A HEALTH POLICY AND SYSTEMS RESEARCH READER ON HUMAN RESOURCES FOR HEALTH

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Key for classifying research inference

- Descriptive
- Exploratory
- Explanatory
- Emancipatory
- Influence
- Predictive
Chapter 5.

Health worker motivation: individual, organizational and cultural factors

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5.1 Defining the chapter

Motivation is both a driver and a consequence of health worker performance (Bhatnagar, 2014; Borkowski, 2009). Motivated health workers are likely to attend to their clients and provide better care, and their improved performance affirms and drives them to achieve their goals further. This relationship between motivation and performance is influenced further by the organizational climate and social context within which health workers are positioned. The objective of this chapter is to present innovative health policy and systems research (HPSR) carried out to understand what motivates human resources for health (HRH). It aims to describe research that has used different theoretical and methodological approaches to measure motivation among various health worker cadres. In particular, this chapter describes research that has studied the role of organizational and social environments within which health workers perform in affecting their motivation, including specific interventions such as performance-based financing. Finally, it seeks to collate research carried out to understand job preferences for and retention in remote and rural areas, because these in turn are influenced by motivation to serve in such conditions. This chapter excludes primary research on the role of meso-level determinants such as leadership, management, governance, and the policy and political environment in motivating HRH, because these themes are covered in other chapters of this reader.

5.2 Background on health worker motivation

Motivation can be understood as a psychological process aimed at achieving both personal and organizational goals, developed among workers due to a combination of their personal needs and desires, the organizational context within which they work, and the community of which they are a part (Bhatnagar, 2014). Motivation has been studied extensively in a variety of disciplines, including psychology, organizational behaviour and economics, particularly in high-income countries. In the context of organizational psychology and behaviour, motivation is generally explained by two sets of overlapping theories classified as content and process theories. Classic textbooks in these fields by Borkowski (2009) and Burns et al. (2012) provide a rich summary of these theories and their inception, and also present empirical evidence from the health sector that supports them. Content theories of motivation postulate that people are motivated by the desire to satisfy their inner needs and values. On the other hand, process theories of motivation focus more on the cognitive processes underlying motivation, including factors that initiate, direct, sustain and halt behaviour. These cognitive processes shed light on the overall context, highlighting practices and interactions in which work is done and the reactions of employees to work (Burns et al., 2012). While the empirical evidence presented in these textbooks is predominantly from high-income countries, Dolea and Adams (2005), in their review of motivation theories, highlight their application in several low- and middle-income countries.
Motivation is a complex construct, closely interrelated with the concepts of job satisfaction, retention and performance. While motivation in the context of work is typically defined as “willingness to exert and maintain an effort towards organizational goals” (Franco et al., 2002), job satisfaction is referred to as “a pleasurable or positive emotional state resulting from the appraisal of one's job or job experience” (Locke, 1976, p. 1300). Although highly related, and often used interchangeably, motivation and job satisfaction are distinct constructs (Cummings and Bigelow, 1976). While the former pertains to a person’s intention to achieve organizational goals, the latter is a reference to his or her attitude or emotional state related to that organizational setting. Despite these differences, the two concepts, fundamental to any human resource, are interdependent and hence influenced by a similar set of individual, organizational and sociocultural factors (Dolea and Adams, 2005; Franco et al., 2002). Given that motivated individuals are likely to remain in their jobs for longer and perform better, determinants of retention and performance of health workers are also associated closely with factors influencing motivation.

The seminal work carried out by Franco et al. (2002) was one of the first to apply various theories of motivation to develop a conceptual framework for understanding determinants of motivation for the health workforce, especially people working in low-resource settings. As described above, Franco et al. (2002, p. 1255) defined motivation in the work context as the “willingness to exert and maintain an effort towards organizational goals”. The key attribute of their conceptual framework, however, was the postulation that motivation develops in individuals as a result of the interaction between individual processes, immediate organizational work context and cultural dynamics. Individual processes pertain to a person’s goals, values and expectations along with self-efficacy. The framework further characterizes organizational factors into organizational resources (infrastructure, medicines, supplies, human resources, monetary funds), structures (hierarchies, autonomy, management, feedback), processes (communication, procedures of work) and culture (set of shared norms, leadership). The broader cultural factors include association between existing social norms and functioning of an organization as well as societal values and expectations manifested as relationships between clients and health workers. Most of the subsequent research on health worker motivation has adapted and used Franco et al.’s framework.

