Intervention complexity — a conceptual framework to inform priority-setting in health

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Abstract Health interventions vary substantially in the degree of effort required to implement them. To some extent this is apparent in their financial cost, but the nature and availability of non-financial resources is often of similar importance. In particular, human resource requirements are frequently a major constraint. We propose a conceptual framework for the analysis of interventions according to their degree of technical complexity; this complements the notion of institutional capacity in considering the feasibility of implementing an intervention. Interventions are categorized into four dimensions: characteristics of the basic intervention; characteristics of delivery; requirements on government capacity; and usage characteristics. The analysis of intervention complexity should lead to a better understanding of supply- and demand-side constraints to scaling up, indicate priorities for further research and development, and can point to potential areas for improvement of specific aspects of each intervention to close the gap between the complexity of an intervention and the capacity to implement it. The framework is illustrated using the examples of scaling up condom social marketing programmes, and the DOTS strategy for tuberculosis control in highly resource-constrained countries. The framework could be used as a tool for policy-makers, planners and programme managers when considering the expansion of existing projects or the introduction of new interventions. Intervention complexity thus complements the considerations of burden of disease, cost-effectiveness, affordability and political feasibility in health policy decision-making. Reducing the technical complexity of interventions will be crucial to meeting the health-related Millennium Development Goals.

Keywords Health priorities/organization and administration; Delivery of health care/organization and administration; Condoms; Social marketing; Directly observed therapy; Tuberculosis, HIV infections/prevention and control; Multidrug-resistant/prevention and control; Models, Theoretical; Developing countries (*source: MeSH, NLM*).

Mots clés Priorités en santé/organisation et administration; Délivrance soins/organisation et administration; Condom; Marketing social; Thérapie sous observation directe; Infection à VIH/prévention et contrôle; Tuberculose résistante à la polychimiothérapie/prévention et contrôle; Modèle théorique; Pays en développement (*source: MeSH, INSERM*).

Palabras clave Prioridades en salud/organización y administración; Prestación de atención de salud/organización y administración; Condones; Mercadeo social; Terapia por observación directa; Infecciones por VIH/prevención y control; Tuberculosis resistente a multidrogas/prevención y control; Modelos teóricos; Países en desarrollo (*fuente: DeCS, BIREME*).

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Introduction

Determining priorities and planning the implementation of health interventions in resource-poor countries is difficult and uncertain, due to lack of dependable evidence, analytical methods for identifying priority options and coherent processes for decision-making which take difficulties in implementation into account (*1*). The analytical tools currently available for evidence-based health planning and priority-setting are economic evaluation and burden of disease assessment. However, there is no analytical tool to assess the technical feasibility of an intervention according to its complexity. Different health interventions differ considerably in the degree of effort required to implement them. To some extent this is apparent in their financial cost, but in general cost is not a very effective proxy for the degree of effort or the nature of the resources required. For example, in some contexts the availability of skilled human resources may be a much greater constraint than financial resources. The main reason why the technical complexity of an intervention is not well reflected in its cost is because, in the short term, a lack of human resources or other shortcomings in capacity cannot easily be compensated for with money. Hence, non-financial resources are potential constraints to scaling up, and additional financial resources are not the solution in the short to medium term.

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We define intervention complexity as the quality and quantity of non-financial resources required to implement and sustain an intervention. A close link exists between intervention complexity and capacity to implement the intervention. Assessing technical complexity is the first step in evaluating technical feasibility. Feasibility can be seen as the match between technical complexity and capacity. If complexity exceeds capacity, there is a capacity gap. Hence, technical feasibility is not ensured and the country faces a constraint to scaling up. This capacity gap can be closed either by increasing technical capacity or by decreasing the complexity of the intervention. Intervention complexity thus complements the notion of institutional capacity.

In this article we propose a conceptual framework for systematically analysing the importance of intervention complexity in expanding access to, and utilization of, health interventions. We see four potential applications for this framework in health policy decision-making, planning and programme management.

