Through Mintzberg's glasses: a fresh look at the organization of ministries of health

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In 1987, district health care policies were officially adopted by a majority of developing countries. Many operational problems constraining implementation of such policies have subsequently been identified, most of which are attributable to well-known characteristics of less developed countries. However, the policy of operational and administrative decentralization has often been critically obstructed by inappropriate organizational structures in ministries of health. By applying Mintzberg's analytical framework to several ministries of health, we identify structural deficiencies that make systems unfit to match their policy environment and yield the expected outcomes of functional and decentralized services. We propose a typology likely to elicit strategies for decentralizing health care administration. Our analysis is based on the following steps:

– a description of Mintzberg's concepts of organizational structure, generic components (strategic apex, technostructure, supporting structure, middle line, operational core) and functions (horizontal and vertical integration, liaison devices, vertical and horizontal decentralization) applied to health systems;

– a discussion of divisionalized adhocracy as a suitable configuration for health organizations with a need for a high degree of regional autonomy, community participation, medical staff initiative, action research and operational research, and continuous evaluation;

– a discussion of the organizational features of a number of health ministry systems and a consideration of strategies for transforming configurations towards divisionalized adhocracy.

Keywords: community health services, organization and administration; government agencies, organization and administration; health care evaluation mechanisms; outcome and process assessment (health care); private sector; public health administration, standards.

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Introduction

The Director-General of a Ministry of Health meets the newly appointed Minister of Health.

"In our country," the Minister says, "health care should be effective, efficient, accessible and holistic, and should enhance the patient's autonomy."

The Director-General replies: "The best strategy for achieving these goals is through integrated district and primary health care, in accordance with our national policy since 1987. Our district management teams coordinate the work of hospitals and first-line care facilities. The strategy is built on the following principles:

– *the assignment of responsibility for a defined population to each facility;*
– *functional task differentiation between hospitals and health centres, and complementarity between comprehensive services and specialized disease control programmes;*
– *resource allocation adapted to the level of decentralization;*
– *community participation associated with health facility management;*
– *an appropriate mix of planning, control and liaison tools."*

"Very nice," says the Minister, "but why doesn't it work?"

District health care policy was adopted by a majority of developing countries in 1987 (*1*). Since then, many operational problems constraining its implementation have been identified (*2*). These problems are to a considerable extent attributable to well-known features of less developed countries: underfinancing of public services, low priority given to social issues and consequent relatively high private spending (*3*), and deficient human resource management exacerbated by political nominations and a lack of career prospects. Of course, there are considerable variations between the less developed countries in this respect.

The implementation of district health care, which essentially involves operational and administrative decentralization, has often been significantly obstructed by the inappropriate organizational structure of ministries of health. By applying Mintzberg's analytical framework (*4*) to health systems we

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identified structural deficiencies that made them unfit to match their policy environment or yield the expected outcome of functional and decentralized services. We propose a typology likely to generate strategies for more efficient decentralization of health care administrations. The analysis is based on the following steps:

– a description of Mintzberg's concepts of organizational structure, generic component parts (strategic apex, technostructure, supporting structure, middle line, operational core) and functions (horizontal and vertical integration, liaison devices, vertical and horizontal decentralization) applied to health systems;
– a discussion of divisionalized adhocracy as a suitable configuration for health organizations with a need for a high degree of regional autonomy, community participation, medical staff initiative, action research and operational research, and continuous evaluation;
– a discussion of the organizational features of a number of health ministry systems and a consideration of strategies for transforming configurations in the direction of divisionalized adhocracy.

Mintzberg's concepts

Mintzberg distinguished five components of an organization: the strategic apex, the technostructure, an operational core, the supporting staff, and the middle line (*4*). Fig. 1 illustrates the configuration of a national health system on the basis of this breakdown.

Strategic apex. The strategic apex defines general priorities in the light of a national health policy (e.g. for eliminating neonatal tetanus), international agendas (e.g. for developing market forces in the health sector), and advice from the technostructure. The apex also defines national standards, allocates resources, and decides how additional resources can be mobilized. It plans sectoral structures and strategies, summarizes information and evaluates performance. External factors influencing apex decisions are social (e.g. the capacity of the lower socioeconomic classes to compel the higher ones to contribute to overall social security, as occurred in Europe after the Second World War), macroeconomic (state budgets), corporate (e.g. professional bodies) and political. In the less developed countries, donor agencies have a powerful influence on the ministry of health apex.

