Human Resource Management in Ethiopian Public Hospitals

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Research Article

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Abstract

Background

In Ethiopia, public hospitals deal with a persistent human resource crisis, even by SSA standards. Policy and hospital reforms, however, have so far resulted in limited progress towards addressing the resulting strategic human resource management (SHRM) challenges Ethiopia's public hospital face.

Methods

To explore the contextual factors influencing these SHRM challenges of Ethiopian public hospitals, we conducted a qualitative study based on the SHRM framework of Paauwe. A total of 19 semi-structured interviews were conducted with a purposive sample of hospital CEOs and HR managers from 15 hospitals across Ethiopia. An additional 4 focus group discussions were held with professionals and their line managers.

Results

The study found that hospitals compete on the supply side for scarce resources among which the human resources of skilled professionals. There was little reporting on demand side competition on health services provided, service quality, and service innovation. Governmental regulations were the main institutional mechanism in place. These regulations also emphasized human resources and were perceived to tightly regulate employee numbers, salaries and arrangements at detailed levels. These regulations were perceived to restrict the SHRM autonomy of the hospitals. Regulation induced differences in allowances and external employment arrangements were among the concerns that decreased motivation and job satisfaction and caused employees to leave their jobs. The mismatch between regulation and workforce needs posed challenges for leadership and caused leaders to be perceived as incompetent and unable when not successfully addressing workforce needs.

Conclusions

Bottom-up involvement in SHRM may help resolve the aforementioned persistent problems. The Ethiopian government might better loosen regulations, providing more autonomy to hospitals for SHRM and implement mechanisms that emphasize the quality of health services demanded rather than the quantity of human resources supplied.

Background

The genesis of the human resource for health crisis in Sub-Saharan Africa (SSA) is complex and context specific, even if common factors are applicable across Africa [1–3], SSA carries 24 % of the global burden
of disease, but only 3.5% of the global health workforce works in this region [2, 4–5]. Ethiopia faces acute shortages of skilled professionals and has a low physician to population ratio of 2.5 physicians per 100,000. The WHO recommendation for low income countries is four times higher at 10 physicians per 100,000 [6–9]. The insufficiency of the workforce to meet the demand for care results in the inability to provide sufficient and proper care [10, 11]. Such human resource challenges are further exacerbated by policy and regulatory incoherence and inconsistencies in Ethiopia and more generally SSA [6, 12].

Ethiopian public hospitals especially reflect the country’s poor health system and deal with a persistent human resources crisis, even by SSA standards [7]. The Government has taken notable steps, especially to improve maternal and child health [10, 13]. The policy and hospital reforms have however fallen short of resolving the challenges in the domain of Human Resource Management (HRM). Labor market issues persist because of shortage of skilled labor, causing especially public hospitals to have difficulties with attracting and retaining qualified staff [4, 14, 15]. The public hospital reform effectiveness is also hampered by a heritage of poor general performance and administrative weaknesses in these public hospitals, as for instance expressed in domains such as delegation of authority, staff planning, incentives, and policy making and implementation [16–18]. While Ethiopia’s public hospitals operate within a robust regulatory framework, institutional health system issues hamper effective implementation [16, 17]. Among these institutional challenges are budget constraints and centralized decision making, which are subject to political dynamics [8, 13, 14, 19].

The aforementioned challenges make clear that the context in which public Ethiopian hospitals operate complicates strategic management of human resources and of improvement of patient outcomes and experiences. Paauwe developed the Contextual SHRM Framework to understand and analyze strategic HRM practices [20]. This framework describes how contextual factors as mentioned above influence the shaping of HRM in organizations and subsequently organizational performance. We will use this framework to analyze how HRM in the Ethiopian public hospitals is shaped by the context. More specifically, the aim of this study is to understand how institutional mechanisms (e.g. policy, legal, and regulatory frameworks, and socio-cultural, demographic, and political factors), competitive mechanisms (labor market, technology, innovation), and heritage mechanisms (e.g. structure, culture, systems, human capital) [21] impact HRM in Ethiopian public hospitals. Our research questions regarding Ethiopian public hospitals therefore are (a) how do institutional mechanisms influence HRM? (b) how do the competitive mechanisms influence HRM? (c) how do the heritage mechanisms influence HRM?

**Methods**

A qualitative study was conducted through structured interviews with respondents from public hospitals in Ethiopia. The interview structure was derived from Paauwe’s Contextual SHRM model (See Fig. 1).