- To assess the technical complexity of an intervention as a first step in evaluating technical feasibility, i.e. to assess the capacity gap.
- To identify the most significant supply- and demand-side constraints to scaling up, i.e. to answer the question of how to close the capacity gap.
- To identify intervention designs that lend themselves to scaling up in the short-term as opposed to intervention designs that require significant implementation constraints to be overcome, i.e. to use for operational priority-setting. This has two types of application:
  - to compare different modes of delivery for the same intervention, e.g. comparing tuberculosis treatment with hospitalization to directly-observed treatment; and
  - to compare different interventions in terms of their technical complexity, e.g. antiretroviral therapy versus treatment of malaria.
- To indicate research and development priorities in order to simplify interventions, i.e. for use in setting priorities for research.

Using the dimensions proposed in the conceptual framework, an intervention-specific capacity profile can be drawn up to highlight particular constraints and priority areas. If interventions can be made very simple — whether in terms of "hardware" (e.g. vaccines) or "software" (e.g. guidelines on use) — and inexpensive, then they lend themselves to widespread use through all delivery channels and may also be deliverable through alternative channels such as nongovernmental organizations (NGOs), community-based arrangements or the retail sector. This makes scaling up much more feasible in low-capacity settings than if the intervention relies solely on government infrastructure or skilled human resources.

A number of simple, low-technology, easy-to-use health interventions have already been developed with the potential to be provided to millions of people in the poorest countries. Despite a recent surge of interest in scaling up health interventions, and a number of well-intentioned programmes that have been in place for a number of years such as the Program for Appropriate Technology in Health (PATH) specifically devoted to the development of simple technology (*2*), the evidence on the effectiveness and implementation characteristics of simple health interventions is scarce. To our knowledge, no attempt has yet been made to categorize health interventions in a systematic way according to their degree of technical complexity. We consider this to be a critical step in addressing the challenge of how to expand access to priority health interventions. In our view, reducing technical complexity by simplifying interventions will be crucial to meeting the health-related Millennium Development Goals.

In the following section, the conceptual framework used to categorize interventions according to their degree of technical complexity is presented. This is illustrated with the examples of scaling up condom social marketing (CSM) programmes and the DOTS strategy for tuberculosis control. This is followed by a discussion of the potential usefulness of the framework for health planning and priority-setting with a particular emphasis on scaling up health interventions.

Methods

Analysis of the complexity of health interventions requires a consistent conceptual framework for classification. Such a framework must meet two requirements. Firstly, it must be comprehensive enough to capture all those major characteristics of health interventions that are possible constraints to scaling up. Secondly, it must be general enough to be applicable to a wide range of very different types of intervention, ranging from socially marketed products for use at home to professional services at the level of tertiary care. Furthermore, the framework should be policy-relevant, in the sense that it helps to identify those characteristics of an intervention that may hinder scaling up in a given setting and helps to identify ways in which the intervention can be simplified so as to relax intervention- and context-specific constraints.

To reflect these requirements, we identified four dimensions of intervention design: characteristics of the basic intervention; characteristics of delivery; requirements on government capacity; and usage characteristics. The dimensions and characteristics were derived from earlier research on understanding constraints to scaling up health interventions (*3*) and a systematic review of the evidence base regarding efforts to overcome constraints to effective health service delivery in low- and middle-income countries (*4*).

Intervention characteristics

The most important characteristics of the core intervention with regard to scaling up are related to basic product design and requirements related to supplies and equipment.

Important basic design features of the product include the following:

- stability of the product, i.e. usable lifetime and risk of destruction;
- the degree to which an intervention can be standardized;
- the safety profile of the intervention in terms of adverse effects, and risks associated with inappropriate use, e.g. from over-the-counter sales of prescription-only medications; and
- ease of storage and transport, e.g. the need for refrigeration.

Attributes of supplies include dependence on regular supplies, and the number and types of different supplies needed.

Equipment issues include the need for high technology equipment and/or infrastructure, the number of different types of equipment and the degree of maintenance needed.

For materials, supplies and equipment, the ease with which they can be acquired should also be assessed.

Delivery characteristics

The delivery characteristics of interventions are analysed according to their requirements in terms of facilities, human resources, and transport and communication.

Interventions are categorized according to whether they can be delivered through the commercial retail sector or they need to be delivered through public or private health facilities. Furthermore the level of health facility required is specified: e.g. outreach services, first-level care or hospital care.

