Decision-making and health system strengthening: bringing time frames into perspective

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Abstract

In many low-and middle-income countries, health systems decision-makers are facing a host of new challenges and competing priorities. They must not only plan and implement as they used to do but also deal with discontented citizens and health staff, be responsive and accountable. This contributes to create new political hazards susceptible to disrupt the whole execution of health plans. The starting point of this article is the observation by the first author of the limitations of the building-blocks framework to structure decision-making as for strengthening of the Moroccan health system. The management of a health system is affected by different temporalities, the recognition of which allows a more realistic analysis of the obstacles and successes of health system strengthening approaches. Inspired by practice and enriched thanks a consultation of the literature, our analytical framework revolves around five dynamics: the services dynamic, the programming dynamic, the political dynamic, the reform dynamic and the capacity-building dynamic. These five dynamics are differentiated by their temporalities, their profile, the role of their actors and the nature of their activities. The Moroccan experience suggests that it is possible to strengthen health systems by opening up the analysis of temporalities, which affects both decision-making processes and the dynamics of functioning of health systems.

Keywords: Health system strengthening, health system dynamics, temporality, time frames, decision-makers, Morocco

Introduction

There is global consensus that health system strengthening (HSS) is essential to achieve improved health outcomes. The WHO ‘building-blocks’ framework (WHO, 2007) has been used as a basis to structure health strategic plans and drive reforms. In many low- and middle-income countries, stewards of health systems face a host of new challenges and competing priorities. As economic growth and globalization create higher expectations, decision-makers must not only plan and implement as they used to, they also must deal with discontented citizens and health staff, be responsive and accountable. This does not simplify the implementation of national health policies as it creates new political hazards susceptible to disrupt the whole execution of the plan.

A limitation of the building-block framework is that it is rather static. Time is a missing variable. Yet, the management of a health system does not take place on a whiteboard. It is affected by different time frames or temporalities. The most important aspect of temporalities in health systems is that the future is not ‘void’: it is ‘loaded’ with expectations, preferences, perceptions and interests of stakeholders.

Our main objective in this article is to bring time into the general thinking of HSS. The article owes a lot to the personal professional practice of the first author (as a Secretary General of the Ministry of Health of Morocco). In a first background section, we present how the Moroccan experience brought us to this realization. We then present a framework articulated around five timeframes which...
Background

Many countries have adopted the WHO ‘building-blocks’ framework as a basis for strengthening their health system. Morocco is no exception. The country focused on the following priority areas of health system improvement: expansion of healthcare services, human resources for health, health information systems, development of health financing mechanisms and pharmaceutical reform. Governance has been ensured through traditional mechanisms of legislation and hierarchical accountability lines. The revision of constitution triggered the need for increased citizen participation, which led to a national consultation process in the health sector (Ministère de la Santé, 2012). The ‘building blocks’ framework was also used to structure the National Health Plan 2012–16 (Ministère de la Santé, 2013). Reporting on the progress of the national plan implementation was organized bi-annually and shared with various stakeholders [parliament, media, technical and financial partners (TFP), managers of decentralized services, etc.]. The mid-term assessment conducted in 2014 showed a relatively good implementation of the national strategy with 79% of the planned action points initiated and 46% completed. However, the population continued to be unsatisfied by health services and access to care. The mid-term evaluation also revealed that:

- The constitutional right to health was used more as a frame to justify actions than as an actual health policy goal;
- The sectorial strategy was dominated by numerous reform measures and traditional health programmes, but not much was done to alleviate the daily suffering of citizens, faced with illness and the difficulties of accessing care;
- There was no investment in staff motivation, making it difficult to collaborate with professional organizations;
- The promotion of politically opportune actions suffered from a lack of integration into the operational structures of the Ministry of Health (MoH) and therefore did not benefit from broad support.

These assessments led Moroccan decision-makers (including the first author, ABA) to reconsider their HSS strategy and reorganize all efforts around the provision of services to citizens. Workshops and consultations were organized to reflect on an alternative system for developing sector strategies. This process led to the development of the framework presented in this article. Experience had indeed taught us that time frames deserved much more attention in our understanding of HSS.

