

Antenatal syphilis control: people, programmes, policies and politics

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Abstract Antenatal syphilis control is an integral component of reproductive health policies in most countries. In many of these countries, however, the existence of a health policy does not automatically translate into an effective health programme. We argue that neglecting to take into account the perspectives of all stakeholders when planning programmes may be the reason that functional and sustained interventions for antenatal syphilis are lacking. Stakeholders may include health policy decision-makers, programme managers, service delivery personnel (on whom implementation depends), as well as the pregnant women, families, and communities who will most benefit from the intervention. We describe how to undertake a multilevel assessment in order to identify stakeholders, identify interlinked perspectives, and analyse these perspectives within the socioeconomic, cultural and political environment within which an intervention is designed to be delivered. Using this multidisciplinary approach, we propose that the barriers to, and opportunities for, turning health policy into effective practice will be identified, and the result will be the formulation of a broad programme response to ensure implementation of the policy. Undertaking a multilevel assessment is but the first step in identifying barriers to successful programmes. Currently there is a lack of strong political support for this intervention at national and international levels. Devising strategies to address these potential barriers requires a broad range of skills and approaches some of which are outlined in this paper.

Keywords Syphilis/diagnosis/epidemiology/economics; Pregnancy complications, Infectious/diagnosis/epidemiology; Prenatal diagnosis; Health policy; Mass screening/utlization; Decision making, Organizational; Focus groups/utlization; Data collection/methods; Process assessment (Health care)/methods; Delivery of health care; Socioeconomic factors (*source: MeSH, NLM*).

Mots clés Syphilis/diagnostic/épidémiologie/économie; Complication infectieuse grossesse/diagnostic/épidémiologie; Diagnostic prénatal; Politique sanitaire; Dépistage systématique/utilisation; Prise décision institutionnelle; Groupe focal/utilisation; Collecte données/méthodes; Evaluation méthodes santé/méthodes; Délivrance soins; Facteur socio-économique (*source: MeSH, INSERM*).

Palabras clave Sífilis/diagnóstico/epidemiología/economía; Complicaciones infecciosas del embarazo/diagnóstico/epidemiología; Diagnóstico prenatal; Política de salud; Tamizaje masivo/utilización; Toma de decisiones (Administración); Grupos foco/utilización; Recolección de datos/métodos; Evaluación de proceso (Atención de salud)/métodos; Prestación de atención de salud; Factores socioeconómicos (*fuentes: DeCS, BIREME*).

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Bulletin of the World Health Organization 2004;82:417-423.

Voir page 421 le résumé en français. En la página 422 figura un resumen en español.

Introduction

Screening pregnant women for syphilis has long been a recommended intervention for reproductive health-care programmes. The burden of disease in both infected adults and their children is well described. Screening and treating women found to be serologically positive are, in theory, simple and inexpensive interventions. Economic analysis reveals that this policy is highly cost-effective (1), and in economic terms in some settings it compares highly favourably with screening pregnant women for human immunodeficiency virus (HIV) (1–3). Simple and effective screening tools are available and can be utilized at the lowest levels of health-care service delivery, and treatment of syphilis relies on

penicillin which is both inexpensive and on WHO's essential drugs list (4). For these reasons, among others, many countries have had syphilis screening policies in place for years.

Despite the existence of policies, however, these same countries often lack functioning screening programmes. Gloyd et al. surveyed 22 ministries of health in sub-Saharan Africa to determine the extent to which health systems address antenatal syphilis screening (5). They found that despite the existence of national screening policies in more than 75% of the countries, few pregnant women were screened. In other settings, programmes have not been scaled-up or sustained beyond successful pilot interventions (6).

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Ref No. 03-007823

(Submitted: 11 September 2003 – Final revised version received: 25 February 2004 – Accepted: 22 March 2004)

Why is syphilis accorded a relatively low priority on health-care agendas in contrast to other sexually transmitted infections (STIs), such as HIV? In this paper, we argue that the reason why functional and sustained interventions for antenatal syphilis screening do not exist is because the perspectives of all stakeholders are not sufficiently accounted for when programmes are planned. Stakeholders may include health policy decision-makers, programme managers, service delivery personnel (on whom implementation depends), as well as the pregnant women, families, and communities, who benefit most from the intervention.

