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Health Science

GOVERNANCE OF HEALTH SYSTEMS: IMPLICATIONS FOR PUBLIC HEALTH POLICY AND RESEARCH

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ABSTRACT "Governance of health systems" is a relatively emerging concept in "Public Policy" and there are fundamental concerns in understanding what health system governance is and how it could be impacted for Public Health Policy and health outcomes. Present study highlights a systematic review of the literature to describe the concept of governance and related theories underpinning as applied to health systems; and to identify which frameworks are available and have been applied to impact health systems' operations and good governance. Study of governance as understood is a complex process in impacting health systems and discussed analytically using multidimensional approaches of 'Interdisciplinarity'. Health system governance is difficult to roll out; the concept of governance originates from different disciplines and therefore interdisciplinary in its approach, is multidimensional in its nature and scope. Present paper discusses about comprehensive understanding of public health governance which could enable public health policy makers to prioritize solutions for problems identified as well as replicate and scale-up examples of good practice and therefore hasten Sustainability.

KEYWORDS : Public Health Interdisciplinary, Policy Evaluation, Health Systems Frameworks, Governance, Health Systems Strengthening, Public Policy and Sustainability

INTRODUCTION

Governance - a public policy terminology where the heart of the matter is a problem of "governance" becomes defined implicitly as a problem of "government", with the corollary that the onus for "fixing" it necessarily rests with the government. Partly it is about how governments and other social organizations interact, how they relate to citizens, and how decisions are taken in a complex world. Thus governance is a process whereby societies or organizations make their important decisions, determine whom they involve in the process and how they render account. The concept of governance may be usefully applied in different contexts– global, national, institutional and community (UNDP, 2003).

Governance in the health sector refers to a wide range of steering and rule-making related functions carried out by governments/decisions makers as they seek to achieve national health policy objectives that are conducive to "Health Systems Strengthening" using Primary Health Care approach to achieve the strategic goal of universal health coverage (WHO). Governance is a political process that involves balancing competing influences and demands. It includes:

- maintaining the strategic direction of policy development and implementation;
- detecting and correcting undesirable trends and distortions;
- articulating the case for health in national development;
- regulating the behaviour of a wide range of actors - from health care promoters, financiers to health care providers; and partners; and
- establishing transparent and effective accountability mechanisms.

Governance has been discussed in many disciplines such as political science, economics, social science, development studies and international relations using different theories. Governance matters as it is concerned with how different actors in the world function and operate and the reasons behind their decisions. Political scientists are of the opinion that governance is not a science which can be 'adequately captured by laws, statues or formal constitutions' (Chhotray and Stoker 2009). Governance is defined as the rules (both formal and informal) for collective action and decision making in a system with diverse players and organizations while no formal control mechanism can dictate the relationship among those players and organizations (Chhotray and Stoker 2009). Political scientists have also expressed concerns that there are insufficient tools to hold people accountable as governance is characterized by complicated policy networks and responsibility is diffused and shared among many stakeholders (Stoker 2006). Governance is becoming more important in international development, particularly due to the movement towards 'good governance' in international aid. The World Bank has played a central role in bringing governance into the development agenda, introducing the concept of 'good governance' in 1989 in a landmark report on sustainable growth in sub-Saharan Africa (World Bank 1989). The report encouraged donor countries to be 'selective' and to give aid to countries with a 'good policy environment' (Chhotray and Stoker 2009). In many ways, governance has been used as a political tool in international development, although this is often denied (Chhotray and Stoker 2009).

In relation to health, the World Health Organization (WHO, 2000) defined Governance in terms of 'stewardship', and called for strategic policy frameworks combined with effective oversight, regulation, incentives and accountability. This definition is based on political ideology; that the health system can be influenced by transparent rules, governed by effective oversight and strong accountability (WHO 2007). More recently, health system governance has been described as 'an aggregation of normative values such as equity and transparency within the political system in which a health system functions' (Balabanova, 2013). As efforts to strengthening of health systems and health service delivery have accelerated during the last few decades, governance has received increasing attention. Prominent among international development partners have described governance as being the 'most important factor' for poverty alleviation and development (Graham, 2003). Governance comprises different functions both within and outside the health sector. In the public policy literature these are commonly described as 'principles', 'concepts', 'dimensions', 'components' or 'attributes'. These terms tend to be used synonymously in the public health governance literature. For this review, we used the term 'principles'. Research is needed both to explore each of the principles of governance in more depth and, to describe governance more generally, in order to understand ways of improving and impacting health systems (Lowenson 2008).