Many economists have also applied psychological theories of motivation to better understand labour markets. The most common postulation pertains to “crowding out” of intrinsic motivation due to extrinsic incentives (Frey and Jegen, 2000). It is assumed that individuals are motivated from within and by external stimuli of different kinds (Gagné and Deci, 2005); and while higher motivation from intrinsic and extrinsic factors results in greater efforts exerted for a task, there could also be certain instances in which the two types of motivation may not move in the same direction (Frey, 1997). This has relevant application for the health workforce as well, especially in the context of low- and middle-income countries, where low wages are systemic. Several performance-based financing schemes have been initiated to improve performance of service delivery indicators, and these affect motivation of health workers. While performance-based financing has typically been criticized for crowding out intrinsic motivation of health workers, an article by Lohmann et al. (2016), by applying the self-determination theory of motivation, argues that performance-based financing does not necessarily have an adverse effect on intrinsic motivation but could in fact affect both intrinsic and extrinsic motivations, depending on how it is designed, implemented and evaluated.

Several reviews and international agency reports have attempted to collate research carried out on understanding what motivates health workers in low- and middle-income countries. Willis-Shattuck et al. (2008), in their review of primary research articles based in low- and middle-income countries, concluded that financial rewards, career development, continuing
education, facility infrastructure, resource availability, facility management, and recognition and appreciation were some of the main motivating factors among health workers. Similarly, Mathauer and Imhoff (2006) synthesized studies that have explored the role of non-financial incentives in motivating health workers across African countries. More recently, Okello and Gilson (2015) carried out a review to ascertain the role of trust relationships between health workers and their supervisors, managers, employing organizations, co-workers and patients in directly or indirectly motivating health workers. Hongoro and Normand (2006) and Singh et al. (2015) have studied community health worker programmes in various contexts to review organizational factors, including incentive schemes, for motivating community health workers. Given that community health workers across low- and middle-income countries typically come from a different socioeconomic background than professional health workers such as doctors, nurses and midwives, and have a different mandate in terms of the services that they provide, understanding their motivation to work warrants special attention and efforts.

In addition, several reviews have been carried out to synthesize evidence on retention and job preferences of health workers. Dieleman et al. (2011) conducted a realist review to collate findings on factors that influence health workers to remain and work in rural and remote postings. Similarly, a systematic review of discrete choice experiments, a technique to elicit stated job preferences, particularly in the context of rural and remote postings, concluded that bonus payments and postgraduate training opportunities were the most sought after choices, typically among doctors and medical students (Mandeville et al., 2014). While these reviews do not directly address the question of what motivates health workers, they do provide a comprehensive understanding of various individual, organizational and cultural factors that influence job preferences of health workers. Many of these factors in turn are closely interlinked with motivation of health workers and drive them towards achieving their professional goals.

As complex as it may be to define and measure, motivation is an essential ingredient for determining the performance of health workers and is key to any effort towards strengthening the health workforce. While several reviews and studies have gathered evidence on factors influencing motivation of health workers, this chapter aims to describe selected primary research on health worker motivation carried out in recent years across different low- and middle-income countries and pertaining to various cadres of the health workforce. These articles were selected from a pool collated from a doctoral seminar at the Johns Hopkins School of Public Health, a crowdsourcing exercise supported by Health Systems Global and subsequent searches using the bibliography of key articles and on relevant databases and search engines (PubMed and Google Scholar). The main criteria used to select the articles included diversity in region, cadre and methods, as well as the quality of the studies based on standard guidelines.

5.3 Illustrative primary research articles

This section describes the seven articles selected for this reader that demonstrate innovative research carried out to understand motivation of health workers over the past decade. An attempt has been made to showcase articles using different quantitative and qualitative methodologies, focusing on various types of health provider working in low-resource settings across different geographical regions. The first two articles (Chandler et al., 2009; Smith et al., 2013) illustrate different techniques to measure motivation, while the next two articles (Huicho et al., 2015; Razee et al., 2012) focus on factors that inspire health workers to serve in rural and remote areas. The fifth article (Shen et al., 2017) describes an impact evaluation of a specific intervention, namely performance-based financing, designed to improve health service delivery and motivation of health workers. The final two articles (Aberese-Ako et al., 2014; Choi et al., 2016) highlight the role of meso-level determinants such as leadership and organizational justice in creating a more enabling environment for health workers.
5.3.1 Measuring health worker motivation