In our paper we describe how to undertake a multilevel assessment (MLA) in order to identify stakeholders, understand their viewpoints, and analyse the barriers to, and opportunities for, turning a health policy into effective practice. First, however, we outline the evidence on the understanding and awareness of syphilis control among a variety of stakeholders.

Clients' views of programmes to control syphilis and STIs

Although there is extensive evidence on the effectiveness of syphilis screening programmes for pregnant women, most research seeks to analyse operational effectiveness. Research from the United States confirms that a community's perceptions of the relevance of the intervention (7) and trust in service providers (8) are critical determinants of the uptake of sexual health interventions.

If potential clients do not see syphilis as a problem, or if they lack awareness that it is treatable, it is unlikely that there will be a demand for services. If inappropriate or unfamiliar terminology is used by health programmes, there is a danger that people will not understand the nature of the problem (9, 10). Focus-group discussions conducted among pregnant women in South Africa found that most women had never heard the word syphilis, and they did not know how it was transmitted, whether it was curable, or who was at risk (11). In addition, these women did not know why they were having their blood drawn nor whether or when they would be given results (9, 11). In areas of the United States where syphilis was relatively prevalent, one quarter of those questioned did not know that syphilis was curable (12).

Providers' views of syphilis management

If providers have little knowledge of the disease being targeted, or if they think that it is not important, or if they are otherwise poorly motivated, or do not think that an intervention is effective, are they likely to provide a high-quality service? Specialist STI doctors in Karachi, Pakistan, correctly described the management of syphilis, but one half of their general practitioner counterparts were unable to describe the correct management (13).

Detailed observations of provider-client interactions in South Africa revealed that only 5% of interactions involved asking a client if they had signs and symptoms of syphilis; fewer than 10% of providers explained positive findings of syphilis to pregnant women; and only 4.5% discussed the importance of using a condom to prevent infecting partners (11).

Policy-makers' views of syphilis and STI programmes

Health policy decision-makers and programme managers are key players in ensuring that a programme receives adequate political,

logistical and financial support. In only a small number of cases, however, are the perspectives of these players explored. A study designed to assess the cost-effectiveness and sustainability of STI interventions in Turkey included interviews with key informants, such as officials in the Ministry of Health (14). The authors concluded that a vital component of an STI control programme was to raise decision-makers' awareness and knowledge of the disease.

A multilevel assessment for syphilis screening programmes

In light of the relative failure of many previous efforts to prioritize antenatal syphilis screening, we argue that an intervention that aims to be available, accessible, effective and sustainable must be designed to take account of the viewpoints and expectations of all major stakeholders. Research has tended to focus on understanding one or two domains within a programme, such as the perspectives of the community or the providers. In contrast, we describe a comprehensive approach to understanding multiple perspectives. This is based on, and complementary to, a number of existing methods for assessing needs in health programmes, including the Strategic Assessment for Improving the Quality of Care in Reproductive Health Programmes developed by WHO (15), and the Reproductive Tract Infections Programme Guidance Tool (RTI-PGT) developed jointly by WHO and the Population Council's Horizons Program. A multilevel assessment will use a range of methods and approaches; it will identify the interlinked perspectives of all stakeholders; and it will analyse the socioeconomic, cultural and political environment within which the intervention is designed to be delivered.

Undertaking a multi-level assessment

Review of existing data

One of the first steps to be taken is a review of evidence on disease prevalence (and associated sequelae) and any previous cost-effectiveness analysis of screening and treatment in local settings. Reviews of data should be undertaken using both published and "grey" literature, such as unpublished reports from nongovernmental organizations and donors, and other relevant quantitative and qualitative data.

In many settings these data sources may be inadequate, incomplete or nonexistent. However, in some settings current levels of syphilis screening and treatment can be determined (although often imperfectly) from service-delivery statistics. In addition, national surveillance and service-delivery statistics should be examined to discover who is affected by syphilis and to what extent it is a problem in any particular community, region, or state. Other sources of syphilis data may be found in hospital records detailing rates of possible complications, such as stillbirths and congenital syphilis.