Technostructure. The technostructure evaluates and gives expert advice, whereas other components in the organization take decisions. It also provides training and develops research activities relevant to the operating core, middle line and strategic apex.

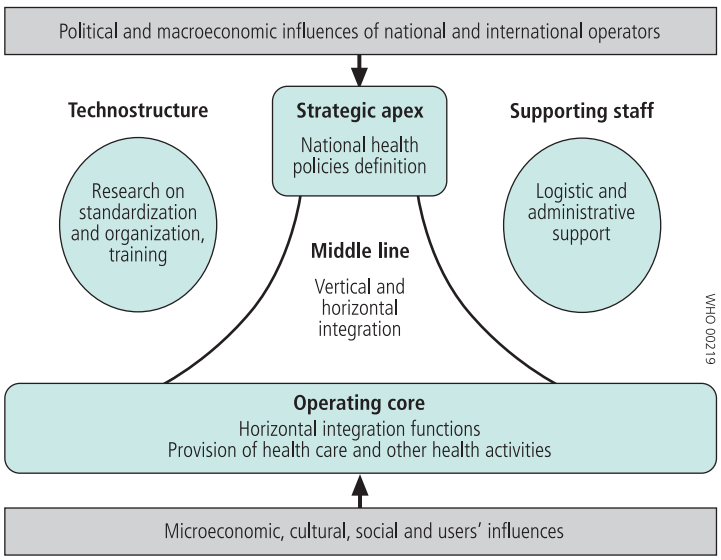
Operating core. The operating core delivers health activities (curative and preventive care, health education and health promotion). It is composed of several multipurpose operational units (general practitioners, health centres, hospitals) and services concerned with specific issues (e.g. tuberculosis control, family planning, leprosy, water and sanitation).

Supporting staff. The supporting staff provide logistical backup (e.g. a regional drug supply office) and administrative support (e.g. an accounting system).

Middle line. The middle line ensures horizontal and vertical integration of the organization. Vertical integration means that there is congruence between central and field activities. National policy-making should take field conditions and perceptions into account, while field actors should work in line with national policy. In this connection, top-down and bottom-up information transfer and liaison tools (defined as coordination mechanisms operating through mutual adjustment) are pivotal. Horizontal integration means that there is tight coordination between and within operational units: between multipurpose district services and vertical programmes, and, within the district, between peripheral health units and hospitals. The middle line should control peripheral decisions and be capable of adapting national guidelines to local conditions, deciding on resource allocation to districts and summarizing evaluations in terms of both epidemiology and health service organization.

Management team. It is tempting to identify the district management team as the middle line in a health system. However, closer analysis reveals that it combines the features of several components. The management team has to make the district health services work in order to meet the demands and health needs of the population in an equitable manner. It is thus responsible for optimizing operational decentralization (from hospitals to health centres and vice versa) and for the integration of specialized disease control targets into comprehensive health care delivery; it has to manage local relations with other sectors (e.g. the political

Fig. 1. **Schematic representation of the functions of the five components of a national health service organization**



authorities, agriculture); and it is responsible for adapting national norms to local conditions (*5*). These can all be considered as typical middle-line tasks. However, the district management team also has to manage resources, since this is a support staff feature; it may carry out operational research (technostructure); and its staff members often also have clinical duties (operational core). It would thus be too restrictive to consider the district management team exclusively as a middle-line component.

Units, power, and coordination

Once the five components have been identified within an organization its overall configuration can be described by the nature of its units, the power they hold and their coordination mechanisms.

The units are the operator groups of an organization. Within a health system we can distinguish the ministry of health authorities (central, regional, district), the operational units (whether governmental, nongovernmental or private profit-making organizations), certain specialized programmes, training and academic institutions, and, in some countries, the financing bodies.

