

# *Integration of Vertical Programmes in Multi- Function Health Services*

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## Summary

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This paper discusses the concept of integration and its operational implications, taking as an illustration the case of HIV/AIDS. The concept is understood as the integration of all, or some, specific programme activities into the package of activities provided by multi-function basic health services. After some clarifications on the terminology used, we first highlight the importance for a decision of integration to rest upon a positive rationale. The expected benefit(s) of such a policy should be clearly spelled out. We argue that many features of HIV/AIDS care are such that multi-function health services may be better placed than specialised services to manage them. A second step focuses on the resistances likely to be met from the different actors involved in the process (specialists, providers of funds, staff of multi-function health services, and last but not least, the patients themselves). The fact that there always is a price to be paid is underlined. We make an attempt to formulate some pre-conditions to be fulfilled if integration is to have a chance of succeeding. The existence of functioning health services, the choice of an appropriate time for integration, the acceptance of a transfer of decision making power to the multi-function services and of a remodelling of objectives are identified as important conditions. We highlight the fact that the (crucial) place of the *care* aspect in the management of HIV/AIDS constitutes an important challenge for the multi-function health services in many developing countries. Finally, we conclude on the importance of a dialogue between specialised and multi-function health personnel for integration to achieve its potential, both in terms of control of health problems as in terms of strengthening of basic health services.



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## *Introduction*

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The concept of integration has been the subject of differing interpretations. It can be understood in the sense of the integration of services in the execution of a programme, in the sense of greater collaboration or indeed a fusion between two programmes (for example a programme for the control of sexually transmitted diseases and a family planning programme), or in the sense of the integration of some activities of a programme in the package of activities provided by a polyvalent (multi-function) service. There is a need to clarify these meanings.

This paper seeks to contribute to the debate by discussing the concept of integration and its operational implications. For this purpose we largely base our discussion on the work and experience developed by the Public Health Department of the Institute of Tropical Medicine in Antwerp in the course of its history and on a review of the literature on the concept of integration.

The concept which we propose to discuss in this paper is the integration of programme activities into multi-function health services. After clarifying the terminology and the conceptual framework in which we understand integration, we shall discuss its potential and limits. We shall then consider the problems encountered in practice, and we shall attempt to formulate the preconditions of integration and the practical questions which must be answered if it is to have a chance of succeeding. This theoretical discussion will be developed with a particular concern for its relevancy in the case of HIV/AIDS control programmes.





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## *Theoretical considerations*

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It is important to establish clearly the definitions of certain terms which will be used in this discussion. According to Kegels (1992) we can distinguish a vertical and a horizontal domain.

### *The vertical 'domain'*

#### VERTICAL PROGRAMMES

A vertical programme consists of a coherent package of activities designed to deal with a single health problem or a group of linked health problems (Cairncross, 1997). The creation of a programme is the result of a *political* decision which *ipso facto* recognises the importance (epidemiological, economic, social, cultural or political) of the health problem and thus justifies the establishment of a specific administrative structure responsible for the management of the programme. The content of a programme (the package of activities and tasks aimed at dealing with a particular problem) is the result of a technical analysis based on a "vertical analysis". A vertical analysis is an analytical method applied to one health problem. The method consists of the following steps (Kegels, 1995): comprehensive assessment of the importance of the health problem, description of the "disease system" (i.e. an epidemiological model), inventory and choice of relevant control interventions, identification of the type of services and staff that are required for the operationalisation of the interventions, design of operational strategies for control, and finally design of evaluation questions.

A vertical programme may be established to manage more effectively the control of a particular disease (for example leprosy or tuberculosis), to manage a group of linked health problems (for instance, diarrhoeas or acute respiratory infections), to manage the health problems of a sub-population sharing a particular risk (problems associated with childbearing), to

structure existing activities (e.g. vaccinations) or new activities (in the AIDS context, for example), etc.

#### VERTICAL STRUCTURES

A vertical structure is a health structure staffed by specialised (i.e. monovalent or "single-function") personnel highly qualified in a particular field, without necessarily a formal specialist qualification, who are responsible for dealing with a single or a limited number of health problems. Very frequently, but by no means always, a vertical structure operates on a periodic basis; it may remain centralised or may operate in a decentralised fashion (for example with mobile teams). The establishment of a vertical structure for the control of a particular health problem ought at least in principle to be the result of technical considerations and analysis of operational consequences (for instance in terms of cost-effectiveness).

### *The horizontal 'domain'*

#### HORIZONTAL STRUCTURES

A horizontal structure is defined as a health facility in which a multi-function staff, responding to the felt needs of the community served, is responsible for dealing with a wide range of health problems. A horizontal structure is decentralised and operates on a permanent basis.

#### INTEGRATED CARE

Integrated care means that the care provided in curative, preventive and health-promotional activities is offered by a single operational unit. A distinction can be made between integration of care in time and integration in space: integration in time means that all services are available at the same time, so that at each contact with the service a patient can have access to any type of care. Integration in space means that all services are

provided by the same team but possibly at different points in time; for example a curative clinic in the morning and a preventive clinic in the afternoon.