**Data collection**

We selected 15 hospitals by purposive sampling. We aimed to select public hospitals that are representative for the Ethiopian public setting. We thus approached a collection of hospitals which
differed in hospital level (i.e. general, teaching, specialized, primary), geographical setting (i.e. regional big towns, regional and rural provincial settings, city government of Addis Ababa), and governance (i.e. federal and regional level governments). Table 1 gives details of all the hospitals included for data collection. Data were collected between March and September 2019.
| Hospital name | Hospital Level         | Geographic Location | Governing body (Public)                        | Established | Bed size |
|---------------|------------------------|---------------------|-----------------------------------------------|-------------|----------|
| Dupti         | General                | Afar Region         | Regional Gov’t/Health Bureau                  | 1958        | 124      |
| Arbaminch     | General                | SNNP Region         | Regional Gov’t/Health Bureau                  | 1961        | 238      |
| Wolaita       | General teaching       | SNNP Region         | Central Gov’t: Federal MOH&MoSHE              | 1928        | 347      |
| Alert         | General                | Addis Ababa City    | Central Gov’t: Federal MOH                    | 1934        | 300      |
| St Peter      | Specialized            | Addis Ababa City    | Central Gov’t: Federal MOH                    | 1953        | 300      |
| Ghandi        | Specialized            | Addis Ababa City    | City Government                               | 1958        | 144      |
| Ras Desta     | General                | Addis Ababa City    | City Government                               | 1931        | 200      |
| St Paul's     | Specialized teaching   | Addis Ababa City    | Central Gov’t: Federal MOH & MoSHE            | 1969        | 700      |
| Adama         | General teaching       | (East) Oromia Region| Regional Gov’t/Health Bureau                  | 1946        | 400      |
| Mojo          | Primary                | (East) Oromia Region| Regional Gov’t/Health Bureau                  | 2015        | 80       |
| Ambo          | General                | (West) Oromia Region| Regional Gov’t/Health Bureau                  | 1946        | 88       |
| Guder         | Primary                | (West) Oromia Region| Regional Gov’t/Health Bureau                  | 2015        | 50       |
| Hawassa       | Comprehensive specialized teaching | SNNP Region | Central Gov’t: Federal MOH&MoSHE | 1998 | 350 |
| Tulla         | Primary                | SNNP Region         | Regional Gov’t/Health Bureau                  | 2017        | 80       |
| Shashemene    | Specialized            | (South) Oromia Region| Regional Gov’t/Health Bureau                  | 1948        | 306      |
Interviews were conducted with purposively selected respondents from different positions within the hospital's HRM hierarchy, who are knowledgeable of the hospital's HRM practices. This enabled to gain broad insight into the variety of viewpoints on the contextual mechanisms that influence HRM across departments and hierarchical levels.

Our first request in each hospital was always to interview the executive board member responsible for HRM and the head of the HRM department (Table 2 shows the respondents' characteristics). In case these respondents were not in the opportunity to participate or these positions were not fulfilled within the structure, team leaders, and HR directors of health bureaus were approached. In total, we interviewed 19 respondents.