International research confirms about governance principles, if implemented effectively, can make a difference to the functioning of health systems and healthcare facilities. In the context, the present study attempts to understand which frameworks for impacting governance in health systems have been developed, operationalized and how governance principles at different levels of a health systems' functioning are implemented. In other words, the study includes a systematic and selective review of the literature to: (1) describe and critique how the concept of governance and the theories underpinning it have been applied to health systems globally; and (2) identify if and how frameworks have been developed and used to impact governance in the health system. The study concludes with lessons for impacting health systems with successful sharing of scalable examples with effectiveness in governance and sustainable health outcomes.

Governance Frameworks: Theories and Perspectives

The aim of this review is to provide an overview of frameworks available and describe how they have been developed, adapted or applied to assess health systems governance in operation. Description and analysis of governance frameworks in health systems are derived on the basis of theories from new institutional economics; disciplines of political science and public administration; development literature and use of interdisciplinary studies and approaches. Under mentioned are in-depth description and analysis of theories and perspectives

concerning 'Governance of Health Systems'.

Principal–Agent theory:

In 'principal–agent' theory, a 'principal' hires or contracts an 'agent' to undertake a particular service within a functional system. Agents may have similar as well as different objectives from those of the principal. Agents, usually have more information than the principal, providing them with an advantage to pursue their own interests at the expense of the principal. Fundamentally, the theory looks at how much of the value that the agent produces should go back to him/her in the form of incentives i.e. the agent (healthcare provider) produces certain services for the principal (the government), for which the agent expects some form of payment (Chhotray and Stoker 2009).

Frameworks to assess health systems governance that draw on 'principal agent' theory, assume that governance is the result of interactions among principals and agents with diverse interests. Two key assumptions using 'principal–agent' theory are; (1) there are incentives and sanctions for the different actors which are performance-based and are used to stimulate accountability and (2) information asymmetry and power difference among different groups. Healthcare users are normally regarded as 'principals' while the state and healthcare providers are 'agents' providing healthcare services to users (Brinkerhoff and Bossert 2008; European Commission 2009; Baez-Camargo 2011; Baez-Camargo and Jacobs 2013; Brinkerhoff and Bossert 2013; Cleary et al. 2013). Agents provide services to principals as long as they have some incentive to do so, but they have more information than principals. At the same time, principals will find ways to overcome the information asymmetry without incurring high transaction costs. For instance, users will look for alternative providers by comparing price, quality or value. In addition, context matters in these frameworks as the 'principal–agent' model is a highly complex set of interactions and not a closed system. It helps to explore how policy makers respond to citizen demands, how health service providers and users engage to improve service quality, and how service providers and users advocate and report on health outcomes.

The framework by Brinkerhoff and Bossert (2008, 2013) is based on a World Bank (2004) accountability framework. The framework depicts three principal–agent relationships: government and healthcare providers; healthcare providers and citizens; and government and citizens. The other framework which uses the 'principal–agent' theory is the governance framework of the European Commission (2009). The EC (2009) framework aims to assess governance at sector level especially in the context of development and aid assistance including "Health Systems Strengthening" worldwide.