The power balance between the different elements in the organization can be described by the degree of vertical and horizontal decentralization. Vertical decentralization implies a transfer of decision-making power from higher to lower levels, for example from a regional medical director to a district management team, or from a national tuberculosis programme manager to regional managers. Horizontal decentralization means that power is delegated from the manager who is in charge to other members of the organization working at the same level, e.g. the transfer of authority for supervising health centres from a district management team to other doctors. Decentralization of power always increases the need for the coordination and training of peripheral staff.

Coordination between and within organizational units is achieved by planning and control systems or through the use of liaison tools such as liaison managers and teamwork. Planning and control systems are appropriate when activities can easily be standardized. On the other hand, coordination through use of liaison tools is more suitable for specialized, complex and highly interdependent work. Within national health systems, horizontal integration between districts and disease control programmes as well as vertical integration between policy and care delivery call for communication, interaction and mutual adjustment, since complex outputs are involved which create a high degree of interdependence in the provision of care. Resource administration and accounting, on the other hand, often need tight planning and control systems.

Structure of organizations

Organizations are constantly pulled in different directions by key staff: the technostructure wants to standardize procedures, the apex wants to centralize decision-making, the middle line wants to increase the autonomy of divisions, the core units want to professionalize, and the support staff want to collaborate. The interactions between these different positions determine the dynamic structure of the organization. An effective organization shapes its design parameters to fit its aims as closely as possible. Mintzberg categorized organizational structures into five clusters, depending on their prime coordinating mechanism, the key level within the organization and the type of decentralization (Table 1):

- the simple structure;
- the machine bureaucracy;
- the professional bureaucracy;
- the divisionalized form;
- the adhocracy.

Not all of these configurations are considered in our analysis as possible templates for the health system, since the simplest form is not applicable to complex organizations. Examples of the machine bureaucracy and the professional bureaucracy are, however, discussed. According to our analysis, a mix of the divisionalized form and the adhocracy, i.e. the divisionalized adhocracy, is probably the most suitable configuration for a health system.

Is divisionalized adhocracy the best template for a health care administration?

The divisionalized form in Mintzberg's typology allows the geographical entities in an organization to operate in the absence of coordination with the others. Adhocracy, as defined by Mintzberg, is a configuration coordinated chiefly by mutual adjustment and is characterized by horizontal job specialization. The administrative components of adhocracies are line managers and staff experts, and sometimes operators, working together in ever-changing relationships on ad hoc projects. Adhocracies operate in complex environments and use sophisticated technical systems. The adhocracy is an ideal configuration if the main purpose of an organization is to produce creative solutions to unique problems. Mintzberg states that the operating adhocracy innovates and solves problems directly on behalf of its clients, and that one of its key features is that its administrative and operating work tends to blend into a single effort (*4*).

The divisionalized adhocracy is an organization combining characteristics of both the divisionalized type and the adhocracy, making it possible to address two challenges simultaneously: the need to respect regional features and to achieve interregional coordination, enabling more mutual adjustment among regional divisions. It seems a particularly suitable management model for a national health system based on geographically defined health districts and regions. The key features of the adhocracy appear to be crucial to

Table 1. **Structural configuration of organizations according to Mintzberg** (*4*)

Structural configuration	Prime coordinating mechanism	Key part of organization	Type of decentralization
Simple structure	Direct supervision	Strategic apex	Vertical and horizontal centralization
Machine bureaucracy	Standardization of work processes	Technostructure	Limited horizontal decentralization
Professional bureaucracy	Standardization of skills	Operating core	Vertical and horizontal decentralization
Divisionalized form	Standardization of outputs	Middle line	Limited vertical decentralization
Adhocracy	Mutual adjustment	—[a]	Selective decentralization

[a] In administrative adhocracies the support staff are a key component. In operating adhocracies the operating core is pivotal.

effective health care systems. The expected outputs in terms of health care delivery are complex and diverse. A considerable amount of creative problem-solving is required from health workers on behalf of their clients, and this implies that administrative and operational work should blend into a single effort. At the district level, where a single team manages both the district hospital and a network of health centres, the operational and administrative pyramids should closely overlap so that problems can be identified and addressed quickly through managerial changes (*5*). Experimentation with creative solutions to unique problems seems pivotal if health organizations are to be successful. Furthermore, the desired vertical and horizontal integration of disease control and the health service organization implies continuous mutual adjustment among highly skilled personnel. On the other hand, an ideal national health care system should, to some extent, be divisionalized, because the geographical and sociocultural heterogeneity within a country, e.g. in accessibility to health care or in user participation, requires autonomy and decision-making capacity at the periphery.