Human resources are analysed according to the level of skill and the degree of supervision of non-health staff needed. Interventions also vary in terms of the intensity of professional services required, i.e. from periodic predictable services such as vaccinations that can be delivered according to a schedule, to services that need to be available continuously to respond to unpredictable acute illness (*5*). To address the need for managerial staff, the level of management and planning requirements is considered.

Transport and communication reflect the need for infrastructure, such as roads and telephone lines. In addition, communication covers the need for substantial exchange of information between different sectors or levels of care.

Government capacity requirements

Demands on scarce government capacity are often a crucial constraint to the delivery of interventions in poor countries. In this framework, they are analysed according to the requirements for legislative and regulatory capacity, management systems and dependence on collaborative action.

Some interventions require special legislation and regulation. Regulatory measures differ widely in terms of their needs for monitoring and enforcement. The dependence of the success of an intervention on collaborative action between different government sectors, between government and civil society, or between government and external funding agencies, can be an important constraint to scaling up.

Usage characteristics

Usage characteristics of interventions are analysed along three dimensions: ease of usage, pre-existing demand for the intervention, and the risk of diminished effectiveness and efficiency because of black-market activities.

Ease of usage includes the extent to which consumer information and education or training are needed to apply the intervention effectively. A low level of pre-existing demand will require a substantial effort to promote the intervention. The risk of black market activities is important in so far as it affects the need for measures to prevent re-sale of products and counterfeiting.

Application of the conceptual framework

To illustrate the use of the conceptual framework for the analysis of health interventions, we applied it to CSM programmes for the prevention of human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS) and other sexually transmitted diseases, and to the DOTS strategy for tuberculosis control.

Condom social marketing

Condom use is the core measure in all safer sex strategies and is probably the single most effective intervention for the prevention of sexual transmission of HIV. The "100% condom use" programmes targeted at commercial sex workers have shown impressive results in Cambodia and Thailand where they have reduced the prevalence of HIV infection (*6*, *7*). In countries where the HIV/AIDS epidemic has spread far beyond the vulnerable groups, a national approach is necessary (*6*). The effectiveness of CSM in increasing the availability and use of condoms on a large scale has been demonstrated in a number of studies since the programmes started in the mid-1980s (*8*). CSM can be applied both to target high-risk groups and to increasing condom availability and use at the general population level. In 1999, around 900 million condoms were distributed through CSM in 59 developing countries (*8*). The most common approach to CSM is the "traditional" or "own-brand" model, where standard commercial marketing and sales techniques are used to promote and distribute own-brand condoms through wholesale and retail sellers to the mass market (*8*). This requires the development of a professional in-country sales force and management structure. For situations where difficult-to-access population groups need to be targeted, alternative distribution systems have been developed, and were recently reviewed by UNAIDS (*8*). An analysis of the technical complexity of CSM programmes using the conceptual framework is presented in Table 1.

DOTS strategy for tuberculosis control

A case management approach pioneered in the United Republic of Tanzania in the 1970s that integrated the diagnosis and treatment of tuberculosis into the existing health services infrastructure at district level was further developed by the WHO Global Tuberculosis Programme in the early 1990s and became known under the brand-name "directly observed treatment, short-course" (DOTS) (*10*). Its key features are political commitment; case detection among self-reporting patients with symptoms using sputum-smear microscopy; a shorter course of treatment than that of traditional regimens, under proper management; assurance of a regular drug supply; a strong surveillance and monitoring system; and the fact that a health worker or trained lay person watches the patient swallow the antitubercular drugs (*11*, *12*). DOTS is now the WHO-recommended strategy for tuberculosis control, but the need for directly observed treatment as a universal requirement is highly controversial, because four carefully conducted trials in Pakistan, Thailand and South Africa showed little or no advantage, in relation to cure, of direct observation over self-treatment at home (*13*, *14*). Because of the increase of therapeutic failures in areas with a high prevalence of drug resistance, the development of new ways to improve adherence and avoid resistance is a priority area for research in tuberculosis control. An analysis of the technical complexity of DOTS is presented in Table 2.