#### INTEGRATED HEALTH SYSTEMS

An integrated health system is a system in which all the elements of which it is composed (basic health services, referral hospital, etc.) are organised and coordinated in such a way that they constitute a single entity with a common objective. For example in an integrated district health system the activities of the health centres and the referral consultations at the hospital are coordinated with the objective of improving the health of a well defined population living within the administrative boundaries of the district.

#### INTEGRATION OF THE HEALTH ACTIVITIES OF A GIVEN CONTROL PROGRAMME

This is the result of a decision to have particular activities, decided on in the context of a programme, carried out by staff working in horizontal structures, accompanied by a transfer of responsibilities. Integration thus implies a decentralisation of both administrative and operational responsibilities (Mercenier and Prévot, 1983; De Brouwere and Pangu, 1989; Feenstra, 1993). We can distinguish administrative (or structural) integration and operational (or functional) integration (Mills, 1983).



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## *Relations between basic health services and vertical programmes*

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In a district health system multi-function health services are organised in a network of health centres complemented with first referral hospitals. In many developing countries the running of a health centre is in the hands of a nurse or medical assistant heading a small team. In other developing countries and in most industrialised countries health centres are headed by general practitioners.

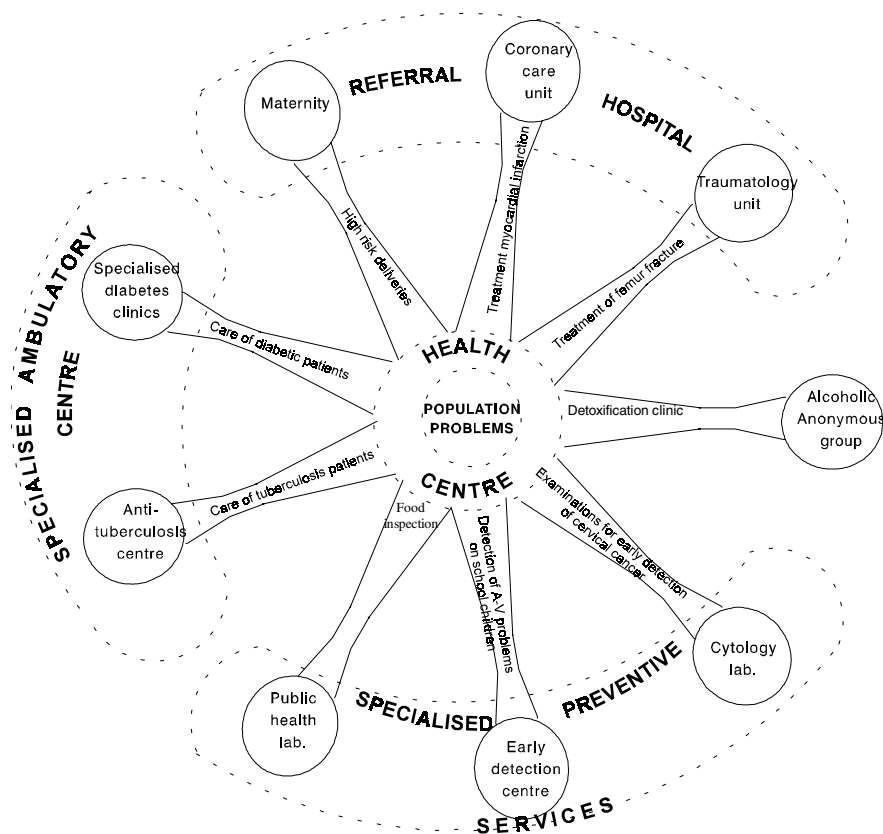
The health policy option considered by the authors of this paper sees the health centre as the first point of access for patients to a formal health care unit, lying at the very heart of the health care system (Figure 1). The health centre has comprehensive responsibility for its population, to which it gives effect by offering a package of continuous, comprehensive and integrated care, covering curative, preventive and health-promotional activities. It is at this level that all relevant information concerning the patient is stored.

The care provided by health centres is fundamentally characterised by its potential for developing the interaction of human and relational aspects between the service and the community it serves, much more than by the technical level of the care provided. In other words the quality of care is defined not only by reference to technical performance but also in terms of the capacity for communication between health care staff and patients, the accessibility of the service, the degree of continuity of care offered, etc.

There is a dynamic equilibrium between the offer of care through horizontal services and the need to structure certain forms of care through vertical programmes. It will depend on the emergence of new health problems, the level of resources available (in terms of the qualification of health personnel and of equipment and supplies) or on political

preoccupations at national level. The opportunity for basic health services to relate with vertical programmes can then take different forms:

Figure 1: Operational structure of health services



### Structuring existing activities

A multi-function health service may decide at a particular point in time to structure all the various tasks which it offers for dealing with a particular health problem in a programme, with the objective of improving its

effectiveness and/or efficiency. For example it may decide to draw up a programme for structuring its measures for dealing with diabetes, high blood pressure or acute respiratory infections.

### *Establishing new activities under new programmes*

New programmes may have been established because of the appearance of new problems, either on a national (AIDS) or a local scale. The basic health services are then alerted to the new problem and staff are trained for the complex of tasks which they will have to integrate into their activities in order to deal with the new problem.