In addition, we conducted 4 Focus Group Discussions (FGDs) with 38 participants in total. The participants of the FGDs (details presented in Table 3) were managers, experienced middle and line managers including matrons, heads of clinical, outpatient, and inpatient departments, and heads of departments responsible for quality, governance, and planning. The FGDs provided a second source of data from middle and lower management respondents, ensuring data triangulation.
| Hospital/facility          | Sex | Educational background | Years in current organization | Years in current position |
|---------------------------|-----|------------------------|-------------------------------|---------------------------|
| Adama Hospital            | M   | MA,BusMgt              | 26 years                      | 3 years                   |
| Addis Ababa Health Bureau | F   | MA,Bus Mgt             | 11 years                      | 1 year                    |
| Afar Regional Health Bureau | M   | MA, Edu Mgt            | 16 years                      | 3 years                   |
| Ambo Hospital             | M   | BA, Mgt                | 5 years                       | 3 years                   |
| Alert Hospital            | M   | MSc,HRH                | 6 years                       | 4 years                   |
| Arbaminch Hospital        | M   | BSc, P Health          | 32 years                      | 4 years                   |
| Arbaminch Hospital        | M   | BA Mgt                 | 10 years                      | 1 year                    |
| Dupti Hospital            | M   | MD                     | 1.1 year                      | 10 months                 |
| Ghandi Hospital           | M   | LLB                    | 22 years                      | 2.5 years                 |
| Guder Hospital            | M   | BA,HRM                 | 7 years                       | 5 years                   |
| Hawassa Hospital          | F   | MA, Marktg             | 12 years                      | 2 months                  |
| Mojo Hospital             | F   | BA, Accont             | 3 years                       | 1 year                    |
| Ras Desta Hospital        | F   | BA, Mgt                | 21 years                      | 12 years                  |
| Shashemene Hospital       | M   | MD                     | 6 years                       | 5 months                  |
| St Paul's Hospital        | M   | MA, Mgt                | 26 years                      | 1 year                    |
| St Peter Hospital         | F   | BA, Mgt                | 13 years                      | 3 years                   |
| Tulla Hospital            | M   | MPH                    | 15 years                      | 2 years                   |
| Wolaita Soddo Hospital    | M   | MSc, Nursing           | 9 years                       | 1.1 year                  |
| Wolaita Soddo Hospital    | F   | BA, Mgt                | 4 years                       | 1 year                    |
| **Total**                 |     |                        |                               | 19                        |
| FGDs | Sex | Female | Male | Total |
|------|-----|--------|------|-------|
| **FGDs** | **Sex** | **Female** | **Male** | **Total** |
| **Representation** | | | | |
| Addis Ababa | 2 | 8 | 10 |
| Afar Region | 2 | 8 | 10 |
| Oromia Region | 0 | 6 | 6 |
| SNNPR Region | 5 | 7 | 12 |
| **Total** | 4 | 9 | 29 | 38 |

The topic list and structured interview guideline (presented in Appendix 1) was jointly constructed by all authors and based on document analysis of FMOH Health Account and National HRH strategic Plan [13, 17] and Paauwe's framework [20]. The interview guideline was piloted in three Ethiopian hospitals by the first and second authors and subsequently revised. With a view of ensuring quality and validity, multiple researchers were involved in this stage. The second author (JVK) traveled three times to the first author (PPG) where the research was conducted while the third author engaged from the Netherlands (MBS).

**Data analysis**

All interviews and FGDs were audio-taped and transcribed verbatim after ensuring (written) consent from all respondents. The transcripts were analyzed using ATLAS.ti 8 to conduct a thematic analysis [21]. The analysis followed the following steps, in which all authors were involved.

**Step 1** The authors familiarized themselves with the data by (re) reading transcripts and identifying essences and patterns of meaning, issues of potential interests.

**Step 2** An initial coding scheme was developed to generate topics of interest. These initial codes were identified following a deductive coding approach based on the conceptual framework underlying the structured questionnaire.

**Step 3** We verified whether the initial list of codes covered the key elements of Paauwe's model and resolved any gaps.

**Step 4** Broader code groups were created for each themes and sub-groups of codes were created for code groups with large number of codes. The researchers remained open for codes that inductively emerged from the data (e.g. poverty, moonlighting).

**Step 5** All codes were combined into agreed broader code groups and themes which were based on similarities and (visualized) linkages in data and on the framework.
Step 6 The final themes were analyzed and synthesized into results as presented below.

Ethical Approval was obtained from the authors institute.

Results

In this section, we present the main findings of our analysis in a sequence that will chronologically provide evidence to answer the research questions described in the introduction. The results are structured to show how the three contextual factors: competitive, institutional and heritage mechanisms are linked to and positively or negatively influence HRM and health outcomes in Ethiopian public hospitals.

Competitive Mechanisms: Competing For Resources And Not For Patients

As defined in Paauwe's model, this mechanism entails the product (e.g. service provisioning), market (competitiveness and economic fitness) and technology (innovation) contexts.

None of the respondent mentioned competition for patients. Neither were hospitals perceived to loose patients for reasons of quality or (limitations in) services provided: 'We don’t lose customers because there is no competition (R8).’ This is likely caused by insufficient capacity to fully meet the demand for care as can be witnessed in the treatment of admitted patients. For example, 'Emergency departments have patients on recliners for several days (R11).’ As a result, hospitals appear to compete for scarce resources rather than for customers. Respondents particularly mention the competition for skilled health care professionals. Rural hospitals are most challenged in this competition: 'Rural hospitals face critical shortages of nurses, surgeons, radiologists, laboratory technicians, and ENT staff (R17).’ Likewise, public hospitals are perceived to struggle more than private hospitals, which offer better working conditions such as a higher salary.