Discussion

Comparison of the application of the framework to condom social marketing and DOTS

As illustrated using the examples of the application of the framework to CSM and to DOTS, interventions can differ significantly in their degree of technical complexity. DOTS proved to be more technically complex in every category and subcategory of the proposed framework than CSM, with the exception of collaborative action and pre-existing demand. Whereas DOTS requires collaborative action within different levels of health

Table 1. **Application of the conceptual framework to condom social marketing (CSM) for the prevention of human immunodeficiency virus/acquired immunodeficiency syndrome and other sexually transmitted diseases (STIs)**

Category	Criteria	Intervention
Intervention characteristics		
Basic product design	Stability Standardizability Safety profile Ease of storage Ease of transport	Condoms are a very stable commodity, with a shelf-life of 1–2 years, and are highly standardizable No risk of serious side-effects. However high standards of quality are needed to prevent unwanted pregnancies and ensure full protection from STIs Condoms do not have special requirements for storage or transport
Supplies	Need for regular supplies	Regular supply of condoms needed, but this is not problematic because of ease of transport and storage. No need for other regular supplies
Equipment	High-technology equipment and infrastructure needed Number of different types of equipment needed Maintenance needed	No equipment or maintenance needed
Delivery characteristics		
Facilities	Retail sector Outreach services First-level care Hospital care	Condoms can be safely and effectively provided by the existing retail sector and alternative distribution channels, including bars, brothels and truckers' stops (*8*)
Human resources	Skill level required for service provision Skill level required for staff supervision Intensity of professional services in terms of frequency or duration Management and planning requirements	No medical or paramedical staff needed for distribution. Training of educational and sales agents is needed, but this can be effectively provided by non-professionals. Preparation of training material needs some professional input Management and planning requirements for condom procurement, stocking, and distribution to sales agents
Communication and transport	Dependence of delivery on communication and transport infrastructure	CSM programmes can be an effective means of getting round communication and transport infrastructure constraints, as demonstrated following the civil war in Mozambique and in rural Haiti (*8*)
Government capacity requirements		
Regulation/legislation	Need for regulation Need for monitoring of regulatory measures Need for regulation enforcement	No need for special regulation. On the contrary CSM programmes can circumvent some regulatory constraints (*9*)
Management systems	Need for sophisticated management systems	No need for sophisticated management systems
Collaborative action	Need for intersectoral action within government Need for partnership between government and civil society Need for partnership between government and external funding agencies	Collaborative action is required between national and local government, local and international nongovernmental organizations, and donors. In particular, approaches not using the commercial approach to CSM, but targeting delivery to the poorest people, require substantial subsidies and collaborative action Collaboration with religious groups and support of opinion-leaders is crucial for successful implementation
Usage characteristics		
Ease of usage	Need for information/education Need for supervision	Easy-to-use household commodity
Pre-existing demand	Need for promotion	In many settings, substantial need for promotion using mass media and interpersonal communication strategies, in particular to reach poor and high-risk groups
Black-market risk	Need to prevent resale/counterfeiting	Low risk of resale of subsidized condoms when they are widely available

Table 2. **Application of the conceptual framework to the DOTS strategy for tuberculosis control**