Assessments among different stakeholders

The second step in an MLA would be for a multidisciplinary group of providers, decision-makers, community leaders, and social scientists to develop or adapt culturally appropriate data collection tools for use with different types of stakeholders. Table 1 identifies some of the possible stakeholders to be addressed by an MLA, the potential barriers to implementing an effective syphilis control programme at each level, the research tools for understanding these barriers, and a range of strate-

gies to address and overcome them. Many of these strategies are explored in more detail in the paper by Schmid et al. in this issue (p. 402–409). Research tools could also be adapted from those used in a reproductive health situation analysis (16) or from the RTI–PGT, as well as from a number of tools used in policy and stakeholder analyses (17).

Women and communities

Focus groups enable researchers to discover whether community members (including local opinion leaders) perceive syphilis to be a health priority and one worthy of health-care seeking. Issues relating to the stigma and discrimination associated with

STIs in general, and syphilis and particular, could be explored. In addition, health inequalities should be addressed, such as the impact of gender inequalities on the ability of women (including pregnant women) to access services. Same-sex groups could be questioned about which RTIs exist in their societies; what effect these RTIs have on women's, men's and infants' health; and if such diseases can be detected and treated. While current demographic and health surveys (DHS) do not include questions about syphilis, they may include these, or questions about other RTIs in future surveys. Such data may be helpful in defining whether communities or households, or both, perceive syphilis and other RTIs as a health priority.

Table 1. Components of a multilevel assessment for antenatal syphilis control programmes

Stakeholder	Possible barriers to effective screening programme	Research tools to understand barriers	Ways to overcome barriers
Community	Unaware of the problem or interventions Do not think problem is important Women do not seek antenatal care or do not seek care from trained providers Stigma associated with STIs ^a Costs associated with detection and treatment. These could be direct, indirect, opportunity-related or stigma-related	Community and household surveys (including DHS ^b surveys) Client exit interviews Focus group discussions Key informant interviews Household and facility surveys to define patterns of health-seeking by pregnant women Household and facility surveys to define barriers to seeking appropriate care	Campaign to promote appropriate care-seeking for pregnant women Implement communication campaign about the consequences of syphilis and the effectiveness of interventions Implement communication campaign to reduce the stigma of all STIs (similar to HIV-related campaigns)
Providers	Unaware of the extent of the problem in the community Unaware of, or not trained in, the appropriate intervention Lack of logistical support for the intervention No financial incentives to screen (private providers)	Interviews with providers Inventories of facilities to check whether equipment available and easily accessible Observations of client–provider interactions “Mystery” clients	Put training programmes in place to improve the quality of care for pregnant women, including promoting syphilis screening Ensure there are adequate supplies of equipment, drugs and other consumables for syphilis interventions
Programme managers	Unaware of the extent of the problem in the communities Syphilis accorded a low priority compared with other health problems Lack of resources for effective interventions Poor planning and monitoring of programmes	Research tools associated with the RTI–PGT ^c such as rapid situational analysis of programme efforts Rapid assessments (e.g. see ref. 16) Cost–effectiveness analysis comparing the costs and benefits of different health problems	Reach consensus on priority setting with all stakeholders involved in analysis of situation Pilot interventions to show feasibility Pay attention to up-scaling of effective pilots Implement comprehensive programme-monitoring tools Link syphilis programme to sectorwide approach to improve planning and monitoring
Policy-makers and decision-makers	Unaware of problem and the cost-effectiveness of the intervention Little external pressure to adopt or implement policies Few apparent political rewards for action	Political mapping Stakeholder analysis	Develop a political strategy Develop alliances, and place syphilis on the agenda of mobilized and aligned groups such as women's health and HIV advocates and activists Link the issue to other successful policies Re-frame the issue and evidence and bring to the attention of decision-makers

^a STIs = sexually transmitted infections.

^b DHS = demographic and health surveys.

