which should be **acceptable, accessible and effective.**⁵

In many countries the private sector is the most important provider of STD care. In these countries, strategies should be designed to make optimal use of available health-care providers. Initially, it is often difficult to involve the private sector, but training, referral services, continuing medical education, involvement in STD surveillance and perhaps access to laboratory services should all be considered to involve this sector.

Detection and treatment of asymptomatic infections is a special form of service delivery. An example of a cost-effective strategy for identifying asymptomatic

Box 3

RELATIONSHIP BETWEEN STD OBJECTIVE, STRATEGY AND ACTIVITIES

Specific objective for the STD control program:

By the end of year three, 90 percent of the newborns delivered in public health-care facilities in the country will receive prophylaxis for the prevention of ophthalmia neonatorum (ON).

Strategy:

- Provision of services for ON prophylaxis

Activities:

- Identify sites with maternity facilities.
- Assess the number of deliveries in identified sites.
- Train nursing staff in routine ON prophylaxis.
- Supply drugs to identified facilities.
- Supervise implementation and make corrections.

Box 4

ELEMENTS OF SUCCESSFUL STD SERVICE DELIVERY

A successful strategy for service delivery in most situations is one in which—

- Case management for the majority of the STD patients is integrated at first-level health-care facilities, using a syndrome-based approach to clinical management.
- Case management by the private and (where indicated) informal sectors is improved and strengthened.
- These services are supported by a limited number of specialized STD clinics providing referral services, training, research and monitoring.

infections is the screening of antenatal clinic attenders for syphilis.⁶ The feasibility and cost-effectiveness of screening other groups depend on the availability of a sufficiently sensitive diagnostic method, its cost, and the prevalence of infection in the group.

Planning Implementation

After deciding on program priorities and strategies, the program manager must prepare a plan for implementing control activities. Planning and developing the three control program components (STD clinical services, BCC and condom programming) must be coordinated, regardless of the program's size and scope.

In addition, close coordination with the Essential Drugs Program (EDP) is important. This is to ensure that the appropriate STD drugs are on the country's essential drugs list and are made available to first-level health-care facilities. It is advisable to involve an EDP representative when preparing and regularly reviewing standard STD treatment guidelines.

If the plan is to provide STD case management for women through MCH/FP and antenatal clinics, the MCH/FP program should be involved early in the planning process. The feasibility, cost and implications of integrating STD and HIV/AIDS prevention and STD case management into MCH/FP programs can be assessed through an initial pilot project.

Available financial, human and physical resources must be considered when planning STD control. Often resource shortages will impose constraints on the program. For example, limited funds for staff trained in syndromic management will mean that program activities cannot be implemented countrywide.

It is often necessary to adopt a phased approach to program implementation. For example, a program could initially develop interventions in one or more urban areas where both high-risk behavior prevalence and STD incidence are high. Concurrently, additional research on the etiology of STD syndromes and on antibiotic susceptibility patterns could begin. In a later phase, services could be expanded to other urban set-

tings and to rural areas as well. Specific quantifiable objectives and indicators for each phase of the program should be developed and clearly stated.

The crucial step in program planning is the preparation of a step-by-step work plan with a realistic timetable and budget. This plan can consist of two separate tables. The first lists the strategies and, under each strategy, the specific activities, with a timeline for implementation. The second table lists the strategies and activities, with budget estimates for each activity.

A work plan is an important **planning, budgeting and monitoring tool**. Detailed planning should only be done for the first year of the program, with an outline of the plan for subsequent years. Toward the end of the first year, a detailed plan for the next year should be prepared.

Planning for Support Components

The following support components are essential to developing and implementing an STD control program and should be included in the detailed work plan:

- Guidelines
- Training
- Logistics (including drugs and condoms)
- Laboratory services
- Research
- Surveillance

Although these components are discussed in other chapters of the handbook in greater detail, their management implications are described below.

Guidelines

Guidelines are used as a reminder and as an easy source of reference for health workers. They guide providers in adopting standard approaches to patient management. For example, national STD treatment guidelines will contribute to creating standardized STD treatment regimens. It is important that the STD program manager ensure that these guidelines are revised regularly to respond to changes in antibiotic resistance. Similarly, diagnostic guidelines can be revised when new and simpler tests become available.

Guidelines should be integrated into STD training and ongoing medical education for private sector practitioners (see Chapter 8).