Category	Criteria	Intervention
Intervention characteristics		
Basic product design	Stability Standardizability Safety profile Ease of storage Ease of transport	Antitubercular drugs, in particular rifampicin, can be easily damaged by high temperatures and humidity. This particularly applies to blister-packaged drugs (*15*) Because of the relatively large number of different drug combinations, different fixed-drug combinations, and local manufacturers, product standardization is demanding Antitubercular drugs are generally well tolerated. Serious liver toxicity may occur in 5–10% of patients. Other less common but serious side-effects are sensory neuropathy, optic neuritis, hypersensitivity reactions, thrombocytopenia and anaemia (*16*) Storage and transport have to take into account the increased susceptibility to damage in conditions of high temperature and humidity
Supplies	Need for regular supplies	Regular supplies of diagnostic material and drugs are of crucial importance to programme success
Equipment	High-technology equipment and infrastructure needed Several different types of equipment needed Maintenance needed	Laboratory equipment for sputum microscopy, cultures and susceptibility testing needed. X-ray facilities for smear-negative and extrapulmonary cases
Delivery characteristics		
Facilities	Retail sector Outreach services First-level care Hospital care	First-level health-care services for diagnosis and treatment management Network of smear microscopy laboratories with regular quality control Hospital services for severe cases and treatment failures, further investigations
Human resources	Skill level required for service provision Skill level required for staff supervision Intensity of professional services in terms of frequency or duration Management and planning requirements	Community volunteers or paramedical staff for treatment supervision Doctors or medical practitioners for diagnosis and management of care Laboratory personnel for smear microscopy, resistance testing and X-ray examinations Hospital staff for complicated cases, e.g. further investigations Professional tuberculosis[a] staff for supervision and training Management and planning of regular drug supply and quality assurance and surveillance activities
Communication and transport	Dependence of delivery on communication and transport infrastructure	Regular drug supply requires functional transport infrastructure Communication between different levels of services required for timely referrals, communication of test results and surveillance reporting
Government capacity requirements		
Regulation/legislation	Need for regulation Need for monitoring of regulatory measures Need for enforcement of regulations	Need for a national TB control strategy Need to regulate licensing of antitubercular drugs, standard-setting and quality monitoring
Management systems	Need for sophisticated management systems	Need for government financing and stewardship of a national TB programme providing training, drugs, supplies, epidemiological surveillance activities and quality assurance
Collaborative action	Need for intersectoral action within government Need for partnership between government and civil society Need for partnership between government and external funding agencies	Collaborative action required between national and local government, between different tiers of the health sector, and between the formal health sector and private providers, NGOs and volunteer treatment supervisors

(Table 2, cont.)

Category	Criteria	Intervention
Usage characteristics		
Ease of usage	Need for information and education Need for supervision	Great need for information/education of the public to increase consultation rates and of identified patients to increase compliance with therapy High level of supervision of treatment supervisors, primary health care staff, and overall TB programme required
Pre-existing demand	Need for promotion	Currently, it is estimated that less than half of all new TB cases (44%) are detected by DOTS and non-DOTS programmes together (*17*). However, once patients are diagnosed, the demand for treatment is high
Black-market risk	Need to prevent resale/counterfeiting	Limited risk of resale of antitubercular drugs Compared to other antibiotics, there is a lower risk of drug counterfeiting, in particular if a national drug supply chain exists

[a] TB = tuberculosis.

services, the success of a CSM programme is crucially dependent on collaboration with religious leaders and local opinion-leaders because it impinges on the domains of sexual behaviour and morals. The finding that low pre-existing demand and the resulting high level of need for information and education are issues in both interventions is interesting, as this has been the case for a number of other key health interventions reviewed (*18*). For many health interventions in developing countries, "pre-existing demand" seems to be the category where there is greatest potential for improvement in the interventions (*18*). Unfortunately, the area of behaviour change communication and information, and education, often receives little attention in health projects. As a consequence, the evidence base on the impact of such strategies is weak.

Priority-setting

Although priorities in health policies are still often decided in the traditional way, i.e. resources are allocated on a first-come, first-served basis, new analytical tools have been developed for a fairer allocation of resources (*19*), i.e. burden of disease assessment (*20*) and cost-benefit or cost-effectiveness analysis (*21*). The affordability of an intervention can be determined from cost data in the economic evaluation. However, neither tool explicitly addresses the feasibility of an intervention in terms of the nature and availability of the non-financial resources required. Implicitly, technical complexity is partially reflected in an economic evaluation, as it affects the costs and effectiveness of an intervention. This is also true for technical capacity, but neither complexity nor capacity can be separated out and analysed in a meaningful way on the basis of the economic evaluation.

In highly resource-constrained settings, the quality and quantity of non-financial resources is, however, often the crucial factor limiting implementation, as reflected in the discussion of whether developing countries have the capacity to absorb additional financial funds. Although feasibility of implementation is a multi-dimensional construct and includes political considerations that are difficult to capture, several of the important technical aspects of feasibility can be addressed by analysing intervention complexity.