An analytical framework of 'social-accountability' by adapting the World Bank accountability model (World Bank 2004) and using the 'principal–agent' theory, Baez-Camargo (2011) presented incentives and sanctions within two routes towards accountability: short (direct) and long (indirect) routes. Direct accountability is most suitable in the competitive market where citizens can 'voice' their preference or choose other alternatives (exit). Direct accountability has received the most attention as it can be promoted either through citizens' participation in service planning, or voicing concern about service providers' performance (voice), or through citizens' choosing other providers (exit). By adapting the Brinkerhoff and Bossert (2008) framework, Governance emphasize the accountability pathways among three groups of key actors (politicians/policy makers; healthcare providers and citizens). The Cleary (2013) framework claims to assess both external and internal accountability mechanisms via three critical factors: resources, attitudes and values. Adequate resources are critical for the health system to function properly while it is important to understand the attitudes of healthcare providers and policy makers without neglecting the values of citizens.

Common Pool Resources Theory:

Governance framework which uses Elinor Ostrom's theory of 'common pool resources' (Ostrom 1990), describes governance as an autonomous system with self-governing networks (or systems) of actors (Stoker 1998). The theory assumes that actors in self-governing networks can not only influence government policy but can also take over some of the business of the government (Stoker 1998). Ostrom's theory focuses on creating different institutional arrangements to manage open resources which are finite. Communities can form self-organized networks or systems composed of interested actors who will develop incentives and sanctions to manage the resources on their own (Stoker 1998). The theory assumes that self-organized systems are more effective than regulation imposed by the government as there will be increased availability of information and reduced transaction costs (Stoker 1998). Indeed, the theory postulates that in situations where government is 'under-governed', social norms fill those gaps (Olivier de Sardan 2015). A similar assumption is highlighted by Dixit (2009) civil-society organizations and non-governmental organizations emerge to fill gaps in functioning when government organizations serve poorly. The theory proposes that there are three levels of a common pool resource problem: (1) an operational level where the working rules are set, (2) a collective level where communities set their own rules, and, (3) a constitutional level from where the set rules originate (Ostrom, 1990). The authors borrowed the concept of 'governing without government' in situations where overall governance situations are not functioning. In such situations, communities with similar interest might develop their own rules and arrangements to manage the common pool. Abimbola's framework (2014) describes the three collective levels of health system hierarchy as; (1) operational (citizens and healthcare providers), (2) collective (community groups) and (3) constitutional governances (governments at different levels). A multi-level framework is believed to be more effective at assessing governance than a single unit assessment. Operational and collective governance can mitigate the failure of constitutional governance, although, there is also some overlapping of roles and responsibilities.

Political Science and Public Administration Frameworks:

Three frameworks conceptually originate from political science and public administration disciplines: Berlan and Shiffman (2012), Brinkerhoff (2004) and Brinkerhoff and Goldsmith (2004). The concept of governance for political scientists focuses on 'formal institutions, accountability, trust and legitimacy' for governance (Pierre and Peters 2005). They are interested to see how collective decisions are made among key actors (both government and non-government actors) with different power centres (Chhotray and Stoker 2009). Thus, governance from political science and public administration focuses on both inputs (the processes) and outputs (results of governing networks) (Chhotray and Stoker 2009).

Berlan and Shiffman's framework (2011) assumes that healthcare providers in low- and middle-income countries have limited accountability to their consumers as a result of both health system and social concerned factors. Oversight mechanisms, revenue source and nature of competition are related to the health system while consumer interest and provider norms are considered under social concerned factors. Their framework helps to identify factors which shape the accountability of healthcare providers. In addition, social interactions and norms operating within the health system and context are prominent features of this framework. Brinkerhoff's framework (2004) is also based on accountability, and aims to map out public accountability mechanisms: financial, performance and political accountability. In this framework, performance accountability is defined as agreed upon targets which should theoretically be responsive to the needs of the citizens. Political accountability emphasizes that electoral promises made by the government should be fulfilled. Brinkerhoff highlights the need to map out the accountability linkages among key actors and to examine actors' interactions as too few linkages can lead to corruption while too many can undermine accountability effectiveness. Together with his framework, Brinkerhoff proposes three strategies to strengthen accountability; (1) addressing mismanagement, misuse of resources and corruption, (2) assuring compliance with procedures and standards and (3) improving performance. The framework includes an accountability assessment matrix which allows the user to rate accountability linkages among key actors. The third framework that draws on political science assesses the patron–client relationship or clientelism in health systems (Brinkerhoff and Goldsmith 2004). Despite the unpopularity of clientelism, it is regarded as an essential principle of governance which can affect corruption and accountability mostly at wider or at national level.