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<tr>
<td>Research methods</td>
<td>Mixed: ethnography in two district public hospitals over 6 months and Likert scale development with clinical officers in 13 public hospitals and assistant medical officers in other smaller public hospitals</td>
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This article adapted the Franco et al. (2002) framework to measure motivation among non-physician clinicians working in district hospitals with poor-quality service delivery in two regions of the United Republic of Tanzania. Using a combination of ethnographic research to understand the working environment of non-physician clinicians and quantitative measurement of motivation constructs, the authors distinguished between intrinsic and environmental factors of motivation. The ethnographic research included interviews with clinicians and observations of clinician–patient consultations, meetings attended by clinicians, and clinician daily routines. Based on these qualitative findings, and using existing quantitative questionnaires, the authors developed a scale, with 62 items on a five-point Likert scale, to measure various constructs of motivation for non-physician clinicians. While various studies attempting to measure motivation have used context-specific scales (Mbindyo et al., 2009; Peters et al., 2010; Purohit et al., 2016), this study is distinctive in its adaptation of the Franco et al. (2002) conceptual framework and subsequent application of the measurement scale, given the rich ethnographic research carried out to validate the above-mentioned framework. Additionally, the article focused on motivation of non-physician clinicians, a cadre rarely studied, especially given its relevance to task-shifting in low- and middle-income countries.


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<td>Research methods</td>
<td>Quantitative dictator games</td>
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This article describes the use of economic field experiments to measure intrinsic motivation of health workers, thereby contributing to evidence on the role of personal values such as altruism in encouraging health workers to work in the public sector. This study was based in three low- and middle-income countries (Kenya, South Africa, Thailand) and used a standard dictator game, where nursing students were given a real financial endowment to split between themselves and others in order to detect “the presence and power of altruism in decision-making” (p. 165). Each nursing student was asked to split the endowment between him- or herself, a patient and a poor person. In general, the study found nursing students demonstrate greater altruistic behaviour compared with other professionals, although there were variations across countries, genders and age groups. The innovative techniques used in this study to measure altruistic behaviour allow for greater consideration for personal values, rather than only job characteristics, in order to understand determinants of motivation. The cross-country comparison also reveals the significance of
socioeconomic contexts for influencing altruistic behaviour. For example, the authors conclude that the relatively lower levels of altruism exhibited by respondents in South Africa and Kenya compared with Thailand could be due to higher inequalities and lower solidarity existing in those societies.

5.3.2 Social factors of motivation and job preferences


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<th>Public and private sector health extension workers, community health workers, nurses</th>
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<td>Research methods</td>
<td>Qualitative: in-depth interviews</td>
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This article describes the social environment and its interactions with health worker motivation and performance of health extension workers, community health workers and nurses in Papua New Guinea. Using a qualitative research design, Razee et al. (2012) carried out in-depth interviews with and observations of several types of primary health-care provider serving in rural Papua New Guinea in both government and private facilities. The article concludes that the identity of health workers and perceptions of the community about them are important factors contributing to their motivation. In particular, the article highlights how respect received from the community and community ownership of health service delivery are significant enablers. The authors also describe the process of building trust and cooperation between health workers and the community. The article explores the role of health worker gender and family life, shedding light on the dual burden of managing work and family responsibilities, particularly among female health workers. Furthermore, this study describes how violence in the workplace and in the community at large results in demotivation of female health workers. On the whole, this article provides a rich narrative on the social context and interactions affecting health worker motivation in a very diverse country, where the evidence base for HRH is limited.


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<th>Health workers</th>
<th>Medical, nursing and midwifery public university students</th>
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This article focuses on a similar topic as above but uses a different methodological approach. The authors interview medical, nursing and midwifery students to understand reasons behind their career choices and their preferences for rural postings in Peru. Using a rich qualitative study design, from two distinct regions in the country, the article describes career choices among medical, nursing and midwifery students to be driven mostly by vocation and for the opportunity to improve the health of their communities. Interestingly, medical students also considered that their profession would improve their socioeconomic status in the society, a belief not validated by labour market conditions in Peru, as noted by the authors. In addition, the study found a mixed reaction to rural postings. While medical students understood the
importance of such postings, both from the point of view of serving people most in need and as valuable professional experience, they expressed reservations about difficult working environments and in general had a stronger predilection for working in urban areas. Nursing and midwifery students, however, especially those from rural backgrounds, expressed a stronger willingness to serve in rural areas.