### *Transferring activities from vertical structures to basic health services*

At some point it may be decided, for good reasons or for bad, to dismantle a vertical structure and transfer its activities to basic health services. This was the case with tuberculosis after the dismantling, in some countries, of networks of specialised dispensaries. It is also regularly attempted in the arrangements for the treatment of leprosy patients, when the activities run by vertical structures are transferred to basic health services.

### *Transferring integrated activities to vertical structures*

Conversely, certain activities run by basic health services may on occasion be transferred to a vertical structure which is considered more appropriate. This is the case of the care for AIDS patients in Belgium where the design of new therapeutical schemes justifies the recourse to a specialised (and in this case centralised) service.

## *Two perspectives*

The discussion on integration may thus be approached from two perspectives:

On the one hand, from the point of view in which integration is considered the *normal state of affairs* and discussion centres on possible preconditions and reasons for de-integrating, that is to say removing a particular activity from the package of activities of a multi-function first line health service and making it the responsibility of specialised personnel. The question then becomes: when should de-integration take place? In what circumstances is the multi-function health worker, the general practitioner, no longer the most suitable person to organise a particular activity?

On the other hand, from the point of view in which discussion centres on the question: when should an activity not previously integrated be integrated?

Conceptually, the first point of view assumes that the multi-function health service (for which the various health problems to be dealt with are on each occasion only relative priorities) is at the heart of the health care system. From this perspective a multi-function service then is, *until proof of the contrary*, best fit to manage a particular activity and de-integration becomes the exception for which a case must be made.

The second perspective, however, can claim to be more in line with reality as it frequently presents itself today; and this is broadly the point of view adopted in this chapter. This reality is the situation in which, whether we like it or not, many health activities are compartmentalised: that is, are not integrated. It is perhaps partly the consequence of a vision of health, still too fragmentary and selective, in which the relativity of each health problem is not acknowledged. From this point of view, discussion will centre on the arguments which would justify a transfer of activities previously carried out by vertical structures to multi-function health services.



The case of HIV/AIDS is a good illustration of the latter approach. The magnitude of the problem, its nature (a lethal condition, in Africa transmitted mainly through sexual relations and afflicting predominantly young adults), and the dynamic attitude of the initial group of victims (young male homosexual population in Europe and United States) towards its illness, led to extremely important work and research on the “new disease”. National AIDS programmes were soon set up throughout the world; their activities mainly took place in hospitals and vertical structures. It is only later, when the increasing burden of HIV/AIDS on the hospitals was recognized as a real problem in developing countries, that the issue of decentralising some of the activities of HIV/AIDS programmes in multi-function services was considered (Osborne *et al.* 1997, Ekeid *et al.* 1994). The question then becomes: is there room to integrate activities, when and how ?



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## *Potential and limits of integration*

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In certain circumstances, and for certain activities in a particular programme for dealing with a health problem, the integration of that programme in multi-function health services may be an appropriate strategy for making the services offered more effective, more efficient and more equitable. This is not, however, always the case. Integration, therefore, is not an end in itself (Mills, 1983).

Integration is justified only when some benefit is to be expected: that is, when it is more advantageous that a particular health problem be made the responsibility of multi-function health services. This benefit must, therefore, be spelt out and supported by argument. The justification for integration then becomes a crucial question. The answer must be based on *technical* and not on *ideological* grounds.

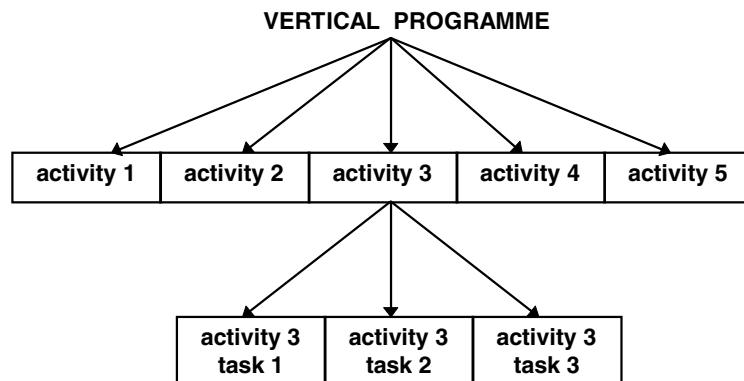
The rationale and motivation of integration must be of a positive nature: integration should be undertaken to bring about an improvement - for example because the handling of cases will benefit from a comprehensive and integrated approach, or to achieve early detection or the proper carrying out of treatment (Lehingue and Urtizbera, 1985; Walley and McDonald, 1991), or because integration will improve the accessibility of health care (Dharmshaktu, 1992; Courtright and Lewallen, 1992), or because it will reduce a stigma that may be attached to some particular health problem, etc.

In reality, however, it is rather common to find that the underlying rationale of integration is not demonstrated (Dechef, 1994) and it is simply taken for granted that integration is better; or to find that the rationale is of a *negative* order. As an example we may take the situation (regrettably very common) in which integration is decided on because of a lack of resources to maintain a vertical structure (Tonglet et al, 1990; Warndorff and Warndorff, 1990). In such a case integration is a makeshift solution, decided on unilaterally by the managers of the vertical programme, in

which multi-function health services are manipulated rather than used to take advantage of their potentialities.