^c RTI–PGT = Reproductive Tract Infections–Programme Guidance Tool.

Clients' perceptions and knowledge can also be determined during exit interviews. For example, did the provider mention syphilis during the antenatal visit? If so, which aspects of the disease, its prevention and its management were covered? If women have had blood drawn, they can be asked whether they understand why blood was taken, how they will benefit from the test results and how they will be informed of the results. In addition, interviews can focus on decisions affecting health-care decision-making. For example, what were the major variables affecting their choice of provider? What role do gender inequalities play in determining health-seeking practices? What influence do economic considerations (including costs and opportunity costs) play in determining health-care seeking and health practices?

Providers and service delivery

Providers' knowledge, motivations and practise can be assessed in a number of ways, including through direct questioning about their knowledge and practise in clinical situations.

Questions may include:

- how prevalent is syphilis in the communities they serve?
- are providers aware of the complications and consequences of untreated syphilis?
- how do they diagnose and treat syphilis?
- how do they decide which women to screen? (This question should include information on whether there are incentives for screening.)
- what symptoms represent infection?
- what is appropriate treatment?

Observations of provider–client interactions provide more objective evidence of actual practice:

- how often are clients screened for syphilis?
- on what basis are clients screened? (For example, routine antenatal versus only symptomatic clients.)
- if screening is not carried out, why isn't it? Is it because resources are lacking?

For practitioners in the private sector, questions of motivation (including incentives) to provide screening services may need to be addressed (18). Questions to ask all health-care providers may include:

- is syphilis mentioned during counselling sessions?
- if so, at what percentage of visits are clients informed about specific aspects of syphilis, such as the relationship of syphilis to HIV, different stages of syphilis, signs and symptoms of the disease, modes of transmission, ways to prevent transmission, and the effects of syphilis on pregnancy and the baby.

“Mystery client” techniques can be used to assess providers' behaviour through simulated visits which are assessed afterwards through interviews with the “clients” (19). All of these types of surveys could be carried out among providers in both the public and private sectors.

Rapid inventories of health-care facilities could be conducted to determine the following:

- are there guidelines on syphilis screening for health workers?
- where are the equipment and supplies necessary for treating, screening and reporting? Is equipment easily available?
- are there sources of information available to pregnant women (e.g. posters, leaflets in an appropriate language and at appropriate literacy levels)?

Addressing these issues would help decision-makers understand how community members and service providers prioritize syphilis screening in their service-delivery sites and at what level service-delivery problems exist in the implementation of policies. If there is a discrepancy between the prevalence of syphilis and the community's perceptions, then communication, raising awareness through the media (also called media sensitization), improved education of clients and providers, and improved counselling of clients can be implemented to bridge the gap. If clients and providers are aware that syphilis is a problem in their communities, but providers are unable to provide counselling or screening because of a lack of time or supplies or equipment, or a combination of these things, or if there are no incentives to provide counselling or screening, then changes can be implemented at the service-delivery level. If policies do not exist, or have not been operationalized into clinical guidelines and protocols, then that may be the area in which change needs to be implemented.

Programmes

An effective, sustainable syphilis screening programme is but one component of STI prevention and care, and maternal health programmes. In order to understand the successes or constraints within which a syphilis control policy is operating, a tool such as the RTI–PGT can be used. This tool describes a locally led process that can be used to undertake a rapid assessment of a programme's performance, highlight the operational constraints of programmes, and identify parts of the programme requiring more input and resources. This tool aids programme managers in all types of reproductive health programmes in prioritizing syphilis control while remaining cognisant of other priorities that deserve resources. This latter consideration provides a compelling rationale for linking planning for syphilis control programmes to parallel initiatives that promote coherent and systematic approaches to health programme planning, financing and performance monitoring, such as sectorwide approaches (20).

Policy and politics

Assessing policy-makers' and decision-makers' views about syphilis and understanding the political environment in which they operate represent the next steps in an MLA. Determining where and how to allocate financial, organizational and political resources are complex processes whose outcomes determine which issues receive attention. Political support is therefore extremely important, not only for getting an issue like syphilis onto the health-policy agenda but also for ensuring that programmes are implemented in a sustainable way (21). The political and contextual environment within which syphilis screening is being delivered needs to be elucidated and understood. For example, is the entire health sector being reformed? If so, syphilis screening will need to be prioritized and implemented within the broader health reform process.