From ideal to reality: machine bureaucracies

As defined by Mintzberg, machine bureaucracies are based on norms and standardization of work processes. Peripheral units are highly specialized, have limited autonomy and a reduced output scope. In a health system, essentially disease control programmes can standardize work processes successfully. This is why health ministries with powerful vertical programmes tend to display so many features of machine bureaucracies. Examples can be found in several West African and some Latin American public health services, where evaluations often focus on output, e.g. vaccination coverage rates, rather than on the quality of care. Each programme develops its own information system, leading to parallel management control systems. Each disease control programme orients its own specific research agenda, focusing mainly on appraisal of the burden of disease (*6*, *7*) rather than on care delivery and organization. Each programme competes with the others for scarce funding. Such systems often have a rather weak apex, which tries to achieve coordination mainly through formal planning and control mechanisms. In West Africa the top-down planning style was perhaps inherited from health systems managed by French colonial forces, but this approach has been further encouraged by international agencies eager to keep tight control on their spending. This particular management style has been adapted to produce a limited number of outputs, but is inappropriate for the very diversified items that dispensaries and hospitals have to deliver. Hospitals have been neglected because their complex outputs cannot be subjected to work standardization and because middle-level management was not suitably qualified. In a generally difficult economic context causing chronic drug shortages and demotivation of human resources, the very features of machine bureaucracies such as the lack of overall vision on quality of care and the limited output scope (selective primary health care (*7*)) have contributed to the erosion of the acceptability and accessibility of comprehensive health facilities in these countries, bringing their health systems close to collapse.

Health system reform

Badly underfinanced public services combined with a rapidly growing private sector in urban settings have made reform inevitable over the past decade. Health centres were given a facelift by activities with characteristics reminiscent of the Bamako Initiative (*8*), and some operational integration of disease control programmes and curative care delivery was attempted by putting qualified versatile health professionals in charge of national disease control programmes. However, there was little administrative integration at the regional or district level, with the result that programme technicians still supervise their programmes in health centres, while operational units are accountable to various lines of authority. This greatly reduces the efficiency of district and regional (middle-line) staff, and gives even more power to directors of disease control programmes. Moreover, donor agencies have often set out to reform machine bureaucracies by acting directly on the apex. Their aim was not so much to integrate systems or decentralize them in order to diversify output, but rather to privatize care facilities progressively and drive the systems towards becoming professional bureaucracies (*3, 9*). This hidden agenda contributed to the weakening of health ministries.

If the aim is to rebuild a public health service, to enlarge the scope of health service outputs, and to

improve the quality of care in hospitals and dispensaries and develop community co-management of health centres, a change in the organizational culture within this type of health ministry seems essential. More autonomy should be granted to peripheral managers at the expense of those at the apex. A strategy for reform on these lines builds mainly upon an essentially conflictive relationship between the centre and peripheral staff managers. This conflict can hardly be pursued openly unless some protection is offered by apex members within the system, technical or donor agencies, or powerful middle-level managers. On this condition, middle-line health professionals could become agents of change, as they are currently quite frustrated at the underuse of the skills acquired during medical training. Associations of district management teams could also exert political leverage aimed at reorientation of national health policy. District management teams, middle-level management staff and members of the technostructure each have a role to play in the reform of machine bureaucracies. Along with political parties they are the forces capable of extending the output of the health system to provide the comprehensive curative and preventive care demanded by users. The reform agenda should also include the strengthening and reorientation of the technostructure with the aim of enhancing the district management team's power and skills (*10*). External support organizations (nongovernmental organizations, cooperation agencies and universities) can play a very positive role. In Mali, the training of district management teams, field supervision and expert on-the-spot guidance are provided by a technical assistant seconded to the regional medical officer. Such support is also possible within a national training unit; for example, the Cimefor/Misereor project in Niger, the WHO Thies project in Senegal (*11*, *12*) and the Benin UNICEF Bamako Initiative project (*13*).