Training

Additional training for health-care workers is usually required when providing STD clinical care through first-level health-care facilities and adopting a syndrome-based approach. Target groups for such training are those providing STD case management, including medical officers, nurses, medical assistants, private practitioners and possibly informal or traditional health-care providers. Training should not be confined to hands-on providers alone, but should include a community's policy makers and opinion leaders.

Each member of an STD program team should be trained for his or her role in the program and should view that role as a link in the STD control chain. For example, a patient's first encounter may be with an orderly or registration clerk whose attitude toward the patient could influence the quality of the information that the patient later gives to the clinical staff. If the patient feels stigmatized or perceives a lack of confidentiality, the interview process may be counter-productive.

A program manager must ensure that training is both appropriate and effective. The training program must be based on an analysis and detailed description of the tasks and skills required of the various cadres of health workers. The training needs identified by this analysis form the basis for preparing training modules. To be effective, these modules should make use of interactive training methods and be clear and pragmatic.

In general, most training needs are in clinical diagnosis, including STD history-taking and physical examination, and in individual counseling and health education. Only limited emphasis should be placed on laboratory diagnosis of STD, except in situations where simple laboratory diagnostics are easily available. In many countries, particular attention needs to be paid to addressing negative and stigmatizing attitudes that some health workers have about STD patients.

Medical schools and other tertiary educational institutions in developing countries need to play a greater role in STD training for physicians and allied health providers such as nurses, laboratory workers, pharmacists and public health staff. These schools should take the lead in the didactic and practical aspects of such training as well as in course curricula design and development. An STD component should be an essential feature of the postgraduate medical training curricula in public health, obstetrics and gynecology, pediatrics, dermatology, epidemiology, microbiology and internal medicine (see Chapter 6).

Logistics

Failure to prescribe effective drugs and frequent drug shortages contribute considerably to low attendance rates at STD clinical facilities. An STD program manager should assess STD drug requirements and ensure that the drugs recommended in the national STD treatment guidelines are available. Ideally, the drugs should be included on the country's Essential Drugs List. Similarly, condom requirements should be assessed in health facilities where STD patients are managed (see Chapter 5).

The cost of STD drugs is a major constraint for many STD programs. Bulk purchase of drugs might facilitate price negotiations and reduce the cost to the program (see Chapter 7).

Laboratory services

Laboratory support services are usually absent or minimal at the peripheral and middle levels of the health care system. Consequently, patient management is based on history taking and clinical examination. Yet laboratory services are essential for an accurate assessment of STD epidemiology, including antimicrobial resistance patterns, and for detecting asymptomatic infections.

Managers should make it a priority to develop or strengthen at least one center where microbiological and epidemiological research on STD pathogens can

be performed. This center will provide the data on the relative prevalence of STD pathogens responsible for the various syndromes and antibiotic susceptibility, information that is needed for effective syndromic case management. Where resources permit, laboratory services can be gradually expanded, provided such services contribute to improved patient management (see Chapter 12).

Research

The program manager should include in the program's work plan operational research that will influence how a program is implemented. For example, studies on the prevalence of pathogens responsible for STD syndromes and on antibiotic resistance are important for formulating or adapting patient management guidelines. Results of research on the efficacy and cost-effectiveness of the syndromic approach will convince policy makers to support this strategy. And studies on the incidence and prevalence of STD in specific subgroups might lead to new priorities for the control program.

Other important operational research issues for STD programs include the following: identifying the most suitable ways of providing STD prevention and control through the primary health-care system; evaluating clinical algorithms for STD patient management; assessing the effectiveness of different methods of contact investigation; and conducting ethnographic research to gain a better understanding of health-seeking behavior and providers' attitudes toward STD clients. Such operational research is usually conducted by or in collaboration with a specialist STD clinic, a medical college or a university hospital.

Surveillance

Similarly, the results of STD surveillance should influence control program planning and implementation. Surveillance of antimicrobial sensitivity, the effectiveness of patient management approaches and the program's impact lead to important program management decisions (see Chapter 15).