The problem is not to integrate programmes, but rather to integrate activities or even tasks of a programme (Figure 2). From this point of view integration is not a standard operation, carried out at constant speed and intensity whatever the context may be (Bainson, 1994). It may be more advantageous to integrate an activity in some situations than in others. Integration is thus not an all-or-nothing question. And it does not mean that the vertical programme should disappear (Mercenier and Prévot, 1983), or that specialised personnel have no longer any part to play (Loretti, 1989; Tonglet et al, 1990; Feenstra, 1993): quite the contrary.

Figure 2: Integration of programmes versus integration of activities or tasks<sup>1</sup>



<sup>1</sup> A programme is made up of a group of activities; an activity consists of a series of tasks. Activity 3 may be taken as an example. In the vertical programme of tuberculosis control one of the activities is the passive detection and treatment of cases. It may be decided to integrate the detection of suspects in multi-function health services (task 1), and also the treatment and follow-up of patients diagnosed as tuberculous (task 3), but not the diagnosis (task 2). One of the reasons for not integrating this task might be that there are not sufficient resources: for example no resources for the purchase of a microscope in the multi-function health services. The diagnosis could then be made by a specialised service, and the patient could return to the health centre for treatment and follow-up. Certain activities in a programme should not be integrated unless there are solid reasons for doing so: for example quality control, epidemiological surveillance, fundamental research. etc. These activities also require the involvement of specialised personnel.

In the case of HIV/AIDS, the following elements are arguments in favour of the integration of some programme activities in multi-function services in developing countries:

HIV/AIDS typically is a condition which requires along the way from infection to death a whole range of services (curative consultations, family planning services, under-five clinics, other preventive activities). This calls for a health service able to provide integrated care in order to give the most appropriate answer needed at each contact, including referral when necessary. Both horizontal and vertical structures can offer integrated care. For example, the specialised HIV/AIDS clinic held at the Institute of Tropical Medicine in Antwerp attempts to offer integrated care. In some developing countries, "patient support" units have been created in the hospital where HIV/AIDS patients can be counselled during their stay (Osborne, CM 1997). Choice will depend on accessibility, acceptability and cost-effectiveness considerations.

A large variety of conditions appears during the long symptomatic pre-AIDS period: oral candidiasis, common cutaneous disorders, abscesses, respiratory tract infections, tuberculosis, diarrhoea, herpes zoster, etc. These problems constitute a vulnerable source of suffering in the sense that they can be treated by the existing therapeutic instrumentarium available in a majority of developing countries. They seldomly require a specific skill or technicity which could not be made available under certain circumstances (standardisation of case-management, support supervision etc.) in a network of basic health services. Moreover, these health problems are not specific for HIV. Many of them are part of the common pathologies seen in the curative consultation of basic health services of most developing countries. Hence, a better accessibility of HIV/AIDS patients to a polyvalent offer of care could increase both quality of life and life expectancy.

Below a certain level of immunity, HIV/AIDS takes the shape of a chronic condition in which the patients' status gradually worsens and which invariably leads to premature death. It then becomes a long lasting cause of important individual and social suffering. This constitutes a rational argument for a preferential development of the *care* aspect in the management of HIV/AIDS, aspect which is much more in line with the nature and purpose of a horizontal service than with those of a vertical structure.

HIV/AIDS is a disease with a stigma, of varying intensity according to the local social, cultural and political environment. This stigma may constitute a barrier to the utilisation by HIV/AIDS patients of an identifiable monovalent vertical structure (Osborne *et al.* 1997). The care and management of HIV/AIDS patients in multi-function services will decrease this barrier.

The very nature of HIV/AIDS is such that good multi-function health services may be more fit than vertical structures to manage most aspects of the care of HIV/AIDS patients. A vertical structure which would really aim to take over the care of HIV/AIDS patients, from start to end, would have no choice but to virtually duplicate a multi-function service.

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## *Problems encountered in the process of integration*

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*Integration is a process which may meet with considerable resistance from the actors involved*

The various members of staff concerned by integration may, in varying degrees, oppose it (Feenstra and Tedla, 1988; Bainson, 1994). This resistance may be of a technical, conceptual or human nature (Mercenier and Prévot, 1983).

### RESISTANCE BY SPECIALISTS

Social, political and technical reasons may motivate the specialist's resistance against a policy of integration in the case of HIV/AIDS. Specialists may fear a decline in the technical quality of the health care provided. They may also be afraid of losing power or losing their control over the running of the vertical programme and its content (Huntington and Aplogan, 1994). Such a control is obviously easier when dealing with a vertical structure than with a multi-function health service. The huge amount of funds availed for AIDS control and research also has facilitated the development of many specialized teams whose work and career prospects are often linked to the survival of vertical programmes.

Integration is more than a mere shift from a specialised structure to a multi-function one. It involves a real transfer of responsibilities, rights and duties to the "horizontalists", the staff responsible for running multi-function health structures.