The need for research and development to simplify interventions is greatest where interventions have proved highly effective, but capacity requirements are also high; this situation is best exemplified by antiretroviral therapy. The proposed framework could be used as a tool for policy-makers, planners and programme managers when considering the expansion of existing projects or the introduction of new interventions. In our view, intervention complexity should be an additional criterion to inform decisions about choice between interventions, and could guide decisions on optimal strategies for the implementation of interventions. Intervention complexity thus complements burden of disease, cost, cost-effectiveness and political feasibility considerations in making health policy decisions on scaling up.

Identifying capacity gaps and reducing identified constraints to scaling up

When expansion of access or of utilization of an intervention is planned, or a new intervention is to be introduced, a preliminary analysis of the intervention design is, in our view, crucial to successful implementation. The analysis of intervention complexity can highlight locality- and intervention-specific supply- and demand-side constraints to implementation, i.e. capacity gaps, which can guide the planning of the intervention.

The framework also offers a systematic way of thinking about how to reduce identified constraints. For example, a common way of reducing constraints is the use of NGOs to deliver interventions when government capacity is weak. NGOs might be more suited for some roles in intervention provision than others. The CSM projects reviewed here are good examples of the successful delivery of health interventions by NGOs on a large scale. But even for those projects managed and subsidized entirely through NGOs, national and local political support is crucial. One example is the need to relax restrictions on condom advertising and distribution outlets. Another widely used way to simplify interventions is to standardize them; this is the aim of the WHO Expert Committee on Biological Standardization (*22*), the WHO Model List of Essential Drugs (*23*) and the WHO Cardiovascular Risk Management Package for low- and medium-resource settings (*24*).

In many low-income countries, the availability of skilled human resources is a key constraint to scaling up priority health interventions. To overcome this constraint, two strategies have been used successfully in the past. First, the standardization and simplification of procedures has allowed the services to

be provided by less-skilled staff. Second, less-skilled staff have been specifically trained to carry out certain tasks that are commonly performed by more-skilled staff. A successful example of the first approach has been the provision of safe surgical and medical abortions by mid-level health staff in Sweden (*25*) and in a number of developing countries (*26–28*). A less successful example is the training of traditional birth attendants to perform tasks normally performed by midwives, where the evidence for success is mixed (*18*, *29*). A successful example of the second approach is trachoma surgery which is traditionally performed by ophthalmologists. This procedure can be effectively and safely carried out by ophthalmic nurses or integrated eye-care workers who, in addition to their basic training (1 year for ophthalmic nurses), require only 2 weeks of training to perform the procedure (*30*, *31*). Given the constraints on human resources available to work on scaling up interventions in many African countries, exploration of whether reduced skill-mix requirements for particular interventions are feasible will be crucial to meeting the health-related Millennium Development Goals.

Conclusions

As illustrated by the examples of CSM and DOTS, the analysis of key health interventions using the conceptual framework proposed in this paper is useful in categorizing interventions according to their degree of complexity, identifying supply- and demand-side constraints, and pointing to potential areas for the improvement of specific aspects of each intervention. In its consideration of human resource requirements, the analysis provides an overview of which skill level is needed for which aspect of the intervention. It assists in identifying bottlenecks and indicates where substitution of human resources might be warranted and feasible in order to achieve an optimal skills mix and distribution of personnel, or where the focus for future professional development and workforce planning should lie. The particular advantage of the analysis, however, is its consideration of human resource requirements in the context of all other requirements, and — as a next step — the comparison with the specific capacity profile of a country, district, programme or provider. This allows the identification of capacity gaps and may lead the way to specific measures to bridge such gaps by simplifying the intervention in a context-specific way or by specific capacity-building measures.