Although preferences of students are likely to be different from people who are actually serving in remote areas, this article opens a discussion for policy-makers and medical education institutions to acknowledge these preferences and incorporate them in HRH policies and interventions to attract students to work in difficult-to-serve areas. A study conducted in a rural Indian setting aiming to understand why doctors have stayed on to serve in remote areas finds some similarities to the above findings, namely geographical and ethnic tribal affinities, rural origins and personal values of service (Sheikh et al., 2012); however, it also sheds light on a host of other factors, including benefits to family life (location of spouse, availability of school for children), relationships with co-workers and surrounding communities, and “acclimatization over time to rural life” (p. 192).

5.3.3 Evaluating the impact of motivation interventions


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<tr>
<td>Geographical area</td>
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<tr>
<td>Research methods</td>
<td>Quantitative: randomized control design for pre-post changes</td>
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<td>Research inference</td>
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Shen et al. (2017) describe a quantitative impact assessment of a performance-based financing scheme on the motivation of health workers in Zambia. While several studies have tried to assess the effectiveness of performance-based financing on service delivery and quality of care outcomes (Basinga et al., 2011; Binyaruka et al., 2015; Engineer et al., 2016), very few have attempted to measure its impact on health worker motivation, although a few studies have aimed to understand the mechanisms through which performance-based financing affects motivation (Bertone et al., 2016; Bhatnagar & George, 2016; Witter et al., 2011). This article is one of the first to measure impact of performance-based financing on motivation, job satisfaction and retention and to understand the pathways that explain the changes in a low- and middle-income country setting. This study, based on a quasi-experimental design, used existing theoretical frameworks and instruments, albeit not developed originally in a low- and middle-income country setting, to measure motivation and job satisfaction of health workers receiving performance-based financing compared with those who are not. The study subsequently carried out qualitative interviews to explore the channels through which incentive payments affected motivation, thereby filling in an obvious lacuna in the performance-based financing evidence base. The authors found that performance-based financing had a positive impact on job satisfaction and a negative impact on attrition, although it did not have “marked effects on motivation” (p. 10). The qualitative study corroborated not only these findings but also more recent postulation that performance-based financing could improve both extrinsic and intrinsic motivations by providing a better platform for serving the community and opportunities for professional development and professional dedication.
While the previous article demonstrates the role of financial incentives in bringing about a change, a case study by Ruck and Darwish (1991) (described in detail in Chapter 3) explains how the introduction of a training programme for improving nutrition services increased motivation and lowered absenteeism among health workers in Egypt. The training programme not only was didactic but also included regular feedback and reinforced supervision, thereby appreciating the value of health workers’ efforts to a greater extent.

In addition to the articles above, two articles included in Chapter 6 on leadership and management explore the role of meso-level organizational determinants in motivating health workers (Aberese-Ako et al., 2014; Choi et al., 2016). These are described briefly below.

5.3.4 Meso-level determinants of motivation


Health workers: Multiple public sector hospital based health workers
Geographical area: Ghana
Research methods: Qualitative: Ethnography; participant observation, conversation and in depth interviews over 16 months in two public hospitals
Research inference: Exploratory

Aberese-Ako et al. (2014) conducted an ethnographic study including direct observations, conversations and in-depth interviews to understand the level and nature of perceived organizational justice and its implications on motivation and responsiveness of health workers in Ghana. The authors found that health workers perceived procedural, distributive and interactional injustice at the national policy level in terms of poor conditions of service, and inequitable distribution of incentives, lack of respect and protection at the organizational level. The authors described that while those who were intrinsically motivated were able to overcome their discontentment with these attributes in their working environment and respond to the needs of their clients, there were some health workers, especially those on the front line, who were not as responsive. The authors argued that health workers should be considered internal clients of a health system, and their perceptions of fairness and justice in organizational and governance structures should be given importance.


Health workers: Public and private sector nurses
Geographical area: Malaysia
Research methods: Quantitative: provider Likert survey and regression analysis
Research inference: Exploratory

Choi et al. (2016) measured the role of transformational leadership and employee empowerment in improving job satisfaction perceived by nurses in Malaysia. The authors hypothesized and subsequently proved, using data from a cross-sectional survey, that transformational leadership enhances empowerment, especially among the nursing cadre, which is considered
to be of relatively low status. They also found that transformational leadership has a positive association with job satisfaction. Moreover, they showed that there was a partial mediating effect, suggesting that employee empowerment explained at least some component of the positive association between transformational leadership and job satisfaction. The contribution of this article extends from using innovating and rigorous methods to measure these complex constructs, to explaining that transformational leadership must be encouraged among managers of nursing staff while empowerment among the nursing cadre should be simultaneously inculcated.