Innovation was hardly recognized to be a relevant competitive factor. Most respondents reported little to no innovation due to budget shortages, high patient demands and government influence. Among the few exceptions mentioned in health service innovation are the introduction of renal transplantation and the placement of shipping containers to resolve room shortages (R5).

Interestingly, some hospitals have taken innovative approaches to improve their attractiveness as an employer, again focusing on the competition for resources. For instance, they offered benefits for their employees such as free medical services for all staff, a supermarket for personnel, or transportation services. In addition, hospitals tried to enhance their attractiveness as an employer through HRM innovations such as increasing autonomy, job security, providing education, and introducing collaborative leadership (R11).
Institutional Mechanisms: Dominant Role Of The Government

The institutional mechanisms mentioned in Paauwe's model are 1) institutional isomorphisms that influence decision making in organization, 2) coercive mechanism that emerge from power sources (e.g. government, employment legislation), and 3) normative mechanisms of adopting standards. They include socio-cultural values and norms, and the policy, legal and political context impacting strategic HRM practices. The findings for this component almost exclusively relate to the government.

The studied hospitals are subject to coercive pressures that result from government regulations. For instance, respondents frequently mention the influence of regulations being stringent. Government regulations are perceived as set in stone and ‘are executed like “Quran and Bible” and pervasively impact daily practices in ‘hiring, salary, allowances, promotion, firing, disciplinary measures, as HR managers have no leeway to change them [regulations].’ In exceptional cases, these stringent and pervasive regulations are seen as beneficial and supportive. For instance, regulations to increase maternity leave from 3 to 4 months were perceived as positive as they improved the quality of life of female workers (R16).

In general, however, respondents considered the governmental regulation to be counterproductive. This is especially the case for regulations regarding financial incentives where payment differences that resulted from regulations were perceived as unfair. Respondents considered it to be especially discriminatory if payment differences occurred in cases perceived as comparable:

‘Regulations are not supportive there is variation in implementing the regulations and law on workforce deployment, salary and allowances even in the same region (R12).’

FG2 members view ‘workforce with the same level of occupation, profession and experiences are compensated with different salary levels that violates rights to work, which is discouraging HR managers and workforce’.

Respondents also explicitly mentioned differences in financial regulation between medical doctors, nurses, and other hospital staff to be unfair, discriminatory, and disproportional. FG3, for example added: ‘professionals’ work is enabled by the support from non-clinical cohort of staff as a team, but the regulation is violating such teamwork through unfair allowances.’

Some respondents pointed out that ‘…such differences negatively impacts collaboration and team building in hospitals, well-being, and might cause turnover of skilled professionals (R 12)’ ‘Teamwork is coerced rather than built organically via these discriminatory practices (R10).’ FG2 participants share this view: ‘though hospital care is a teamwork, but government regulation violates this culture through discouraging compensation’.
All the studied hospitals reported a tension between political versus hospital interests and goals. Politicians are perceived to set up goals for hospitals that mainly refer to productivity in numbers, including numbers of health service professionals and support staff. The activities by which the government subsequently allocates increasing numbers of professionals and staff is sometimes referred to as HRH flooding strategy. For instance, respondents mentioned the ‘flooding strategy for physicians’ (R3), and the ‘massive production of nurses’ was enforced by politicians….’ (R10). Respondents perceived that this quantitative focus inhibited attention for quality of healthcare services for patients and for well-being of the workforce. Hence in the eyes of many respondents, politicians prioritized policy interests, and political interests such as party interests, over hospital interests.

‘….[There is] political imposition to focus on quantity over quality. This has induced gaps in knowledge and skills of professionals (R19’).

‘Their [politicians] conflicting interest of fighting for their political issues and maintaining their top position and loyalty to party interest. No attention given for managing hospital and service quality (R3)’.

In some cases in which politicians held executive positions in the hospital, political interests were reported to be better aligned with the hospital interests. These hospitals appeared to benefit from the political involvement compared to competitors:

Our primary hospital is lucky, because it has the local level politicians as Board members, party loyalty made them empowered and confident. They[politicians] are very supportive with budget but at federal level and in some regions, there is no such political support in budget and HRM issues (R17).