International Development Framework:

In the development literature, governance focuses on pre-defined principles which development specialists believe to be critical for 'good governance' in aid assistance and international development. The three frameworks identified (Islam et al. 2007; Kirigia and Kirigia 2011; Mikkelsen-Lopez et al. 2011) focus primarily on "how governance is defined", "how it can facilitate effective aid policy", and, unlike any of the other frameworks, those in international development are concerned with "how governance might be

measured" for greater impact. Kauffman and Kraay (2007) propose to measure governance in two ways using rule-based measures (e.g. a policy or a procedure exists) and outcome-based measures (e.g. the policy has been implemented or the rule has been enforced) (Chhotray and Stoker 2009). Islam (2007) presents a health systems assessment manual which includes a framework to assess governance, developed under the Health Systems 20/20 project (USAID). The aim is to guide data collection providing a rapid but comprehensive assessment of key health system functions. Based on the six domains of the health system (1) service delivery; (2) health workforce; (3) health information systems; (4) access to essential medicines; (5) financing; and (6) leadership and governance. This framework groups indicators into general governance (e.g. voice and accountability; political stability; government effectiveness; rule of law; regulatory quality and control of corruption) and health system specific governance indicators (e.g. information/assessment capacity; policy formulation and planning; social participation and system responsiveness; accountability; and regulation), (WHO). The governance framework (Mikkelsen-Lopez et al. 2011) is based on systems thinking, and uses a problem-driven approach to assess governance in relation to an identified problem to highlight the barriers to good governance. The framework assesses governance in all four levels of a health system (national, district, facility and community) using the established WHO health system building blocks and five proposed principles of governance: (1) strategic vision and policy design; (2) participation and consensus orientation; (3) accountability; (4) transparency; and (5) control of corruption.

Interdisciplinary Research Frameworks:
Four frameworks appear to be based on principles of interdisciplinary research involving more than one discipline (Vian 2008; Siddiqi et al. 2009; Baez Camargo and Jacobs 2011; Smith et al. 2012). Three of these (Vian 2008; Siddiqi et al. 2009; Baez Camargo and Jacobs 2011) draw on the 'institutional analysis' theory of North (1990), originally derived from new institutional economics. These frameworks also seem to reflect predefined governance principles in line with the international development literature.

Institutional Analysis Theory:
Theory of institutional analysis assumes that markets are created and maintained by institutions (Douglas North). North defined 'institutions' as the rules of the game and 'organizations' as the players. Institutions consist of formal rules and informal constraints while organizations consist of groups of individuals with common objectives (North 1990). North's principal argument is that individuals within an institution have certain opportunities which are the result of specific formal and informal constraints that constitute the institutions. Using the theory of North (1990), Vian (2008), Siddiqi (2009) and Baez Camargo and Jacobs (2011) highlighted that institutional analysis is key to assessing governance in order to understand the institutional arrangement and rules set by the organizations. A mapping of the power distribution can be used to identify the key decision makers who affect the behaviour of health system functioning and actors. In addition to application of North's theory of institution analysis, propose a comprehensive framework to assess governance based on the UNDP principles of governance as highlighted under three relevant domains: context, processes and outcomes (UNDP, 2003).

In conceptualizing governance, the study suggests their framework could be used to compare governance functions across countries. The framework is intended for use at both national (policy formulation) and sub-national levels (policy implementation and health systems facility levels) to assess all essential principles of health systems governance; something which other frameworks do not aim to do. In particular, the potential for application of the framework at sub-national level is a unique feature as most other governance frameworks are developed for macro-level assessment. Baez-Camargo and Jacobs (2011) propose an 'inputs, processes and outputs' framework for health systems governance in low-income countries. The framework draws on the values of good governance articulated in the development literature, and 'Institutional Analysis' to map out key stakeholders and the power distribution among them. It draws on North's principal argument that key players in the health system have certain opportunities which are the product of formal and informal rules and constraints set by institutions (North 1990). The framework is based on the assumption that corruption in the health sector is driven by pressures of government agents to abuse, opportunity to abuse, and social factors supporting abuse of the system. Therefore, the framework is diagnostic in nature as it aims to identify potential abuse that can occur at each step of a health service delivery process within health system.