The health system as a set of interacting dynamics

The management of a health system is affected by different time frames or temporalities. As a standalone variable, time is neutral in the analysis of HSS strategies. It becomes, however, highly significant as soon as we bring it in interaction with perspectives of different HSS actors. All stakeholders have their own needs and preferences. The latter result in expectations, impatience, rigidity, latencies that pressure and influence the decision-maker actions. This ‘complex’ of time and actors’ perspective is conceptually difficult to apprehend. But adopting the decision-maker perspective under the lenses of HSS probably makes things more tractable: we propose to use the ‘HSS dynamics’ term. The term ‘dynamic’ emphasizes the fact that decision-making is both affected by the continuous flow of phenomena beyond the control of the decision-makers (the stream of requests falling upon them) and by the pace that decision-makers can themselves give to processes under their control (as they can block, slow down or accelerate things).

Our premise is that recognizing these dynamics allows us to shed a more realistic light on the obstacles and the successes of HSS approaches.

Our analytical framework is built around five HSS dynamics identified initially through the professional practice of ABA. The number and the boundaries of these dynamics emanate from the specificities of the key players in the health system, the issue-specific

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Key Messages

- Investing in the health system building blocks is not sufficient to successfully strengthen a health system; we must also bring time frames into perspective and consider the pragmatic realism of the decision-makers.
- The analysis of the temporalities of the different health system actors allows a better understanding of the health system functioning.
- The health system can be described on the basis of a grid of five dynamics, adapted to the decision-makers practice in health systems.
temporalities that matter to them, and the organizations they are part of. As we shall show, these dynamics interact in the everyday life of the actors of the health system. They can reinforce each other and thereby ensure a harmonious and continuous development of the health system. However, they can also conflict with each other and disrupt the agenda of the policymakers. This is the main reason why they should get a central place in our HSS analysis.

The delimitation of the dynamics depends on each context and the HSS needs. As the purpose of a health system is to serve the population, we believe that the first dynamic to consider is the dynamic of services to the population. Three others directly influence this central dynamic: the programming dynamic, the political dynamic and the reform dynamic. We think it essential to acknowledge the existence of a fifth dynamic that lends support to the other four and which we propose to call the capacity-building dynamic. It focuses on the development of intangible assets (knowledge and skills) that constitute strategic intangible capital for HSS (Figure 1). These five dynamics differentiate themselves by their temporalities, their profile, the role of their actors and the nature of their activities.

Because it emphasizes the dynamics of the actors and the temporalities, our first hypothesis is that the framework of the five dynamics could complement existing frameworks which are often based on structures or functions. Our second hypothesis is that this model could easily be appropriated by political decision-makers, as it emanates from their practices and considers their bounded rationality and the relativity of the scope of their decisions.

In the following sections, we present each of these dynamics and highlight their relevance and the way they are structured for service provision (Table 1). We will illustrate this approach through examples from the Moroccan experience. This will give us more insight into these five dynamics and help us appreciate their descriptive power (see boxes). We will then delve deeper into the analytical confines of our proposal.

The services dynamic: service users’ experience
The service dynamic is the closest to the core of health systems: a better delivery of health services to individuals, families and communities (WHO, 2016; Kruk et al., 2018). A service is defined as ‘a place of interaction between a user (or customer) and a production system of goods and services’ (Teboul, 2006). The service involves the user directly as a beneficiary and a consumer but also as a participant in the performance and evaluation of the health service (front office). In service management and marketing, several authors (Normann, 1984; Carlzon, 1989; Grönroos, 1990) considered the service as a ‘moment of truth’ because it is a decisive factor in the assessment of the user-service provider relationship and the quality of service user experience.

The services dynamic therefore depends primarily on users’ time perspective, and is centred on ‘the everyday’. This dynamic is organized around demand for care or help, sometimes in distress or in life-threatening situations (Box 1). Service provision consists of medical (preventive, curative and promotive) and non-medical services (reception, appointment and complaint management, etc.).