Some of the tasks of a programme are carried out by specialised services. This is not in contradiction with the multi-function health service

remaining responsible for the patient's care. Let us return to the example of the tuberculosis control programme in Figure 2: there is no contradiction between the fact that the diagnosis of tuberculosis is still made at the central, specialised level and the "integrated" situation in which a decentralised multi-function health structure has overall responsibility for the care of patients. In this situation the multi-function facility uses the specialised service in the same way as a general practitioner uses a laboratory to have examinations carried out. The centre of decision remains at the point where arrangements for the comprehensive care of the patient are made.

#### RESISTANCE BY DONORS

If the management of resources is to become the responsibility of horizontal structures there is a real risk of problems in the supply of those resources; for very frequently the resources supplied by international fund providers are rigidly linked with budgetary items earmarked for financing precisely specified elements in vertical programmes. Their management by multi-function health services, for which this health problem is only one among many, makes it likely that some of those resources will be used for other activities which have little connection with the particular problem for which the resources were offered by these fund providers.

This problem is particularly relevant for HIV/AIDS as the majority of HIV related conditions are not specific of the HIV infection. A budgetary split in the resources allocated to patient care, according to the patients' HIV status, would be neither feasible, nor acceptable or desirable.

Donors are disinclined to support this kind of situation, not least because it could have a negative effect on the raising of funds; for funds are increasingly being raised through the media, for which it is necessary to have a single, simple - even simplistic - message, inevitably isolated from its context.

Moreover these strategies designed to generate funds make it necessary to offer those who give money tangible results in the short term which



justify the use of the money (in terms of health care coverage, for example, or the number of human lives saved); this is evidently not a realistic objective, at least in the short term, for the integration of activities included in a vertical programme.

#### RESISTANCE BY THE "HORIZONTALISTS"

There may also be resistances within multi-function health services for technical, social and cultural reasons. Integration may be rejected by the staff of a multi-function health service because social disapproval or the stigma attached to a particular health problem would lead the population to object to the mixing of patients with that problem and other patients. At the very start of the AIDS epidemic, there has been resistance coming from the health workers themselves because they feared this new disease. This perception and attitude is not static. In the case of HIV/AIDS, it has gradually changed because of better information on ways and risks of HIV transmission.

Integration may also meet staff resistance because of the surplus of work it involves. Integration can thus have a disruptive effect on the operation of multi-function health services (Unger, 1991). This can be the case for HIV/AIDS in settings where the prevalence is high. Staff may then feel overloaded with HIV/AIDS patients, not being able to cope with the need for regular home visits for example. Additional staff may then be needed; or the collaboration with a monovalent structure carrying out these home visits may then be considered.

#### RESISTANCE BY PATIENTS

The integration of arrangements for handling a health problem in multi-function services may also have implications for patients in terms of the loss of privileges: for example the loss of free treatment for their

particular problem<sup>2</sup>, or the loss of other advantages such as gifts of food (this is the case, for example, in Uganda with AIDS patients). Evidently these patients will disagree and will tend to oppose a process of integration which will make them "normal" patients just like the others. Patients may also oppose integration if they see the multi-function service as a second-best alternative to a specialised service.

In the case of HIV/AIDS, some of the patients, mainly the ones at an advanced stage of the disease, may be reluctant to loose the mutual psychological and moral support they can get from a specialised structure which plays the role of a meeting point.

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<sup>2</sup> In Congo-Kinshasa, in colonial times, leprosy patients sometimes objected to being offered the prospect of cure. A former leprosy patient then became an individual like any other patient and lost such privileges as free health care, exemption from taxes, free accommodation, etc. (personal communication from H. Van Balen).

## *There is a price to be paid for integration*

There is a price to be paid for integration in terms of technical efficacy, resources (guidelines and instructions, basic and continuous training, equipment and recurrent costs) and in terms of organisational changes. The price to be paid is linked with the status of *relative* importance of the health problem for which integration is to take place among all the various problems of which people are conscious, about which they complain and which they bring to the multi-function health services (Table 1). For example when an immunisation programme is integrated there may in consequence be a drop in coverage.

One sacrifice which must be accepted is a drop in the technical quality of the services provided (at least in the short term). By definition, a health worker in a multi-function health service (for example a generalist doctor or a health centre nurse) will never have the technical competence of a specialist in a particular field. And of course if this were not so the specialists would have no *raison d'être*.

Integration is thus not always possible even if it is desirable. Techniques, instruments and tasks which are integrated should be designed in such a way that they can be used by multi-function staff. It is necessary, therefore, to prepare and distribute guidelines and standardised instructions suitable for multi-function staff, who will frequently have only limited qualifications.