The 'cybernetic' framework for leadership and governance which uses systems theory, is interdisciplinary in its approach and is concerned with discovering patterns in the way systems (including health systems) operate (Smith, 2012). It is important to view governance as hierarchical (rules and responsibilities for allocating resources) and horizontal (both incentives and the market regulate purchasing power, and systems produce common values and knowledge through professional norms). Cybernetics framework focuses on how systems use information, and how systems monitor actions to steer towards their goals. This includes three key principles functionally: setting priorities, accountability (inputs into the health system) and performance monitoring (output). The framework focuses on the leadership principle of governance and was developed for use in health systems in high-income countries, so would require adaptation to low- and middle-income settings for scaling up of sustainable impact on health systems.

Analysis of Health Systems Governance:
Present review brings together the literature on health systems governance, firstly by describing and critiquing how the concept of governance and the theories underpinning it have been applied to health systems, and secondly by identifying which frameworks have been used to assess health systems governance, and how this has been done to date globally. Frameworks originate mainly from three disciplines: (1) new institutional economics; (2) political science and public administration; and (3) the international development literature. The most commonly used theories which underpin the available frameworks originate from new institutional economics and include the 'principal–agent' theory, Douglas North's theory of institutional analysis and Elinor Ostrom's theory of 'common pool resources'. Frameworks that originate from the development literature tend to pre-define principles of governance and are the only ones to attempt to measure governance performance (Kirigia and Kirigia 2011).

The majority of frameworks discuss overall governance while some assess specific principles of governance such as accountability, corruption, patron–client relationship and partnerships. Most frameworks describe governance in health systems using qualitative methodology, based on the premise that governance is the result of interactions among different actors within a health system, and that studying the reasons for and the extent of interaction can be used to document good governance. Governance is a practice, dependent on arrangements set at political or national level, but which needs to be operationalized by individuals at lower levels in the health system; multi-level frameworks acknowledge this and recognize the importance of actors at different levels. Some assessment frameworks explicitly mention pre requisites needed for successful application, such as the framework by Baez-Camargo and Jacobs (2011) which requires a governance problem to be already identified, and the cybernetic model presented (Smith et al. 2013) which requires users' familiarity with the functional health system.

This review also illustrates that health system governance is complex and difficult process to assess; the concept of governance originates from different disciplines, is interdisciplinary and multidimensional in its approach. This review attempts to synthesize how these perspectives have led to the development of governance in health systems. Critical analysis shows that frameworks for good governance may be applicable in one setting but not functioning in another. There is no single, agreed framework that can serve all purposes as the concept of governance will likely continue to be interpreted openly and flexibly. However, for governance principles to contribute to health system strengthening in countries, and ultimately to impact on outcomes, it is critical to at least evaluate and monitor if and how governance works (or not) in practice. As each health system operates in its own context, and different components of governance may need to be prioritized over others in different settings and at different times, it is important that any assessment of governance recognizes the particular circumstances and has a clear purpose. Assessing health systems governance can raise awareness of its importance to health policy makers, public health researchers and health professionals identify problems or conversely, document success or failure stories. This can encourage and catalyse improvement in health systems. It is more important to identify what governance arrangements are considered appropriate for a particular context (prescriptive measures) than to judge the governance of a particular system (diagnostic measures) (Chhotray and Stoker 2009).

Findings of this review could help to inform decisions and discussions among policy makers and public health practitioners in countries considering governance as a mechanism to support health systems strengthening. Study findings will help decision makers and researchers form a view on what governance is, and which principles are important in specific context of country specificity. Public policy implementers at a more local level may choose and adapt one of the available frameworks or tools to assess governance and/or identify gaps in governance arrangements therefore assisting measures in strengthening of health systems.

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