The services dynamic considers on the effectiveness of health facilities as their ability to manage interactions, time spent with users and ‘moments of truth’. In these organizations, the key players are frontline staff who are in direct interaction with patients and who redefine health priorities through their everyday decision-making (Terwindt et al. 2016). Because of their position, their role is 2-fold: operational as service providers and relational as representatives of the health system to the eyes of the users and their families (Grönroos, 1982; Eiglier and Langeart, 1987).

Table 1 Characteristics of the different dynamics of a health system

| Dynamics of the health system | Temporality | Actors | Actions |
|------------------------------|-------------|--------|---------|
| Services dynamic             | User-time (the everyday) | Users, Providers, Family caregiver, Social providers | Home, Primary health centres, Hospitals | Health care, Service provision |
| Programming dynamic          | Administrative and cyclical time (short and medium term) | Planners, Managers, TFP | Administrations (Central et decentralized), Non-governmental organizations (International co-operation, Civil society) | Planning and mobilization of resources |
| Reform dynamic               | ‘Long term perspective’ time (yet affected/bounded by windows of opportunity offered by the political dynamic) | Decision-makers and stakeholders | Ministerial departments, Partners | Health reforms, Transformation of health systems |
| Capacity-building dynamic    | Collaborative time (variable duration) | Internal and external | All organizations | Knowledge management, Skill building, Development of organizations |
| Political dynamic            | Elastic and plural time (variable duration) | Political actors, Stakeholders, Social movements, Pressure groups | Government, Political parties, International organizations | Negotiations, Agreements, Alliances, National or international partnerships |
Box 1 User services
Despite the enshrining of the right of access to care in the new 2011 constitution and the increase in investments in the health sector, the population kept complaining about the lack of access to health services and the poor quality of care. The mid-term evaluation of the 2012–16 national health plan had shown that the effort made was not focused on improving the relationship between users and health facilities which is basically a relationship of service.

So Moroccan health authorities launch in 2016 a specific programme to strengthen user services. This programme included the set-up of remote services to manage hospital appointments (MAWIDI internet application) and complaints (CHIKAYA), a re-organization of medical emergency services with an emergency ‘141’ phone service and pre-hospital emergency services including medical helicopter transport (HELISMUR).

Box 2 Patient-centred health programmes
The strategic reorientation of this dynamic by the Moroccan Ministry of Health has allowed the development of people-centred health programmes with particular attention for those in a vulnerable situation such as the elderly, the disabled, prisoners, drug users, etc. The focus of other programmes was redirected towards specific user demands and the needs of firstline health professionals. Examples are the cancer control programme developed in partnership with the Lalla Salma Foundation for Cancer prevention and control (Big national NGO chaired by the first lady) and the Global Fund-supported HIV/AIDS programme.

Box 3 Advanced regionalization
In the late 1990s, the MoH started regionalising the health system. This resulted in the set-up of the first regional health directorates and the creation of local planning, coordination and resource allocation posts. Under the new constitution (2011), this undertaking evolved into a comprehensive territorial reform, referred to as “advanced regionalisation” (Law 111-14 of 2015). The reform enabled the health sector to benefit from public aid funds such as the Social upgrading funds and the Interregional solidarity funds, instituted to reduce inequalities. It also allowed the sector to reap the benefits of new political dialogue mechanisms, e.g. consultative committees on equal opportunities, equity and gender.

The reform of advanced regionalization is the highlight of a negotiation process which started in 1996, when the law on regionalisation was published. It took a lot of arbitration and a search for convergence between the political parties to arrive at its current design. The reform of advanced regionalisation was not isolated. It was launched while the health sector was undergoing other reforms such as in basic medical coverage (or universal health coverage), the hospitals reform, the health facility map, the pharmaceutical sector and in paramedical training. Health sector reform was no longer a single issue but became a project consisting of multiple components, impulses and of variable duration according to the political agendas and the stakeholder game.

Due to the time required for their implementation and the diversity of their objectives and their agendas, these reform projects required the establishment of a dynamic design and implementation framework that is different from the dynamics of services and programming. To ensure coherence in the health system strengthening, both the reform of advanced regionalisation and other reform projects must find their justification in boosting the dynamics of services and improving the experience of users with health services.
child mortality reduction strategies, or more comprehensive ones such as the reform of universal health coverage (UHC).