Box 5

RESOURCE MOBILIZATION FOR AN STD PROGRAM

Mobilizing resources for an STD program requires the following:

- A detailed, realistic work plan
- A clear statement of the size of the problem and the vulnerability of the problem to an intervention

It is easier to mobilize resources if the program manager can show the following:

- Success in previous program activities
- Success in using resources efficiently
- The cost-effectiveness of a program

Resource Mobilization

Mobilizing financial, human and material resources is an important step in the planning process. The situational assessment should have identified the resources available to the program and indicated the size of the STD problem. Thus, the initial assessment is an important tool for mobilizing additional resources from the Ministry of Health, donors and the private sector.

Although outside donors are an important source of support for many countries, the long-term sustainability of largely donor-funded programs should be considered. Most donors have their own requirements for the accounting of funds, and it is often advisable to employ an accountant to meet these requirements.

Resource mobilization requires frequent advocacy and negotiations with many sectors including national governments and international partners. Care should be taken that the program's absorptive capacity is not exceeded.

Monitoring and Evaluation

Monitoring

Monitoring is the process of assessing how well various program activities have been implemented (*for a more detailed discussion, see Chapter 14*). It may be based on periodic field visits, regular activity reports and reports on special activities. Monitoring should be both quantitative (how much is being achieved) and qualitative (how well activities are being carried out). For example, it is not sufficient to know how many people have been trained in syndromic STD case management. It is also important to assess through observation and supervision how successful the training was in providing health workers with the skills they need in applying the syndromic approach.

Monitoring will reveal when and where the program falls short of what was expected. This knowledge allows program managers and implementers to identify constraints, which should lead to problem solving and adjustments. By using monitoring results to make corrections to the plan, program managers can ensure that resources are being used in the most efficient way.

Evaluation

Evaluation is defined as a periodic assessment of whether a program is meeting its planned objectives. Typically, programs are evaluated at one or two-year intervals. Planning for evaluation is an integral part of program planning and should be done at the start of the process.

Although evaluation might make use of information collected through monitoring activities, in most cases it will require a special survey or study. Sometimes, a survey will also be needed to establish a baseline against which progress can be measured. For example, a specific objective “to reduce STD prevalence among sex workers by 50 percent in one year” requires both an initial cross-sectional STD prevalence survey and a follow-up survey after one year to evaluate the intervention’s impact.

Revising or Planning for Program Expansion

Evaluation results are essential to revising less successful program components, planning program expansion, or developing and implementing new strategies.

To revise the program plan, managers might need to reformulate objectives or design new strategies for meeting program objectives. Planning program expansion involves the same steps as those described earlier. In both cases, a new work plan with a budget and a timeline should be developed.

C O N C L U S I O N

Managers of STD control programs are responsible for ensuring that program resources—human, material or financial—are used in the most cost-effective way to reach the program’s stated objectives.

To fulfill this responsibility, managers must assess the available resources, the infrastructure and the extent of the STD problem. They must prioritize the strategies and activities that are most likely to achieve the program’s objectives cost-effectively. Carrying out these strategies and activities requires a detailed work plan with a realistic timeline and budget. A work plan’s implementation must be monitored against set targets, and an evaluation will reveal how successful the program has been in reaching its stated objectives.

This chapter has outlined essential aspects of program management and described in detail the planning process. This process will allow program managers to develop cost-effective STD control programs that are sufficiently flexible to accommodate social, cultural, epidemiological and political variations and to make the greatest use of existing resources.

APPENDIX 1

GUIDELINES FOR STD CONTROL PROGRAMS

1. Strengthen program management

1.1 Develop/strengthen central STD unit

- Assess staff needs.
- Employ staff and/or train existing staff.
- Develop coordination mechanisms with the Information, Education and Communication Division.

1.2 Develop/strengthen regional/district STD management structure

- Assess available human resources.
- Organize STD planning and management workshops.
- Develop communication mechanism with central unit.
- Monitor activities.
- Plan supervisory visits.

1.3 Establish STD Advisory Committee

- Identify members of the STD Advisory Committee.
- Organize regular meeting of the committee.
- Communicate results of meetings to decision makers.

1.4 Develop a national STD control policy and strategy.

2. Strengthen STD case management

2.1 Design flowcharts

- Organize a national meeting to design patient management guidelines, including flowcharts.
- Field test the flowcharts in pilot areas and adapt them.
- Finalize, print and distribute flowcharts.
- Review flowcharts every two or three years.

2.2 Strengthen case management in public sector

- Conduct an inventory of facilities.
- Assess needs in equipment and consumables.
- Assess training needs.
- Estimate STD drug and condom needs.
- Develop or adapt training module.
- Train trainers.
- Schedule further training of health workers.