The risk of choosing a wrong template: professional bureaucracies

According to Mintzberg, professional bureaucracies are characterized by the standardization of professional skills rather than output, a high degree of autonomy for working units, and weak vertical and horizontal integration. The key component of these organizations is the operating core. In health systems with features of professional bureaucracies, health professionals tend to defend their autonomy against the influence of the central apex. Another feature of a professional bureaucracy is the weakness of the technostructure. Medical doctors work without technical supervision, on-the-spot training or evaluation. Their outputs remain unstandardized, and this contributes to increasing the cost of care. They may, however, invest in training to increase their technical skills, because increased prestige gives them even more freedom in decision-making. The major drawback is that their mission, as they perceive it, is almost exclusively professional, i.e. medical, to the neglect of organizational aspects, resulting in poor integration and inefficient practices within the system.

Western Europe. The health systems of several Western European countries have features of this type of organization. Since the Second World War, European governments have bartered health care efficiency, effectiveness and accessibility against subsidies to health professionals for the delivery of care. In Belgium, for example, the reimbursement of payments for medical services by the state, acting as a third party in the relationship between patients and care providers, is based on the accreditation of professionals and the recording of activities. With the help of complex control mechanisms, this system has enabled the government to control costs, although these are much higher than those in the United Kingdom. The administration of the reimbursement system is a responsibility of the Ministry of Social Affairs (*14*). Belgian health professionals can fully defend their interests as members of the board of the administration in charge of reimbursements. This professional bureaucracy pattern derives from health policy choices, referred to as the purchaser/provider split, made in Belgium after the Second World War.

Less developed countries. Many of the less developed countries with experience of state health systems are now rapidly moving towards such professional bureaucracies as a result of internal lobbying and international pressures. In Chile and Colombia, the administrations were exposed to intense lobbying by private organizations interested in obtaining tenders and public funds. Similar changes, although conducted at a slower pace, are taking place in virtually all of the less developed countries. Public health services are being dismantled and public funds are being diverted to private operators. Health ministry facilities are managed almost autonomously by medical professionals who are entitled to collect and manage funds. Unfortunately, these changes are taking place in countries where the state often represents only the vested interests of the better off (*15*).

The results are far from reassuring. In the less developed countries, privatization is not sufficient to correct for poor quality in clinical care (*16*), to widen the array of outputs (*17*, *18*) or to increase efficiency (*19–21*). It is well known that systems based on a purchaser/provider split are inefficient (*22*) and that corrective devices such as diagnosis-related groups are not very effective. Such pathology groups, whereby standard reimbursement are given for standard health care, with a view to preventing private health structures from artificially increasing their costs, did not enable the Netherlands to establish prospective budgets (*23*, *24*). Their applicability in less developed countries remains doubtful because of their computational complexity and data requirements.

Quality assurance mechanisms should be part of the work process but are often neglected as being too complex to be applied by untrained middle-line

staff in less developed countries. Moreover, health ministries operating as professional bureaucracies in such countries have been relatively ineffective in controlling health professionals who lack skills or ethical integrity. This problem is particularly crucial in less developed countries because the low purchasing power of their populations makes them extremely vulnerable to malpractices (*25*). The behaviour of many health care professionals working privately appears to be associated with motives of economic survival or profit, and this compromises the accessibility and quality of the care they provide (*16*).

Professional bureaucracies in less developed countries thus typically suffer from:

– a lack of horizontal integration, with overlaps and functional deficiencies in health coverage;
– an absence of tariff enforcement, leading to poor financial accessibility to care;
– marked heterogeneity in the quality of care and an absence of quality assurance mechanisms.

Bureaucracies and adhocracies

How can health professional bureaucracies be brought closer to divisionalized adhocracy? In Africa, purchasing power remains weak and the profitability of the private sector seems limited. This makes the apex more reluctant to embark on contracting out to the private sector. In Mali, when the Ministry of Health could no longer finance its health units (*26*), the apex allowed the following two approaches to develop in parallel.