*Table 1: Differences between the approaches of managers of vertical programmes and managers of horizontal services*

<b>Manager of a vertical programme</b>	<b>Manager of horizontal services</b>
Health problem approach: a vertical logic	Health Service approach: a horizontal logic
An epidemiological objective in a relatively short term perspective: reduce the frequency of a given health problem in order to positively contribute to a measurable improvement in health status	A social objective in a relatively long term perspective: reduce human and social suffering created by health problems in general in order to contribute to individual and collective well-being
This health problem has a character of absolute priority	Any health problem has a character of relative priority
Methodology: a linear top-down approach	Methodology: a bottom-up approach answering to people's felt needs
Role of basic health services: increase the programme's coverage	Role of the basic health services: offer a technically adequate answer to people's felt needs and establish a dialogue with the community
Type of health personnel needed: personnel which is capable to implement the different programme activities	Type of health personnel needed: multi-function personnel
Perception of the community's role: the community is to use the services and to facilitate an extension in programme coverage	Perception of the community's role: the community is to participate in the decision making process on the basis of informed choices
Tendency towards maximalisation	Tendency towards optimalisation

Perhaps the most immediately visible cost of integration, at least in the short term, is the cost of the training programme for multi-function staff (Ross, 1982). The cost of an initial programme of specific training can of

course vary very considerably from one problem to another. There are also the costs of the continuous training of multi-function staff (mainly the cost of supervision), particularly in the short term; these costs can be very considerable during the first phase of integration, which makes more intensive supervision necessary.

Integration can also increase the recurrent costs of a multi-function health service (Brédo, 1991). Again, these costs will vary considerably from one problem to another, and it is difficult to quantify them. For example it might be necessary to buy specific drugs or additional equipment for multi-function services. It may also happen that the costs associated with the general logistics of multi-function health services increase because of integration, or that it becomes necessary to recruit additional staff to cope with the increased work load. Some of these costs may, however, be recovered if the specialised vertical structures are discontinued.



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## *Preconditions of integration*

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### *Basic health services must be functioning*

There is no point in integrating when multi-function health services are not operating properly. How can one integrate in something that isn't there?

How will integration work when the overall performance (both technical and relational) of multi-function health services is poor? Clearly the success of integration in these circumstances is very doubtful: a vertical structure may then be completely justified (Roos and Van Brakel, 1994).

However, if we are to answer this question properly we must take the context into account:

What resources are consumed by the vertical structure? Have the costs involved not become too high? The resources - or some of the resources - allocated to the vertical structure (which is concerned with only a single problem) could in actual fact be used to increase the functioning level of the multi-function health services (which have to deal with a variety of problems) if it is really a lack of resources that is the principal cause of their dysfunction. In other words, the functioning level of multi-function health services is a *variable* and not a *constant*.

Integration may offer an opportunity to invest in the overall functioning of multi-function health services: for example, resources for regular supervision may become available. It may also be a means of enhancing the credibility of the service and thereby increasing the satisfaction and motivation of the staff of multi-function health services: for example, the decision to equip health centres with microscopes under the tuberculosis control programme. The microscope can be used for purposes other than the diagnosis of tuberculosis. An improvement in the ability of multi-function health services to respond to problems with additional technical

capacity can increase the confidence and the credibility of these services. An interesting question to explore would be whether it is a marginal benefit of integration to trigger off the development of multi-function health services (even though this is not the principal objective of integration). It could improve the ability of multi-function health services to respond to the wide spectrum of problems presented by the population (Loretti, 1989).

A successful integration of HIV/AIDS control in multi-function health services would imply, given the complexity of the disease, a discussion on a variety of issues like effectiveness of curative care, quality of the relationship with the patient during individual consultations and quality of dialogue with the community at large, performance of the referral system and of the supervisory activities, level of standardisation of clinical management, extent of decentralisation of some treatments and techniques, capacity of the health service to synthesize and store significant patient information, etc. The integration of HIV/AIDS can thus be an opportunity to transform a situation perceived as a failure of the multi-function services to provide an appropriate answer to the community's demand, into a positive approach where multi-function services get strengthened.

In many developing countries, the AIDS pandemic has already given a boost to the *care* aspect of the health care delivery: for instance, individual patient counseling and home based care have received a new impetus. The other patients attending the health services may benefit from it and the general performance of the service may be strengthened.

Is there any advantage in having a monovalent (single-function) vertical structure concerned with a single problem in a context in which the functioning of multi-function health services is poor? This can be justified only insofar as such a health problem is so common and so serious that its control can be felt by the population as a real improvement in their wellbeing (for example epidemics of very serious problems such as African trypanosomiasis: Kegels, 1995).



## *Integration should be decided on at an appropriate time*

### INTEGRATION WHEN THE PROBLEM HAS BECOME LESS COMMON: TOO LATE

Frequently integration is decided on because the problem has become less common. For instance, for many authors discussing the appropriateness of integration of leprosy in basic health services, the main argument to do so is an epidemiological one, i.e. a drop in prevalence. This is what we have called a "negative motivation". In a situation in which the frequency of a health problem is decreasing the marginal cost of a specialised service becomes increasingly high: a stage of diminishing return is reached.

The managers of a vertical programme may then decide to integrate because the unduly high marginal costs of the specialised service become unacceptable to them (and to the providers of funds)<sup>3</sup>; *but not (necessarily) because the staff of the multi-function health services would really be offering a "plus", a significant improvement in the quality of care.*

In reality a situation of low prevalence may be a reason for *not* integrating.

The specific work load of the multi-function health personnel could be so low that they would not see enough patients with this specific problem to maintain their technical competence in handling the problem. The staff of multi-function health services will have little incentive to take a training course for a rarely occurring problem<sup>4</sup>. How can (non-specialised) staff be expected to identify correctly a new case of leprosy if it has become a very rare problem in the community? In the long term it is the credibility of the

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<sup>3</sup> Very high marginal costs could in fact be justified in a situation in which the health problem can be eradicated: i.e. a situation in which a permanent impact can be hoped for (as was the case with smallpox).