Normative mechanisms emanating from government regulations affect HRM practices. All the studied hospitals report that government regulation doesn’t accept or allow absenteeism and moonlighting. Yet, some respondents view ‘though moonlighting is unacceptable norm [by government] but practiced mostly by skilled professionals because of coercive mechanisms of government (e.g. not allowing workforce to get equal overtime payment and allowances) (R16)’. ‘This is pressurizing professionals to illegally engage in dual practices or causes high turnover (R1)’. The resultant high turn-over might subsequently put the quality of care at risk:

‘Hospitals are human-capital intensive and risky working environment, but a risk allowance incentives set by policy makers/Government for the whole workforce of the hospital was not considered [by management] (FG3).

This is because the regulations failed to solve low salary which is pushing professionals to leave that negatively impacts service provision and health outcomes (R1).

Despite the dissatisfaction with the current policy and the felt urgency to change it, some respondents had faith in the improvement attempts. In general however, respondents stated that the policy reforms aimed at managing budgets and allocation of (newly educated) workforce, and disregarded the well-being and job satisfaction of the workforce in the public hospitals.
Variation in implementation of regulations between regions further decreased the faith in policy and further increased the dissatisfaction of the workforce:

Variations in implementing health policy, with lack of health insurance for employees in some regions. It is present in other regions and hospitals, a clear policy and HR strategy incoherence and inconsistency in the country. This is leading to apathy, low satisfaction and performance of workforce (FG3).

**Heritage mechanism**: a heritage of limited human resource management leeway.

Paauwe’s framework describes heritage mechanisms entailing the human capital context, organizational culture, structure, and systems that ultimately impact HRM. It considers the path dependence of HRM and its and fit with other preceding organizational development.

From the responses it is clear that the aforementioned lack of competition and top-down enforcement of stringent regulations are long standing and have therefore become part of the human resource management practices. Even on the operational level, the studied hospitals report that staffing issues have not been under the control of the hospital management but instead under the control of ministries and/or regional health bureaus. For example:

Roles of the HR manager is not recognized because the structure doesn’t empower HR department, mainly due to failures of health policy reform in addressing HR issues (FG2).

The studied hospitals perceive the regulatory bureaucracy as a complex contextual and organizational structure that hinders resolution of HRM challenges and promotes political dynamics.

The structure of teaching hospitals is so complex, confusing with accountabilities to various government bodies with multi-sector governance from federal ministries (R5).

*Governing Board is not supportive in addressing hospital demands and HR issues in time, rather intersectoral governance approach is missing (FG3).*

Within this difficult and complex environment, leadership was found to be a critical element. However, it was felt that leaders mostly adopted the government logic and were disconnected from human resources management and patient care:

‘Our hospital lacking leadership competence that also contribute to their inability to improve HR issues. This is mainly due to appointment procedure based on party criteria (FG2).’

Some respondents reported a ‘Lack of a supportive leadership culture in valuing staff as an asset also creating disengagement of workforce (R12).’ ‘Ex-leadership was autocratic, giving more focus on ethnic/tribal and political networks, unable to solve HR problems (R6).’

Positive affirmations of the importance of leadership have also been provided: ‘our hospital has a culture of collaborative leadership in empowering line managers to take HR responsibilities (R11).’ ‘The hospital values workforce as asset than cost (R15).’ There is a culture of collegial relationships that are useful for
employee and hospital performance, there is a new culture developed by the CEO of the hospital with a good staff-management relationship (R1).

All studied hospitals report that they are lacking leeway to develop their own HRM system.

**Discussion**

To research how context influences strategic HRM in Ethiopian public hospitals, we used the Contextual SHRM framework of Paauwe which describes factors that influence the shaping of HRM and subsequently organizational performance. This study aimed to identify and understand how institutional mechanisms (e.g. policy, legal, and regulatory frameworks, and socio-cultural, demographic, and political factors), competitive mechanisms (e.g. labor market, technology, innovation), and heritage mechanisms (e.g. structure, culture, systems, human capital) impact HRM in Ethiopian public hospitals.

Before addressing competitive, heritage and institutional mechanisms separately, we synthesize that persistent underlying shortages of human resources and financial resources are the foundation of all these mechanisms. The national government actively engages to address the consequences of these shortages by allocating human and financial resources to specific hospitals. Moreover, it promotes the education of increased volumes of health professionals. The subsequent policies to address the workforce shortages within a tight budget by tight regulation and detailed top down policy implementation severely impacts HRM in Ethiopian hospitals, as further addressed below.