The reform dynamic derives from the vision of decision-makers and stakeholders. It requires negotiation skills, ability to take some risks, political commitment and visibility on available resources. Politicians are often reluctant to engage in this dynamic as its impact is seen in a far future and has little electoral value. This dynamic is driven by the political dynamic (see further), and it owes its progress to policymakers’ and stakeholders’ mobilization (Box 3).

The reform dynamic is based on the temporalities of an important number of stakeholders and several administrations or ministries are often involved. Ideally, this dynamic would be intergovernmental and benefit from the continuity of public administration for its implementation. It is advisable to fit it into a broad political dialogue formalized in charters, agreements or development plans involving all stakeholders.

A challenge of the reform dynamic is that, while aiming for change (modification of institutional arrangements), it must preserve the functioning of the administration (programming dynamic) and not affect the continuity of user service (services dynamic). This explains the importance of and the need for a transversal dynamic of systemic empowerment and learning.

The capacity-building dynamic: knowledge management and skill building
Penrose (1959) and Wernerfelt (1984) laid the basis for a movement of organization theory that focused on intangible resources. Several authors further developed and specified this concept (Prahalad and Hamel, 1990; Spender and Grant, 1996; Teece et al., 1997). In reference to this theory, capacity building in health systems contributes to a sustainable intangible capital, through investment in knowledge, skills and institutions.

The capacity-building dynamic consolidates all processes that aim at improving or strengthening the capacities of the health system as intangible resources. It supports technical skills for the services dynamic; structure organizational processes, resource mobilization and implementation in the programming dynamic; and inspire visions and ensure sustainable change in the reform dynamic. The CARPESS project is an example of this kind of dynamic (Box 4).

As part of this dynamic, all health organizations should be ‘learning organizations’ and policymakers should develop a leadership practice supportive to learning, encourage the implementation of knowledge management processes and promote an environment open to the exchange of experiences (Garvin et al., 2008; Akhnif et al., 2018). The capacity-building dynamic is necessarily part of a temporality of varying durations that uninterruptedly underpins other dynamics and ensures the efficiency of the underlying collective learning processes.

The political dynamic: leadership and accountability
The four dynamics above are, to variable extent, under the control of health authorities.

However, health authorities are also subject to political crises, social movements or external decisions out of their control.

Our fifth dynamic is the ‘political dynamic’. It results from the action of institutional political actors (government, parliament, political parties), and their interaction with informal social movements and active forces of society, i.e. civil society organizations, advocacy groups, media and opinion leaders (Box 5). It is within this dynamic that alliances and coalitions are formed.

Box 4 Certificate in Analysis and Strengthening Policies and Health System (CASPfHS)
The directors at central and regional level are responsible for implementing health policies and supporting the dynamics of health system actions with all the background, skills and responsiveness this implies. These managers have little time to attend training courses that are often not adapted to their context. At the start of the reform process and as a result of social and time pressures, the MoH of Morocco, well-aware of these issues, organised a distance learning capacity-building programme with the support of the WHO and the Institute of Tropical Medicine Antwerp. This CASPHS programme is spread over 8 months and targets all central and regional managers. The course covers the themes of national reforms and is based on various empowerment tools (self-study, reading articles, watching videos, drafting syntheses, face-to-face discussions and study tours abroad). A conclusive appraisal of this initiative (WHO / EMRO, 2017) has led the health authorities to extend it to hospital management staff within a national institution that strengthened its capacities accordingly. The initiative triggered a more comprehensive understanding of the health system and created a shared vision on central and regional level. The expected outcome is not just skill acquisition by a group of managers but an institutional transformation of the MoH.