<sup>4</sup> World Health Organization. Report on a consultation on the operation of leprosy control in the context of primary health care. MOS/CDS/lep/86.3.

multi-function staff that is called in question, and there is then a risk that the community may lose confidence in their abilities. In such a context integration would have clearly negative repercussions and the managers of the vertical programme would have no difficulty in demonstrating that integration was a failure.

To integrate in a context of this kind may form a serious handicap for the staff of multi-function health services at the very beginning of the process of integration. This may also be the case when it is proposed to integrate the activities for dealing with a problem which has just emerged and is still relatively rare: it may then be too early to decide on integration.

#### INTEGRATION IN A SITUATION OF EMERGENCY: IS THERE ANY BENEFIT?

An emergency situation calls for a rapid response. Multi-function health services do not seem the most appropriate facilities for handling a situation of this kind.

The rapidity of response will be determined by the load of routine work falling to these health care units and on the amount of work required to deal with the emergency. For example it will not always be possible or acceptable to stop all their routine activities in order to deal with the emergency. Moreover multi-function health services will often not have the appropriate means to do this work properly. And finally it would be necessary to evaluate - independently for each such situation - what additional benefit there is in using multi-function staff (rather than specialised staff) to deal with a particular emergency situation. For example, what would be the specific contribution and the benefit of having multi-function staff involved in dealing with cholera? In the case of cholera there is an urgent need of people skilled in such essential techniques as oral and intravenous rehydration. No other particular technical skill is required. A hospital auxiliary may very well be the most competent person.

## *Integration involves a transfer of decision-making power to multi-function health services*

Integration may involve the disappearance of specialised health care structures, but not the elimination of the programme and/or the specialised staff, at the most centralised levels of the health system. As noted above, the establishment and the existence of a vertical programme is a political decision reflecting the fact that a given problem calls for particular attention even if the problem is not a need felt by the population (e.g. a decision to establish a vertical family planning programme may be founded on macro-economic or demographic motives). A vertical programme, therefore, may not depend on specialised vertical structures: whether or not specialised vertical structures should be used, and at what level of the health system they should be operational, are questions the answers to which lie in the technical field.

Integration involves administrative and operational changes at the level of multi-function health services, since there is no point in integration unless the multi-function health services have been given the means to deal adequately with the problem, taking account of the level of qualification and work load of their staff. Integration will necessitate - in varying degrees - supplementary training, appropriate instruction manuals, closer supervision, etc. This implies that the managers of the multi-function health services must have sufficient administrative authority and operational control: it is very difficult to achieve successful operational integration unless there is concomitant administrative integration.

A practical example which illustrates this point concerns supervision. Most of the work and studies on integration stress the importance of supervision. One important question, however, remains (Smith and Bryant, 1988): who should carry out the supervision? the specialist or the manager of basic health services? what are their respective roles?

Administrative integration means that the managers of multi-function health services are responsible for supervision; they will monitor the quality

of health care in general and not merely the quality of the handling of a limited number of health problems (Mercenier and Prévot, 1983). If there is operational but not administrative integration, there is a danger that a situation like that shown in Figure 3 may arise, with various specialists visiting multi-function health care units to supervise activities carried out at that level under a specific vertical programme. There might thus be several specialised supervisors supervising different programmes, possibly leading to overlaps and contradictions which become a source of confusion for the staff being supervised. The main concern of specialised supervisors is to check that their particular programme is being properly carried out. There is then a real risk that the multi-function structure may be seen as an appropriate instrument for developing the activities of each programme in relation to its particular objectives and that the multi-function health care unit will be used to serve the purposes of various specific programmes. This has been recognized as a problem in some settings where home-based care, in the context of an HIV/AIDS programme, was operationally integrated in multi-function services. Staff was kept away from its routine duties to perform a selective but time consuming activity (home visits for AIDS patients only) to the benefit of the AIDS programme but at the price of some other activities which had to be cancelled.

A situation in which a multi-function supervisor follows up the various activities carried out in a health centre is *not* in contradiction with the involvement of a more specialised supervisor at a particular time, provided that the multi-function supervisor is a person who appreciates when and why it may be appropriate to seek more specialised expertise and what particular expertise is needed (Figure 4). Not only is there no contradiction in having a specialist associated with the arrangements for supervision: it would be foolish not to use her/him when appropriate.