With respect to the competitive mechanisms, the scarcity of human resources leads to a supply side competition for skilled professionals, with a consequence of accepting moonlighting. This competition is particularly challenging for public hospitals which depend on governmental allocation decisions and hardly have leeway to deviate from the prescribed salaries and allowances. Hence, jobs in private hospitals and outside of the health sector continue to attract public hospital staff, causing turnover at public hospitals to be high. This limits the effectiveness of the HR flooding and allocation strategies implemented by the government while hospitals have little room to maneuver to resolve these problems. These findings confirm previous research reporting shortage of skilled professionals aggravated by high turnover and mainly driven by budget scarcity and corresponding low salaries [6, 7]. Previous studies [e.g. 9, 10] also shown that the current government efforts may not lead to a decrease of workforce shortages unless financial resources are addressed.

Our findings thus provide evidence of human resource shortages faced by low- and middle-income countries causing the market to be eminently shaped by service supply [15]. Our data have not provided any evidence of competitive mechanisms on the demand side, e.g. hospitals competing for patients by providing higher quality of care or additional services.

Correspondingly, the few innovative practices we found also mainly aimed to increase the attractiveness of the hospital for employees and were not targeted at patients. They included offering free medical and
transportation services for employees and HRM innovations (e.g. increasing job autonomy, job security, education) and introducing collaborative leadership.

The government clearly appeared as a dominant institution from our findings. The tight government control of resources was perceived to focus on quantity. This finding substantiates previous research [7] on government responses to HR shortages. Moreover, regulations influence HRM at a very detailed level, such as the number of nurses for a department and the salaries of individuals. This tight quantitative control implied logics and priorities which differed considerably from the views of the hospital employees. These professionals prioritized quality over quantity, in particular the quality of care provided and the quality of the arrangements for the human resources. From a human resource perspective, and in view of the low salaries, differences in regulation and arrangements for allowances and external employments were a main concern. They caused financial inequalities among employees that were perceived as unjust and led to dissatisfaction/demotivation. Some literature [16, 19] supports our finding that differences in regulations, political forces and shortages of critical resources complicate addressing urgent HRM issues. Previous studies added financial inequalities, lack of coordination and ineffective policy implementation as a cause for incoherence and regulatory/policy failures to address HRM issues [22–24].

The focus on quantity diminished the possibility to tailor HR arrangements to the needs of employees. Thereby this approach contrasts sharply with the HR architecture and talent management literature which stresses the need for tailoring of HR practices for organizational performance [25]. The combination of a dominant top down government logic and regulation that was 'implemented like Koran and Bible' with the difficulties experiences by staff as communicated bottom up, put hospital and HR leadership in a difficult position. HR managers felt compelled to devote their time to implementation of and compliance with tight regulations. These regulations inhibited empowerment of hospital and HR leaders to provide tailored and locally effective responses as considered necessary to effectively address the challenges. Leaders experienced a lack of autonomy. In terms of Paauwe's model, they perceived a lack of 'leeway', of 'room to manoeuvre'.

Senior hospital management often was government appointed. They were often perceived to emerge from a network with political, tribal, and/or religious ties and to prioritize the logic and demands from this background over workforce logic and demands. While it was understood that the needs and objectives from the government and the workforce were very difficult to simultaneously address, their perceived inability to address workforce demands contributed to senior management/leadership being regarded as incompetent. Likewise, literature shows that manager's lack of decision space/autonomy for changing HRM also contribute to perceived low competence of leaders and hospital workforce [26–29].

Workforce is rarely engaged in any part of HRM policies. The lack of a bottom-up approach has led to apathy, disengagement, and demotivation. These feelings translated in illegal moonlighting and high turnover. Although moonlighting is not acceptable by law, it is quite common. This situation contrasts with other African countries in which moonlighting is regulated and accepted [30].
Strength And Limitations Of The Study

This study includes a large and varied sample of Ethiopian hospitals covering various geographic locations, rural and urban settings, and central and regional governments. The study particularly engaged various respondents, ranging from experienced administrators and HR managers to team leaders and professionals. This triangulated was further strengthened by using interviews, focus groups discussion, and document analysis.

After piloting and contextualization, Paauwe's well elaborated model elicited rich responses from the respondents and appears to have thoroughly captured the external mechanisms influencing HR management in Ethiopian hospitals. It adds to previous studies that were largely based on secondary data and had little attention for these external factors [e.g.2,3,19].