5.4 Research challenges

The main difficulty faced in selecting articles for this chapter was the complexity of how motivation is defined, given its various theoretical underpinnings and influencing factors. Similarly, various theories of motivation have their own definition of what constitutes intrinsic versus extrinsic motivation, or what determinants are from within the individual and what belong to the broader context within which he or she is working. This also made it difficult to compare and contrast studies that used different theoretical paradigms for understanding motivation. In addition, it was difficult to select among studies that used similar methods, albeit in varied contexts and for different cadres of HRH. For example, most studies measured motivation using qualitative or ethnographic methods, or descriptive quantitative techniques using self-reported responses on structured scales.

In addition, this section attempted to put forth research from across all regions but did not succeed in generating a pool of good-quality articles that were equally representative of all parts of the world. A large proportion of research on the issue of health worker motivation was based in sub-Saharan Africa and south Asia, with a smaller regional focus on other middle-income country settings such as those in Latin America and eastern and central Asia. Although contributions from all languages were invited during crowdsourcing of articles for the reader, all subsequent searches were carried out among articles published in English, resulting in excluding those in, for example, Spanish, Portuguese and Russian. Similarly, the bulk of the current evidence base focused on medical doctors and nurses; there is an emerging body of work on community health workers, but less on other cadres of the health workforce. Additionally, most of the research on health worker motivation uses cross-sectional study designs. Longitudinal study designs, such as following a cohort of students over a period of time to see how their attitudes and choices evolve, would enable research to account for the dynamic and complex nature of human behaviours.

5.5 Future research directions and gaps

As mentioned above, there is no agreement in the literature on the correct course for defining and measuring motivation. Moreover, to date no study has critically examined the existing methods, especially in the context of low- and middle-income countries, used for doing the same. As researchers in the field of HPSR, it is necessary for us to take a step back and question whether we are using appropriate methodologies, drawing adequately from theoretical disciplines and understanding motivation of health workers as a set of human behaviours and not only as organizational processes. In this regard, future endeavours for measuring motivation of health workers should be critical of existing methods and strive continuously to develop more innovative techniques to measure this complex construct. For example, further experimentation could be done with existing techniques to elicit choice, building on classic dictator games, to understand motivation for performing different tasks. In addition, measures such as speed, accuracy and persistence with which tasks are completed could also be used to gauge motivation of health workers (Touré-Tillery & Fishbach, 2014). It is also important to
move beyond descriptive studies on what motivates health workers to assess effectiveness of different interventions for improving motivation. Future research of this nature should use a mixed-methods approach, aiming not only to assess interventions but also to understand why and how changes are taking place.

As described above, most of the evidence base for health worker motivation studies, using quantitative methods, is based on self-reported responses on structured scales measured at a given timepoint. Very few of these scales, however, have been validated using appropriate statistical methodologies or measured with advanced techniques such as structural equation modelling (Lohmann et al., 2017). For future researchers attempting to design context-specific scales for measuring motivation, it is essential to follow a theoretical framework and validate the scale against that framework using appropriate techniques. It is also important to note that these ratings are likely to be influenced by social desirability bias as well as events that have taken place just before the conduct of the study (such as an altercation in the workplace or a positive patient outcome) and may not necessarily reflect the true opinions of the respondents. Similarly, the rigour in qualitative methods for measuring motivation needs to be strengthened, with studies demonstrating various ways in which the trustworthiness, namely credibility, dependability, transferability and confirmability (Jensen, 2008), of their findings were assessed.

As mentioned above, most of the literature on health worker motivation includes studies exploring determinants of motivation, but very few studies have aimed to measure the impact of specific programmes carried out to motivate health workers. This is particularly puzzling as there have been many initiatives, especially in low-resource settings, targeted at improving motivation and performance of health workers, such as but not restricted to performance-based financing and performance management interventions (Dieleman et al., 2006; Shen et al., 2017). While impact evaluations are methodologically difficult for social science research, time-consuming and resource-intensive, there is a need to expand the current evidence base for such studies and hence an area for future investigation and investment.

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