- The French cooperation favoured conversion of the state machine bureaucracy to a professional bureaucracy through privatization (*27*) and for this purpose created a network of privately run urban health centres in Bamako (*28–30*) whose main function was to employ jobless doctors. The middle-level management of the Ministry of Health was not capable of facilitating access to these health centres, and their utilization by urban dwellers remained extremely low. In 1994 the 25 health centres concerned, covering a population of 624 300, had a consultation rate of only 0.13 per year per inhabitant (*30*). It is reasonable to assume that the overprescribing of drugs, making it possible to finance doctors' salaries, has been a significant financial barrier prohibiting access to care.
- UNICEF and the World Bank favoured a divisionalized adhocracy pattern and accordingly invested in a mainly rural project to help health centres to become self-financed and co-managed by the community (*31*). Funds were provided for experts at the middle level to train and guide district management teams, which in turn were made responsible for training public health field workers. Changes in the management control system and pilot health centres paved the way towards decentralization. Although the process was slow (only about 25% of Mali's health centres adopting the scheme in 10 years), the impact on service utilization and staff motivation seems to have been positive. In 18 areas the rates of utilization of curative care increased from less than 0.1 to almost 0.25 new cases per year per inhabitant (*32*).

The latter approach seems to have overcome an inherent weakness of professional bureaucracies — their lack of vertical integration. In this instance the strengthening of the middle level ensured the performance of activities consistent with national policy, while the project negotiated with community-co-managed health centres on technical supervision, access to essential drugs and vaccines, and other matters. This experience was similar to that of the Tanzanian Ministry of Health, which negotiated with denominational hospitals for them to assume responsibility for well-defined target populations (*33*).

Better links between medical practice and service organization can, moreover, be fostered by continuous medical education and technical guidance, which requires an effective technostructure thoroughly imbued with the criteria of quality of care (e.g. good practice, evidence-based medicine, quest for efficiency). Evaluation, audit, peer review, quality control and technical supervision make it possible to bridge the gap between individual needs and training.

While district management teams and systems for continued education can help to bring professional practices closer to national health policy, more is needed to secure this when health facilities are managed autonomously. A national financing system makes it possible to improve the operating core's compliance with national policy. The negotiation of state inputs has been used to secure access to care and complementarity of functions between first-line health units and hospitals in many European countries. Similar results have been obtained in some less developed countries (e.g. Mali, the United Republic of Tanzania and, more recently, Benin), but these are rare and atypical since they were achieved by affluent donor agencies or powerful nongovernmental organizations operating in a favourable political environment. Districts, being closer to the health output (*34*), could perhaps improve third-party mechanisms. What is at stake is the will of governments to defend public interests effectively against private lobbies. External coalitions of representatives of the public, namely health committees, trade unions, social associations and political parties, have influenced public health facilities in many circumstances (*35*). Social strategic planning is pivotal to identifying and dynamizing those groups likely to reinforce public control of units with a large measure of managerial autonomy.

Divisionalized organizations: can they do better?

The essential feature of divisionalized forms of organization is their coordinating mechanism, the standardization of outputs. Their key element is the middle level.

The United Kingdom National Health Service meets many important criteria of the divisionalized form. Its outputs, the various types of health care financed by the Ministry of Health, are standardized. Regional health boards enjoy considerable power because of their partly political, partly technical position and can purchase care according to prevailing health problems and available resources. These boards, which can be viewed as middle line, secure some degree of coordination between the various units, either general practitioners or hospitals, and some vertical integration as well. At the district level, trusts are instrumental in securing performance control. Since 1996 the National Health Service has developed a more integrated structure covering general practitioners, hospitals, and community health services. Personal social services are still uncoordinated, creating a significant problem for local government authorities as the cost of caring for an ageing population emerges as an obstacle to seamless services (*36*). Products and services are extremely diversified. Finally, more than in any other Western European country, in the United Kingdom there is a significant flow of authority throughout the system.

The basic reason why divisionalized health systems could benefit from moving towards divisionalized adhocracies is that the most effectively integrated health systems have management units (facilities and health tiers) large enough to generate efficiency of scale but small enough to allow for communication with the operational staff, i.e. the health unit professionals. This in turn enables local managers to develop on-the-spot training, increase operational decentralization, foster local initiatives and improve communication and technical skills.