The relatively low priority attached to detecting and treating syphilis in pregnant women in many countries may be the direct result of a number of political and economic constraints:

- first, influential international organizations have not recently worked to move this issue up the international health-policy agenda;
- second, there are few interests that would stand to gain economically from major efforts to diagnose and treat this disease. The current diagnostic tools are relatively inexpensive, and the drugs used to treat it are not only no longer protected by patents but are also cheap;

- third, the political imagery of syphilis as a disease of “blame and sex” (22) may influence the amount of political support that control of this type of disease is likely to garner (23).

A number of tools exist to help define policy-makers’ views and the policy and political contexts and processes of an area. Political mapping is a systematic approach used to gain better understanding of the past, current, or future prospects for policy adoption or implementation (24). It is based on the traditional tools of stakeholder analysis developed in the policy sciences. Political mapping begins by identifying relevant policy-level stakeholders. The first step is to carry out interviews with the identified stakeholders. The interviews aim to generate information about:

- a relevant player’s agenda or interests;
- how or where the policy fits into these interests (i.e. the priority of the issue);
- where the power or resources in an area lie (not only financial resources, but also access to other actors such as decision-makers, the media, constituencies, etc);
- a player’s position on the issue (i.e. supportive, neutral or opposing);
- the power or resources that the player has at his or her disposal (such as financial resources, access to other players and decision-makers, the media, constituencies, etc.);
- a player’s relationships to other stakeholders (25).

The step after political mapping is to carry out interviews with the identified stakeholders. The interviews offer an opportunity to collect background information, such as documents that inform decisions on syphilis policy, and any syphilis-related data, including costs and the cost-effectiveness of local programmes. In this assessment, the most important outcome of political mapping is the identification of political strategies for improving the implementation of syphilis control programmes (24).

Tools for political analysis range in complexity from the informal analysis of unstructured interviews with a few policy-makers to computer programmes specifically designed to conduct political analysis (27). Both structured and unstructured approaches are useful, and applying aspects of both may provide a rich analysis of why an intervention like antenatal syphilis screening is not being implemented.

Completing the puzzle

In this paper we have highlighted the need to view syphilis screening and control programmes through the perspectives of multiple stakeholders so as to identify barriers to, and opportunities for, improving the formulation and implementation of national policies. We have outlined a range of tools that can be used to define the understanding and implementation of a health

policy from the community level through to the political level. We have called this approach a multilevel assessment, but it is also a multidisciplinary assessment, relying on a range of potentially useful research tools and methodological perspectives. In addition to the methods we have discussed, there may be other areas to be explored using a number of additional methods and disciplines, such as details of the costs and cost-effectiveness of screening and treatment; a description of factors influencing health-care seeking practices; and an exploration of the motivations and incentives of private sector practitioners to provide screening services. These may all provide important insights. We recognize that, in practice, those charged with understanding how and why a syphilis screening policy is not being effectively implemented will only have access to the time and resources to use a limited number of these methods.

A multilevel (and multidisciplinary) assessment, however, while a necessary step, is not sufficient to ensure implementation and sustainability. We began this paper with a rhetorical question asking why antenatal syphilis screening programmes have not achieved a higher degree of importance on health-policy agendas. Using some of the tools outlined above, we hypothesize that a multilevel assessment is likely to reveal some or all of the following issues as being influential in keeping syphilis control programmes in a position of low priority:

- first, there seems to be a lack of mobilization or activism associated with syphilis in any community, in contrast with, for example, the situation with HIV;
- second, in most settings that are already overburdened and under-resourced public health-care professionals resist efforts to try and add yet another health intervention to them;
- finally, in many cases there is a lack of strong political support for this intervention at the national or international level. Devising strategies to address these potential barriers at different levels will require a broad range of skills and approaches.