- Purchase and distribute equipment and consumables.
- Develop drug logistics.
- Provide training in stock management.
- Monitor clinic use and clinical practices.
- Plan refresher training.
- Develop or adapt training module.
- Organize training workshops.
- Monitor clinical practices.
- Plan refresher training.

2.3 Strengthen private sector case management

- Involve national private medical association(s).
- Conduct an inventory of private health-care providers.
- Assess clinical practices and training needs.
- Develop or adapt training module.
- Organize training workshops.
- Monitor clinical practices.
- Plan refresher training.

2.4 Improve STD service provision to women

- Pilot test integration of STD services in MCH/FP clinics.
- Assess feasibility and cost.
- Expand STD service provision at other sites.

2.5 Strengthen national reference laboratory

- Assess needs in equipment and consumables.
- Assess training needs.
- Purchase equipment and consumables.
- Develop or adapt STD bench-level laboratory manual.
- Train laboratory technicians.
- Monitor activities.

2.6 Control of congenital syphilis

- Conduct an inventory of antenatal clinics (ANCs).
- Estimate the number of attenders in ANCs.
- Identify laboratory support (either in or linked to the ANCs).
- Assess equipment and consumable needs.
- Purchase and distribute equipment and consumables, including syphilis serological tests (RPR or VDRL).
- Institute screening of all ANC attenders at first visit (if possible, also in the third trimester).
- Treat women and partners testing positive.
- Develop reporting mechanism.
- Monitor activities.

2.7 Prophylaxis of ophthalmia neonatorum (ON)

- Conduct an inventory of facilities with maternity facilities.
- Estimate the number of deliveries in maternity facilities.
- Purchase and distribute prophylactic drugs.
- Train health-care staff in the application of prophylaxis.
- Implement ON prophylaxis of all newborns.
- Train traditional birth attendants (TBAs).
- Provide TBAs with prophylactic drugs.
- Monitor activities.

2.8 Targeted interventions for high-risk groups (core groups)

- Identify target groups.
- Develop access to target groups through key members.
- Design services to meet needs of each group.
- Train health providers and peer educators for treatment and outreach.
- Develop a reporting mechanism.
- Monitor activities.

3. Promote prevention and treatment-seeking through Information, Education and Communication (IEC)

3.1 IEC through mass media

- Identify and define priority groups.
- Identify community leaders.
- Assess knowledge of priority groups.
- Define appropriate channels of communication.
- Develop messages and materials with members of the target groups.
- Pretest, develop and print IEC materials.
- Monitor IEC activities.

3.2 IEC through outreach (peer) educators

- Identify priority groups for outreach work.
- Conduct qualitative research on knowledge and practices (risk behaviors, health-care-seeking behavior).
- Identify peer educators.
- Develop and/or adapt appropriate materials.
- Train peer educators.
- Monitor peer education activities.

3.3 IEC through traditional media (theater, music, etc.)

- Identify traditional channels of communication.
- Develop training materials.
- Orient and train traditional artists.
- Review productions.
- Monitor activities.

4. Establish condom programming for STD prevention

4.1 Distribute condoms through treatment facilities

- Identify facilities providing STD services.
- Estimate condom needs.
- Purchase condoms and develop distribution system.
- Train health workers in condom promotion and demonstration.
- Include condom distribution in STD patient management.
- Monitor condom distribution activities.
- Monitor condom quality.

4.2 Social marketing of condoms

- Identify social marketing organizations and/or NGOs.
- Assess condom needs.
- Develop a condom distribution network.
- Monitor condom sales.

5. Monitor STDs

- Organize a national workshop to develop an STD sentinel surveillance protocol.
- Develop training module for STD surveillance.
- Select sentinel sites and conduct training.
- Supply sites with required equipment and supplies.
- Analyze data and communicate results.

SUGGESTED READING

6. *Conduct operational research*

- Define research priorities.
- Identify research sites and/or facilities.
- Assess needs (equipment, consumables, training).
- Provide resources.
- Train staff.
- Collect results and communicate to interested parties.
- Modify the program according to the results.

7. *Evaluate*

- Plan program evaluation.
- Compile results and inform interested parties.
- Organize a meeting with program managers and decision makers.
- Organize planning to revise or expand program.

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