The United Kingdom recognizes the need for geographically based health action zones but the agenda for reducing the number of National Health Service trusts (*37*, *38*) may be at odds with this requirement. The key to cost containment lies with primary care, where 80% of National Health Service consultations are delivered for 20% of the overall cost. New primary care organizations should supersede professional partnerships and take on the capitation-based management of finite health and social care resources. These new organizations should have more local accountability for the quality of primary care provision and should be more sensitive to local needs. Operating under the strategic framework of the new integrated local authorities, they depend for success on the involvement of all clinical staff in resource management. Cost containment through locally managed care is to be the theme of the next period of the National Health Service (*36*). In addition, trusts could be instrumental in getting evidence into clinical practice (*39*).

The adhocratic character of the organization in the United Kingdom could be strengthened by health professional organizations (e.g. the Royal College of General Practitioners) defending a new vision of health care and services and permitting exchanges of experience. Vertical decentralization from boards to trusts could build on administrative entities smaller than regions, covering hospitals and networks of first-line providers, which are close enough to the operational level to improve the use of resources, the quality of care and user participation. Since health boards, as political bodies, are not in the best position to improve the technical and managerial skills of field workers, they could bring regional health policy into line with other regional political choices (*40*) and organize technical guidance for the trusts. External institutions such as universities could make such guidance available to trusts and direct pilot experiments on their desirable features and resources.

Discussion

We have shown how the structural organization of a health ministry can impede reform directed towards achieving an integrated health system. Mintzberg's vision of the effective organization provides health sector analysts with a framework for systematizing experience, generating fruitful hypotheses and establishing a common vocabulary. Other theorists also convey fruitful perspectives (*41*). For example, Lindblom's (*42*) incrementalist approach provides valuable insights on processes of organizational decision-making and design involving changes at the margins of policies and procedures. It is specifically useful for assessing policies having impacts that can be quantified (such as budget allocation), permit comparison and are sufficiently precise for application to a policy process that moves through small changes. Williamson (*43*), who uses a make or buy distinction, sheds light on the purchaser/provider split (*19*), an important subject of debate in modern health policies.

One important concept in the ideal health care system is not addressed by Mintzberg: community participation in health centres and hospitals is more than simply relaying clients' viewpoints. Participatory bodies attached to health facilities in a democratic administration require further conceptualization.

On the other hand, our classification of existing health systems within categories of Mintzberg's typology has necessitated some simplification, since health systems frequently include components belonging to different categories. Country specifics were possibly overemphasized in this exercise in order to reveal the main features and open avenues for change.

The district health care policy adopted in Harare, Zimbabwe, in 1987 can be seen as an attempt to reinforce the middle-line management of health care systems, decentralize health management and integrate the system. Operational and administrative pyramids were designed to overlap at the peripheral level, where top-down and bottom-up planning should meet. The district is an administrative form in which health units and their resources are managed by a single authority, the district management team, capable of providing or mobilizing adequate technical support. In Mintzberg's typology, districts would

satisfy the criteria of an operating adhocracy. Middle-line staff are responsible for securing vertical and horizontal integration in health services. They should mainly work through liaison devices, although planning control is necessary for some disease control programmes, for monitoring access to care and for cost control.

This brings us back to the question "Why doesn't it work?" posed at the start of this article, and leads to another: "How can a divisionalized adhocracy be made to work as required?" The answer is twofold.

First, success depends on a vision of health and health care and on leadership that can promote it throughout the system. New objectives should be formulated in terms of the quality of care, allowing for community participation such as advocated by UNICEF and WHO as an ingredient of the management of public health facilities. It is indeed pivotal for securing a policy of public interest (*44*) in government health facilities. However, community participation requires care to achieve a reasonable level of acceptability. In many countries, therefore, it is necessary to improve nursing practice in hospitals, to ensure that family physicians and family medical assistants serve as cornerstones of comprehensive primary health care systems (*45*), and to create patient-centred care.

Second, strategies for attaining these objectives should be designed which can take advantage of Mintzberg's ideas. The degree of autonomy at the periphery is determined to a great extent by the periphery's financial autonomy. Support staff are pivotal for resource allocation and in order to secure objectivity and overcome political biases there should be some social control over their operations. The introduction of cost recovery has provided communities with some leverage for modifying health service performance. With a view to providing backup for health districts, technostructure units should be able to support facilities offering wide product diversification. These units should also be capable of giving a vision to apex members, who are often political leaders lacking technical insights. This implies that such units should be relatively independent of the system but sufficiently in contact with field operations to be credible. Experience shows that these units endowed with national or regional responsibility can have a pivotal role in the management training of field staff, on-the-spot expert coaching, and promotion of a new organizational culture in the health services of less developed countries.