Devising an effective political strategy might represent one of the most challenging facets of implementing a sustainable programme. We suggest that much should be made of the technical and economic rationale for action (the burden of disease and the inexpensive and cost-effective diagnosis and management tools available in most settings), but we also suggest that linking syphilis screening to another more politically “successful” issue might help raise the profile of this intervention. For example, it may be possible to link syphilis screening with programmes to prevent parent-to-child transmission of HIV. However, the outcome of such an approach will be entirely dependent on context and place. A multilevel assessment may help local decision-makers and activists decide whether this is a route worth pursuing. ■

Conflicts of interest: none declared.

Résumé

Lutte anténatale contre la syphilis : acteurs, programmes, politiques et options

La lutte anténatale contre la syphilis fait partie intégrante des politiques de santé génésique dans la plupart des pays. Dans nombre d’entre eux cependant, l’existence d’une politique de santé ne se traduit pas nécessairement par un programme de santé efficace. Nous estimons que le fait de ne pas tenir compte du point de vue de tous les acteurs lors de la planification des programmes pourrait expliquer l’insuffisance d’interventions

efficaces et durables contre la syphilis maternelle. Peuvent faire partie des acteurs concernés les décideurs chargés des politiques de santé, les directeurs de programmes, les personnels des services de santé (sur lesquels repose la mise en œuvre des programmes), ainsi que les femmes enceintes, les familles et les communautés, principaux bénéficiaires de l’intervention. Nous indiquons comment entreprendre une évaluation à plusieurs niveaux pour identifier

les acteurs et faire ressortir les points de vue convergents, que l'on analysera par rapport à l'environnement socio-économique, culturel et politique dans lequel une intervention est prévue. Grâce à cette approche pluridisciplinaire, nous pensons pouvoir identifier les facteurs qui s'opposent à la traduction de la politique de santé en pratiques efficaces, ou qui au contraire la favorisent, avec pour résultat l'élaboration d'une vaste réponse programmatique en vue de la concrétisation de la politique de santé. L'évaluation

à plusieurs niveaux ne constitue que la première étape de ce processus en identifiant les obstacles qui s'opposent à la réussite des programmes. La lutte contre la syphilis maternelle pâtit actuellement d'un manque de soutien politique, aussi bien au niveau national qu'au niveau international. L'élaboration de stratégies destinées à combattre ces obstacles potentiels exige des compétences et des approches très diverses, dont certaines sont décrites dans le présent article.

Resumen

Control prenatal de la sífilis: personas, programas, políticas y opciones

El control prenatal de la sífilis es un componente esencial de las políticas de salud reproductiva en la mayoría de los países. En muchos de esos países, sin embargo, la existencia de una política sanitaria no siempre se traduce en un programa de salud eficaz. Sostenemos aquí que el hecho de no tener en cuenta las perspectivas de todas las partes interesadas al planificar los programas puede ser el motivo de que no existan intervenciones operativas y sostenidas para la sífilis materna. Entre esas partes interesadas figurarían los decisores en materia de políticas sanitarias, los gestores de programas y los dispensadores de servicios (de los que depende la implementación), así como las mujeres embarazadas, las familias y las comunidades, que son las que más se beneficiarán de la intervención. Describimos la manera de emprender una evaluación multinivel a fin de identificar a las partes interesadas, distinguir perspectivas

interrelacionadas y analizar esas perspectivas en el marco del entorno socioeconómico, cultural y político en que deba llevarse a cabo la intervención. Usando este enfoque interdisciplinario, sugerimos que se conseguirá identificar los obstáculos que impiden traducir las políticas sanitarias en prácticas eficaces, así como las oportunidades para ello, y el resultado será la formulación de una respuesta programática amplia que asegure la implementación de las políticas. La realización de una evaluación multinivel no es sino un primer paso para identificar los obstáculos que restan eficacia a los programas. Actualmente se carece del firme apoyo político necesario para hacer realidad esta intervención a nivel nacional e internacional. Si se desea formular estrategias que aborden esas posibles dificultades, se requerirá una amplia gama de aptitudes y criterios, algunos de los cuales se exponen en este artículo.

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