Figure 3: Supervision in the context of operational integration without administrative integration

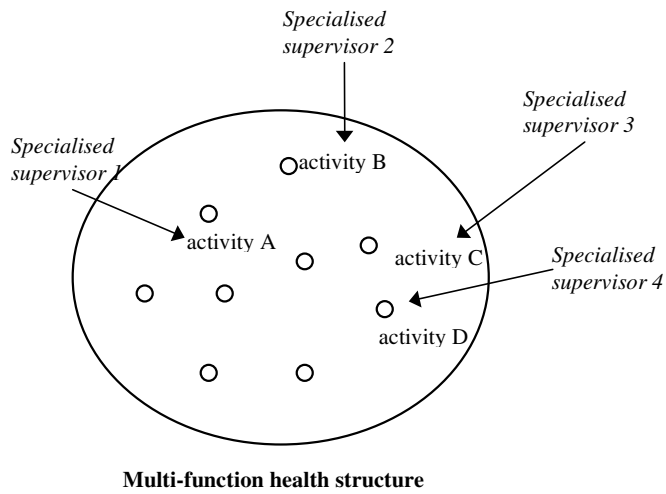
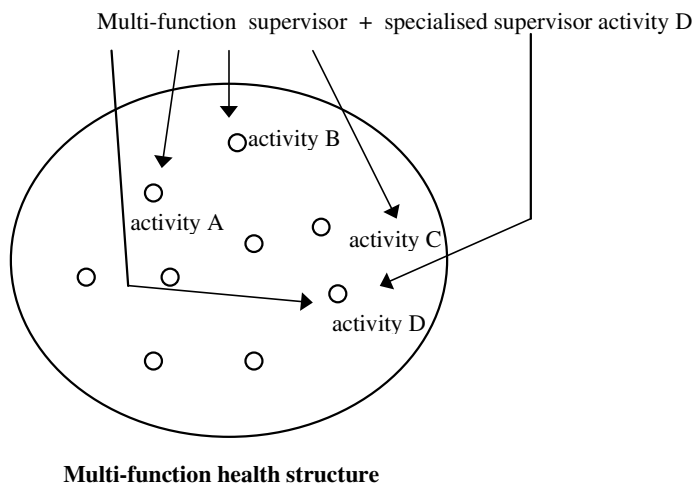


Figure 4: Supervision in the context of operational and administrative supervision





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## *Integration calls for a remodelling of objectives*

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Integration entails a redefinition of the objectives of the programme. Instead of aiming at a relatively short-term epidemiological impact, the objective becomes one of offering the most appropriate response to the suffering of patients. The integration of control activities in multi-function health services can clearly be part of a policy whose objective it is to have an epidemiological impact, for example in terms of reducing the incidence of the problem; but this should not, and cannot, be the prime objective of integration. Nor would it be reasonable to impose an epidemiological impact as the prime objective to be achieved by integration (Criel, 1992). The corollary is that the absence of impact on the frequency of the problem after integration does not (necessarily) mean that the policy of integration has failed. The case of passive case-finding and treatment of sputum positive pulmonary tuberculosis patients is illustrative. An integration of this activity in multi-function health services is a means to improve the care to TB patients; it will not (necessarily) lead to a decrease in the incidence and the transmission of TB (since many of these contagious patients will already have infected their environment *prior* to their case-finding). Hence, the terms of reference for an evaluation of the performance of passive case-finding carried out by multi-function first line health services should not include measurements of impact on transmission.

The framework and the criteria for the evaluation of integration must therefore be adapted. The results expected from a policy of integration must be clarified from the very outset and must be clearly formulated. Multi-function health services cannot be expected to achieve results which are impossible for them to achieve.





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## Conclusion

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Integration cannot succeed without a dialogue between specialised staff and the staff of basic multi-function health services. This dialogue is necessary from the very beginning, so as to promote the best possible mutual understanding between two different logics:

The logic of the system of multi-function health services is to respond in an appropriate manner and in a dynamic perspective to the needs of the population (where the health problem in question has only a relative priority) without the imposition of any specific target from outside. The achievement of any such target may interfere with locally defined priorities or even be at their cost.

The logic of the system of specialised services is to achieve quantified and relatively well defined objectives in the control of a particular health problem. Once the vertical programme has been established, its sole function is to deal with a given problem. The idea of priority, therefore, has little relevance.

A dialogue is also necessary to appreciate the specific characteristics of the other partner's potential contribution. A rational discussion on the sharing of activities and tasks between specialised and multi-function staff can then take place. Even if the two logics differ it is undeniable that there are sufficient overlaps between the two systems in terms of objectives: both of them desire to improve the care provided to patients. Sufficient common ground exists to initiate the dialogue. The starting point should be what is common to the two systems and not what distinguishes them from one another. Both systems can benefit from integration.

As has been shown above, it is important to organise a discussion between specialised and multi-function services on a technical basis and not on an ideological basis or on the basis of institutional arguments. In that case there would be a real risk that each partner would cling to its own

positions, and the result would be a service of poor quality of which the patient would be the first victim.

Before contemplating the integration of the activities of a programme in the basic health services it is essential that every health service manager should ask himself the following three questions: Is it advantageous to integrate? Is this the right time to integrate? Is it possible to integrate? The answers to those three questions are, as we have seen with the HIV/AIDS example, to a large extent situation bound, as well in place as in time. It is thus perfectly possible that in one context some activities are integrated whereas in another context the same activities are not; or even that in a same situation the answers to the questions outlined above change over time.

Integration is not the “magic bullet” in the control of HIV/AIDS. However, if a network of functioning multi-function health services exists, we would deprive ourselves of a wonderful tool if we do not use it. In the search for a dynamic equilibrium between the offer of horizontal services and the need to structure certain forms of care through vertical programmes, the choice for integration can be under certain conditions (“positive” motivation, concomitant operational and administrative integration, functioning basic health services) an appropriate strategy.

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