The political dynamic is marked in part by the unexpected. Political instability or crisis, by nature, makes HSS difficult. The time of the political dynamic is ‘elastic’ and can be short or medium term, according to electoral deadlines, opportunistic coalitions or political momentum. But it can also be subject to sudden halts, accelerations or the need of an immediate response. This dynamic

Box 5 National Consultation on Health Expectations (Intidarat assiha)
In order to develop a transparent and democratic national health strategy (2012-2016), the MoH of Morocco launched a broad consultation programme, called “Intidarat assiha” (#Expectations of health) in 2012. The aim was to identify the expectations of citizens, the civil society and health professionals. The programme derived its legitimacy from the provisions of the new Constitution which state that the government should create consultative bodies to involve the various civil society actors in the elaboration, implementation and evaluation of public policies (Article 13). It targeted all levels of Moroccan society and was based on four tools for collecting data on expectations: direct radio audiences (25 channels), continuous public hearings (10 days), the “Facebook” social network and a press review (6500 newspaper and magazine articles). Proposals emanating from these different consultations were included in a report (MS, 2012) that was shared with stakeholders and that served as a discussion platform at a National Health Conference, under royal patronage (MS, 2013).
will also be part of a longer-term time frame supported by actors conscious of their long-term interests (professional bodies, service providers, investors). Furthermore, it is influenced by developments at the global level (e.g. the sustainable development goals), particularly through international organizations and partners that provide technical and financial support.

Articulating the five dynamics

With the five dynamics, we conceptually equip the decision-maker with an understanding of the multifaceted nature of time. In the services dynamic, time is short, iterative and intense. In the programming dynamic, time is cyclical, incremental and has a deadline. In the reform dynamic, time is a resource if it allows sustained action in a long-term perspective. Likewise, in the political dynamic time is plural, marked by events, which may challenge or provide windows of opportunity for the reform dynamic. Finally, in the capacity-building dynamic, time is collaborative and corresponds to a temporality of knowledge capitalization and good practices (Table 1). Steering a health system is about skilfully managing these five dynamics.

Discussion

Equipped with the descriptions of the five dynamics, we can now examine the possible analytical power of our framework in the context of HSS. As mentioned in the introduction, the time variable has been rather absent in the conceptualization of and reflections on HSS. According to Dawson (2014, 2016), even leading thinkers on change management have often bypassed the temporality factors or considered these to be a non-controversial issue for analysis of change. In our opinion, the analytical strength of the five dynamics framework is the awareness that for the decision-maker every issue at stake is backed by stakeholders who have their own temporalities and that satisfying is central to success.

With this plural view of temporality, we conform with the observations made by others (Butler, 1995; Kaplan and Orlikowski, 2013) that temporalities are not necessarily linear and that they have a meaning because they affect decision-making and learning processes. If they are an obstacle, they can affect performance, because they block the capacity for reflection and action (Ciborra, 1999; Moore and Tenney, 2012). By bringing the intertwined timelines in our analysis, we give ourselves a chance to develop a better understanding of the challenges of changing a social system (Palier and Surel, 2010; Dawson and Sykes, 2016).

Given their relation to temporalities, decision-makers have a responsibility to manage the pressures of time to prevent it from negatively affecting decision-making (Maule et al., 2000; Marsden et al., 2002). To do this, they will try to manage time rather than be ruled by it. They will give ‘rhythm’ to their actions by choosing decisions that give quick wins or opting for sequencing over a longer period (e.g. by reprogramming projects). They can also negotiate a speed-up in anticipation of a crisis or forego an action to the benefit of a better alternative. They also know that delays in the implementation of projects or reforms can be considered as failures.

By categorizing the challenges of temporalities, we hope to provide the decision-makers with a grid that allows them greater control over the uncertainties and therefore over the development of the collective processes that must be managed.

A big part of the daily challenge of the decision-maker is to manage the various temporalities head-on. The analytical strength of our framework lies in the awareness it arouses and the proposal for sequencing it contains. This issue is central because the inadequacy between temporalities and actions creates dysfunctions and inefficiency. A classic case is the political impatience that clashes with the slow programming. A good example is a government that wants to implement a comprehensive health financing reform to achieve UHC during one single political mandate (3–5 years). A good decision-maker is someone who recognizes the necessities of urgency, but who is also aware of the constraints imposed by the implementation. She knows how to get teams and administrations out of their routines, but also values a job well done. The framework of the five dynamics can help the decision-maker in their everyday job of making the difficult synthesis of the multiple contradictory and often pressing demands emanating from the different categories of actors.