In conclusion, the divisionalized adhocracy has been identified as the most suitable organizational structure enabling health systems to deliver effective, efficient, accessible, acceptable, holistic and continuous health care while enhancing the autonomy of patients. Shaping the system into an effective organization is clearly one of the challenges that has to be met in successful health sector reform. ■

Résumé

Nouveau regard sur l'organisation des ministères de la santé au travers du cadre de Mintzberg

En 1987, la majorité des pays en développement ont adopté officiellement des politiques de soins de santé de district. De nombreux problèmes opérationnels limitant la mise en œuvre de ces politiques ont été par la suite identifiés, dont la plupart sont imputables à des caractéristiques bien connues des pays les moins développés. Toutefois, la politique de décentralisation opérationnelle et administrative a souvent été sérieusement bloquée par les structures organisationnelles inappropriées des ministères de la santé. En appliquant le cadre analytique de Mintzberg à plusieurs ministères de la santé, nous recensons les défauts structuraux qui font que ces systèmes ne peuvent correspondre à leur environnement politique et produire les résultats attendus, à savoir des services fonctionnels et décentralisés. Nous proposons une typologie susceptible de déboucher sur des stratégies de décentralisation de l'administration des soins de santé. Notre analyse se fonde sur les étapes suivantes :

– une description de ce que Mintzberg entend par structure organisationnelle, éléments génériques (sommet stratégique, technostructure, structure de soutien, structure intermédiaire, centre opérationnel) et fonctions (intégration horizontale et verticale, dispositifs de liaison, décentralisation verticale et horizontale) appliqués aux systèmes de santé ;
– une discussion sur l'adhocratie divisionnaire en temps que configuration convenant aux organisations de santé ayant besoin d'une forte autonomie régionale, d'une participation communautaire, d'initiatives du personnel médical, d'une recherche-action et d'une recherche opérationnelle, ainsi que d'une évaluation permanente ;
– une discussion sur les caractéristiques organisationnelles d'un certain nombre de systèmes employés dans les ministères de la santé et une étude des stratégies permettant de transformer ces configurations en adhocratie divisionnaire.

Resumen

La perspectiva de Mintzberg como una nueva forma de análisis de la organización de los ministerios de salud

En 1987 la mayoría de los países en desarrollo adoptaron oficialmente una política de atención de salud de carácter distrital. Posteriormente se han identificado numerosos problemas operacionales que limitan la aplicación de esa política, la mayoría de ellos atribuibles a características bien conocidas de los países menos adelantados. Sin embargo, es la inadecuación de las estructuras orgánicas de los ministerios de salud lo que a menudo ha obstruido de forma crítica la descentralización operacional y administrativa. Aplicando el marco analítico de Mintzberg a varios ministerios de salud hemos identificado deficiencias estructurales que impiden que los sistemas se ajusten a su entorno político y obtengan los resultados previstos de los servicios funcionales y descentralizados. Proponemos una tipología que favorece la formulación de estrategias de descentralización de la gestión de la atención de salud. Nuestro análisis se basa en los pasos siguientes:

– descripción de los conceptos de Mintzberg relativos a la estructura orgánica, los componentes genéricos (vértice estratégico, tecnoestructura, estructura de apoyo, línea media, núcleo operativo) y las funciones (integración horizontal y vertical, dispositivos de enlace, descentralización vertical y horizontal) aplicados a los sistemas de salud;
– examen de la adhocracia segmentada en divisiones como configuración idónea para las organizaciones de salud que necesitan un alto grado de autonomía regional, participación comunitaria, iniciativa del personal médico, investigaciones sobre actividades e investigaciones operacionales, y evaluación continua;
– examen de las características organizativas de varios sistemas aplicados en los ministerios de salud y consideración de las estrategias para transformar las configuraciones en una adhocracia segmentada en divisiones.

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