A first limitation of our study is formed by the regional conflicts within Ethiopia that caused delays and restricted travels to the study settings/regions (Oromia, SNNPR). Therefore, we may have missed some factors and aspects of mechanisms and our study may not be generalizable to other hospitals in Ethiopia. Secondly, collection of data from employees not involved in management has not been as extensive (only as FGD participants). More extensive inclusion of such respondents is recommended in future research (see e.g. [4]). Thirdly, quantitative data for some HRM and management issues (e.g. workforce satisfaction and perception towards engagement) were not accurately documented in the hospitals. Thus, data triangulation through the addition of quantitative data has not been possible. Fourthly, the study exclusively focused on public hospitals in Ethiopia. Therefore, the generalizability to the private hospitals and other healthcare contexts and countries may be low.

Conclusions

Guided by Paauwe's SHRM framework, our study looked at how competitive-, institutional- and heritage mechanisms influence the shaping of HRM in fifteen public hospitals in Ethiopia. It is considered that the combination of these contextual factors importantly shape HRM in the studied hospitals. The competitive mechanisms largely relate to competition for scarce human resources rather than for customers and rarely relate to competitive advantage and innovation. The institutional mechanisms appear most important and influence HRM through stringent top-down regulations, supporting governmental policies to build workforce numbers within a limited budget management. The heritage mechanisms revealed little variation between public hospitals and appeared to be mainly entrenched with politics and government regulations regarding health work force policies.

Our study show that though top management complied with the coercive government regulations/policies, these instruments failed to address the persistent HRM challenges. Hospitals lack autonomy to design their HR policy/strategy and tailor arrangements to workforce needs. Leadership is perceived to lack competence as HR managers lack leeway to shape HRM.

As potential remedies for the aforementioned situations, we therefore recommend:
- Government should loosen regulations and provide authority and leeway to hospitals for strategic HRM to tailor solutions to the local context and challenges.
- The governmental entities involved should collaboratively design simplified organizational and HR governance structures, especially for teaching hospitals.
- Government regulations can more actively consider health service demand and promote responsiveness in provisioning of service delivery and service quality, thus connecting explicitly to the values of the professionals and the needs of patients.

**Declarations**

**Ethics approval and consent to participate**

All participants provided their informed consent to participate in this study. This study and informed consent procedures were approved by the Ethiopian Public Health Institute. (Approval NO. EPHI-IRB-131-2018, Date: 31 Dec 2018) of the Ministry of Health. Interviews and group discussions were recorded following the protocol, after respondents have given their explicit informed consent.

**Availability of data and materials**

Supplementary materials (Appendix 1) available as Additional file 1.

**Consent for publication**

Not applicable

**Competing interests**

The authors declare that they have no competing interests

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Author contributions

PPG, JVDK and MBS were responsible for the initial conception of the proposal, research questions, research design, and final manuscript preparation. PPG was primarily responsible for the proposal development, literature study, conducting all interviews, transcribing and reporting. PPG and JVDK pilot testing the data collection tool. PPG was responsible for manuscript writing, JVDK and MBS were responsible for supervision and reviews. All authors were responsible for data analysis, interpretation and reporting. PPG, JVDK and MBS read, edited, and approved the submitted manuscript.

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References

1. Fieno JV, Dambisya YM, George G et al. A political economy analysis of human resources for health in Africa. *Human Resources for Health* 2016; 14:44.

2. Gile P, Martina Buljac, Van der Klundert J. The effect of human resources management practices on performance in hospitals in Sub-Saharan Africa: a systematic literature review. *Human Resources for Health* 2018.; 16:34.

3. World Health Organization (WHO). World Health Report 2006. Working together for Health. 2006. Geneva; WHO.

4. Van de Klundert J, Broek JVD, Yesuf EM et al. ‘We are planning to leave, all of us’: a realist study of mechanisms explaining healthcare employee turnover in rural Ethiopia. *Human Resources for Health* 2018; 16:37.

5. Miseda MH, Were SO, Murianki CA et al. The implication of the shortage of health workforce specialist on universal health coverage in Kenya. *Human Resources for Health* 2017; 15:80.

6. Deribew M, Laytin AD, Dicker RA. The surgical workforce shortage and successes in retaining the surgical trainees in Ethiopia: a professional survey. *Human Resources for Health* 2016; 14:29.