Any decision or intervention in one of the dynamics necessarily has implications for other HSS dynamics. For example, commitment to health reform requires political decisions and compromises. Implementation requires planning and resources, and the sustainability of the process needs capacity strengthening. Thus, the programming dynamic prepares and follows the political dynamic, as it rolls out the reform dynamic. Similarly, the services dynamic provides information to the programming dynamic and triggers the political dynamic (e.g. in case of incident or deficit). Likewise, the reform dynamic preserves and strengthens the programming and services dynamics.

The concept of ‘dynamics’ complements the ‘building-blocks’ concept which is static and offers an ‘inventory’ approach (Frenk, 1994). The six building blocks constitute a system only because of the multiple interactions that connect them. Health systems are in fact dynamics of interaction, synergies and subsystems undergoing change (Senkubuge et al., 2014). As evidenced by its success, the six building-blocks framework has heuristic power. It is simple and structuring. Yet, this simplicity is at the same time misleading, as the framework is silent on the essential variable of time.

The five dynamics framework shares the same concern for equipping policymakers with easy-to-use conceptual proposals. As such, the concept of dynamics preserves both the social and temporal dimension of the system and the decision-making processes that drive it. In complex adaptive systems, such as health systems, the active components in the reform of the system are agents (actors) free to act according to their bounded rationality and their interests and whose actions are interconnected, in such a way that the actions of one agent modify the context of other agents (Pickle and Greenhalgh, 2001). As De Savigny and Taghreed (2009) reminded us, the role of actors includes their participation as individuals, civil organizations and networks, influencing every component of the system. The importance given in our framework to actors (individuals, groups and organizations) and to time allows combining a synchronistic functional approach that emphasizes the role and functions of actors and institutions as well as a diachronic approach interested in flows and temporalities. The integration of these two approaches preserves the health system components as well as processes. The model reflects the complex and changing nature of health systems and offers new angles for understanding HSS.

To facilitate understanding of the logic of change in health systems, Frenk (1994) pondered that the functions of health systems are easier to understand in a relational framework specifying the main actors, their exchanges and the bases of their mutual relationships. He proposed a differentiation of the actors’ role and the levels of intervention. We have added temporalities as a factor of differentiation. One of the great strengths of our proposal is that it allows to deal with the paralysis, the blockages, the slowness, which are most
if the time in fact related to time. An HSS analysis framework that has no such analytical strength is fundamentally incomplete from the decision-maker’s perspective.

Although each of our dynamics is marked by certain actors, it does not trap them into one single dynamic. While recognizing the diversity of health system actors and the many uncertainties and actions they supervise, our alternative framework lets them position themselves according to different statutes and roles in each of the five dynamics.

In addition, temporal differentiation clarifies the analysis of change and the health policies and strategy trajectories. Relativity in the understanding of time and duration of actions allows policymakers to cope with contextual constraints, political agendas and scarcity of resources. Strengthening the position and the role of the actors thus facilitates negotiations and accountability. Similarly, temporality provides a better understanding of the sustainability of changes in HSS. Inversely, it also enlightens the challenges faced in fragile states, where dynamics are disrupted and their movements and interactions are threatened.

We suggest that time and temporality should be a new research field; they deserve further conceptual and theoretical exploration within the health system. As such, further investigation of the analysis of HSS temporalities could shed more light on their role in the evolution and regulation of health systems.

Conclusion

In this article, we made a diagnosis and outlined an informed proposal based on literature review and the professional experience of the first author. We think that this plan must now be consolidated and we see at least two possible complementary approaches.

One would be basic conceptual research about taking time into account in the analysis of social systems, in particular health systems. We hope to have created an opening for researchers to further study temporality in greater depth, for example by linking to research on complex adaptive systems.

The second approach is that of action and empirical research. We need enough application to appreciate whether the five dynamics grid enables decision-makers to appropriately describe life-situations and empowers them in the difficult job of steering health systems. At the end, this is what matters the most.

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