The framework has also proved useful in analysing a number of other priority health interventions (*18*). Overall, we see the main value of the framework in its current format for priority-setting and the planning of health interventions. This would include strategies for reducing the constraints identified when considering the expansion of existing interventions or when new interventions are introduced. It can be used both to define what is feasible locally and to identify the best way to deliver an intervention. Because development projects in the past have often been hampered by their failure to be grounded in sufficient institutional assessments, the exploration of capacity gaps as proposed here is particularly important. In addition, if efforts to scale up health interventions are to be successful, much clearer thinking about how to overcome capacity constraints while maintaining appropriate standards in public health interventions is required. ■

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Résumé

Complexité des interventions : un cadre conceptuel destiné à guider la définition des priorités en matière de santé

Le degré d'effort nécessaire pour mettre en œuvre les interventions sanitaires est hautement variable. Dans une certaine mesure, il transparaît dans le coût financier de ces interventions, mais la nature et la disponibilité des ressources non financières revêtent souvent une importance similaire. Les besoins en ressources humaines notamment constituent fréquemment une contrainte majeure. L'article propose un cadre conceptuel permettant d'analyser les interventions selon leur degré de complexité technique. Cette caractéristique est à prendre en compte en plus des moyens organisationnels lorsqu'on examine la faisabilité de la mise en œuvre d'une intervention. On évalue les interventions selon quatre de leurs aspects : les caractéristiques de l'intervention de base, celles des prestations, les besoins en moyens de gestion et les caractéristiques de l'utilisation. L'analyse de la complexité des interventions devrait conduire à une meilleure compréhension des pressions exercées par l'offre et la demande sur le développement des activités, indiquer les priorités à suivre dans les travaux de recherche et développement futurs et désigner les domaines d'amélioration potentielle de certains aspects des interventions, en vue de combler le fossé entre la complexité de l'intervention et les moyens disponibles pour la mettre en œuvre. A titre illustratif, l'article cite les exemples constitués par l'élargissement des programmes de marketing social de préservatifs et la stratégie DOTS de lutte contre la tuberculose dans les pays à ressources limitées. Le cadre pourrait être employé comme outil par les décideurs politiques, les planificateurs et les directeurs de programmes lorsqu'ils envisagent d'étendre les projets existants ou de mettre en place de nouvelles interventions. La complexité des interventions complète donc les aspects déjà pris en compte (charge de morbidité, rapport coût-efficacité, accessibilité économique et faisabilité politique) dans la prise de décisions en matière de politique sanitaire. La réduction de la complexité technique des interventions jouera un rôle essentiel dans la réalisation des objectifs de développement du millénaire relatifs à la santé.

Resumen

Complejidad de las intervenciones: un marco conceptual para orientar la fijación de prioridades sanitarias

El grado de esfuerzo requerido para ejecutar las intervenciones sanitarias varía considerablemente. Ello se refleja hasta cierto punto en su costo financiero, pero la naturaleza y disponibilidad de los recursos no financieros tiene a menudo parecida importancia. En particular, los requisitos de recursos humanos son con frecuencia una limitación muy importante. Proponemos un marco conceptual para analizar las intervenciones según su grado de complejidad técnica; esto complementa la noción de capacidad institucional a la hora de considerar la viabilidad de la ejecución de una intervención. Las intervenciones se clasifican en función de cuatro dimensiones: las características de la intervención básica; las características de la ejecución; la demanda de capacidad de los poderes públicos, y las características de uso. El análisis de la complejidad de la intervención debe permitir conocer mejor las limitaciones que del lado de la oferta y del lado de la demanda dificulten su expansión, sugerir prioridades para nuevas actividades de investigación y desarrollo, y mostrar ámbitos potenciales de mejoramiento de aspectos específicos de la intervención para cerrar la brecha entre la complejidad de la intervención y la capacidad de ejecutarla. Para ilustrar el funcionamiento de este sistema se usan como ejemplos la extensión masiva de los programas de mercadotecnia social de anticonceptivos y la estrategia DOTS empleada para combatir la tuberculosis en los países con graves limitaciones de recursos. Este sistema podría ser utilizado por los formuladores de políticas, los planificadores y los gestores de programas que prevean ampliar proyectos existentes o llevar a cabo nuevas intervenciones. La complejidad de las intervenciones complementa por tanto las consideraciones relacionadas con la carga de morbilidad, la costoeficacia, la asequibilidad y la viabilidad política en la toma de decisiones en materia de políticas sanitarias. La reducción de la complejidad técnica de las intervenciones será decisiva para alcanzar los Objetivos de Desarrollo del Milenio relacionados con la salud.

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