7. Assefa T, Hailemariam D, Mekonnen W et al. Health system’s response for physician workforce shortages and the upcoming crisis in Ethiopia: a grounded theory research. *Human Resources for Health* 2017; 15:86.

8. Wamai R. Reviewing Ethiopia’s Health System Development. *JMAJ* 2009; 52: 279–286.
9. Manyazewal T, Oosthuizen M, Matlakala M. Proposing evidence-based strategies to strengthen implementation of healthcare reform in resource-limited settings: a summative analysis. *BMJ Open* 2016; 6:e012582.

10. Kitaw Y. Lessons from the evolution of Human Resources for Health in Ethiopia: 1941–2010. *Ethiopian Journal of Health Development* 2013; 27: 6–28.

11. Thatte N, Choi Y. Does human resource management improve family planning service quality? Analysis from the Kenya Service Provision Assessment 2010. *Health Policy and Planning* 2015; 30:356–367.

12. Anyangwe SCE, Mtonga C. Inequalities in the global health workforce: the greatest impediment to health in Sub-Saharan Africa. *Int J Environ Res Public Health* 2007; 4: 93–100.

13. Ministry of Health (MOH). National HRH strategic plan for Ethiopia for 2016–2025. MOH 2018.

14. The World Bank. The health workforce in Ethiopia. The remaining challenges. *The World Bank Study* 2012.

15. McPake B, Maeda A, Aranjo EC et al. Why do health labor market forces matter? *Bulletin of the WHO* 2013; 91:841–846.

16. Dejene D, Yigzaw T, Mengesha S. Exploring health workforce regulatory practices and gaps in Ethiopia: a national cross-sectional study. *Global Health Research and Policy* 2019; 4:36.

17. Federal Ministry of Health (FMOH). Ethiopia Health Accounts 2016/2017. FMOH 2019.

18. Ostebo MT, Cogburn MD, Mandani AS. The silencing of political context in health research in Ethiopia. Why it should be a concern. *Health Policy and Planning* 2018; 33:258–270.

19. Ravaghi H, Foroughi Z, Nemati A et al. A holistic view on implementing hospital autonomy reforms in developing countries: a systematic review. *Health Policy and Planning* 2018; 33:1118–1127.

20. Paauwe J, Farndale E. Strategy, HRM, and performance: a contextual approach. 2nd ed. Oxford: *Oxford University Press* 2017; P 103.

21. Alingh CW, van Wijngaarden, Huijsman R et al. The influence of environmental conditions on safety management in hospitals: a qualitative study. *BMC Health Services Research* 2018; 18:313.

22. Martineau T, Mirzoev T, Pearson S et al. Coherence between health policy and human resource strategy: lessons from maternal health in Vietnam, India and China. *Health Policy and Planning* 2015; 30:111–120.

23. Borghi J, Lohmann J, Dale E et al. How to do (or not to do). Measuring health workforce motivation in surveys in Low and Middle Income Countries. *Health Policy and Planning* 2018; 33:192–203

24. Dussault G, Dubois CA. Human Resources for Health policies: a critical component in health policies. *Human Resources for Health* 2003; 1: 1.

25. Lepak D, Snell S. The human resource architecture: Towards a theory of human capital allocation and development. *Academy of Management Review* 1999; 24:31–48.

26. Alonso-Garbayo A, Raven J, Theobald S et al. Decision space for health workforce management in decentralized settings: a case study in Uganda. *Health Policy and Planning* 2017; 32: iii59–iii66.
27. Garcia-Prado A, Chawla M. The impact of hospital management reform on absenteeism in Costa Rica. *Health Policy and Planning* 2006; **21**: 91–100.

28. Zurn P, Vujicic M, Lemière C et al. A technical framework for costing health workforce retention schemes in remote and rural areas. *Human Resources for Health* 2011; **9**:8.

29. Adhikari R. Vacant hospitals and under-employed nurses: a qualitative study of the nursing workforce management situation in Nepal. *Health Policy and Planning* 2015; **30**:289–297.

30. Russo G, McPake B, Fronteira I et al. Negotiating markets for health: an exploration of physicians’ engagement in dual practice in three African capital cities. *Health Policy and Planning* 2014; **29**:774–783.

**Figures**
Figure 1

SHRM Framework, based on the contextually-based HR theory (Paauwe and Farndale 2017)

Supplementary Files

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