

THE IMPACT OF REMUNERATION ON EFFICIENCY OF MEDICAL OFFICERS DURING THE COVID-19 PANDEMIC A CASE OF PARIRENYATWA HOSPITAL.

Chrispen Mbatya Marwodzi, Dr T. Fundira

Bindura, Zimbabwe

Abstract

The study sought to assess the impact of remuneration on efficiency of medical officers during Covid-19 pandemic at Parirenyatwa Hospital. The medical officers embarked on an industrial action in 2019 and 2020, which was compounded by the advent of Covid-19 pandemic in 2020, thus endangering the lives of patients in need of basic health care. The researcher reviewed literature and noted that there was a contradiction in literature in that some authorities reasoned that remuneration had no impact on the efficiency of medical officers, while some argued that the relationship between the variables was weak and still other authorities concluded that the relationship was strong and positive. The conceptual framework adopted in the study depicted the determinants of medical officers' efficiency using a systems approach, which involved a seven phase process comprising situational analysis; input; process; output; outcomes, effects and impact. The researcher adopted positivism paradigm so as to eliminate bias and enhance objectivity of the research process. The study pursued exploratory and explanatory research designs to resolve the research problem. The methodological approach adopted for the study was a quantitative survey technique that included use of a questionnaire in collecting relevant data from sampled respondents. The study employed stratified random sampling technique whereby medical officers at the hospital complex were categorised according to their functional area and then randomly chosen from the various strata for research purposes. A descriptive statistics method was employed to examine field data using E-Views 11 Student Version. The results of the study were presented using tables, graphs and charts. The major findings of the study indicated that there was a positive correlation between remuneration and efficiency of medical officers. The study highlighted several challenges faced by medical officers such as suboptimum remuneration, unfavourable working hours, lack of medical drugs and medical supplies and poor working conditions. Guided by the findings presented in this study, it was concluded that medical officers have a duty of care to vulnerable patients and should strike a delicate balance between their genuine quest for adequate remuneration and the needs of patients under their care. The study established that there was a strong positive relationship between remuneration and efficiency of medical officers. Based on the findings and conclusions, the study recommended that government should acknowledge the importance of decent work by medical officers by addressing their deteriorating working conditions and poor remuneration. The challenges faced by medical officers in improving their efficiency require a holistic and transparent approach that harnesses available resources and efforts of all stakeholders to attain a sustainable resolution.

INTRODUCTION

Numerous studies have sought to enquire into the relationship between remuneration and efficiency of medical officers. However, the advent of Covid-19 pandemic has brought a novel dimension to the manner in which these variables interact and influence each other. This study sought to assess the impact of remuneration on efficiency of medical officers during Covid-19 pandemic at Parirenyatwa Hospital. The medical officers embarked on an industrial action in 2019 and 2020, thus endangering the lives of patients in need of basic health care. Access to primary health care is a fundamental human right as enshrined in Section 76 of the Constitution of Zimbabwe and interruptions in health services affect some of the most vulnerable patients. According to , the strike by medical officers also coincided with the advent of Covid-19 virus, which reduced provision of and access to medical services. The hospital environment inherently poses a great risk of contracting the air-borne virus for both medical officers and patients. , contended that it was debatable whether it was ethical for medical officers to withdraw services considered essential for survival of patients. The failure by medical officers to perform their duties was thus a pertinent issue which warranted research so as to restore full medical services for the benefit of needy patients.

Whereas the need to earn a fair remuneration, as demanded by medical officers was a legitimate plea, it should however not be an overriding objective in the provision of medical services. , argued that remuneration should be commensurate with the responsibilities of medical officers and fair when compared with others in the same or equivalent jobs. Remuneration was considered to be a primary lever for raising living standards and

constituted a major source of income for medical officers. According to , the living standards of medical officers at Parirenyatwa hospital were very low and not commensurate with their responsibilities. The government had partnered with non-governmental organisations in increasing the remuneration of medical officers from a Zimbabwe dollar equivalent of USD100.00 in September 2019 to Zimbabwe dollar equivalent of USD500.00 in December 2020. Basic salaries made up to 20% of remuneration with the rest being salary supplementation which was both performance and risk based allowances. However, the medical officers insisted on being paid in hard currency, while the government was adamant that such a remuneration model was not sustainable in the current turbulent economic environment.

Whereas , and argued that there was no correlation between remuneration and efficiency in the workplace, economists asserted that the link was weak while concluded that the relationship between the two variables was very strong and positive. There was also a dearth of literature on the impact of remuneration on employee efficiency in the context of public health services sector in Zimbabwe. According to , most studies focused on developed countries with a huge gap existing in developing countries such as Zimbabwe. According to (Wushe and Shenje, 2019) there were also few studies which focus on Africa. (Mangundu, Roets and Janse van Rensburg, 2020) argued that most studies paid more attention to employment effects, but less on efficiency and remuneration effect, leading to inconclusive literature reviews. This inconsistency in literature denoted a gap which had to be filled by further research into the impact of remuneration on the efficiency of medical officers during Covid-19 at Parirenyatwa Hospital.

Against this background, the purpose of this research is to answer the research question: What is the impact of remuneration on efficiency of medical officers during Covid-19 pandemic at Parirenyatwa Hospital? More specifically the research has three subsidiary objectives:

To evaluate different forms of remuneration that influence the efficiency of medical officers at Parirenyatwa Hospital.

To identify challenges faced by medical officers in enhancing their efficiency during Covid-19 pandemic at Parirenyatwa Hospital.

To ascertain the relationship between remuneration and efficiency of medical officers at Parirenyatwa Hospital.

This research investigated the influence of remuneration on efficiency of medical officers during the Covid-19 pandemic. The study was crucial because though coronavirus was a new phenomenon it had a negative impact on the provision of basic health services and ultimately on population health. According to , improving the efficiency of medical officers was a pertinent topic as it had a direct impact on the well-being of a nation. Furthermore, the industrial action by medical officers during the pandemic worsened the plight of vulnerable patients. It was thus necessary to investigate the extent to which financial and non-financial rewards could motivate medical officers to improve their efficiency.

Zimbabwe's health referral system is a four-tiered pyramidal system with the lower level primary health facilities (clinics), secondary level (district hospitals), tertiary level (provincial hospitals) and quaternary level (central hospitals). There are six national (central) referral hospitals of which Parirenyatwa Group of Hospitals is one of them. It started as a small hospital in 1890. Small satellite health facilities were established within this complex. In 1963 the Group of Hospitals included Salisbury Central Hospital, Princess Margaret Hospital, Lady Chancellor Maternity Hospital, Orthopaedic Centre and African Outpatient Clinic. The hospital was formerly known as the Andrew Fleming Hospital, named after the principal medical officer to the British South Africa Company. After the independence of Zimbabwe in 1980, the hospital was renamed in honour of Tichafa Samuel Parirenyatwa (1927–1962), the first black person from the country to qualify as a doctor of medicine.

It is the largest and most sophisticated referral centre in the country for complex problems which demand specialist care. It has a capacity of 1800 beds and a work force in excess of 2000 staff, of which 35 are medical officers. The hospital is located in the Belgravia area of Harare and built on a 400 000 square meter piece of land. The Group of Hospitals is made up of the Main Complex; Mbuya Nehanda Maternity Home; Sekuru Kaguvi Eye Hospital and Annexe Psychiatric Unit. The hospital incorporates the University of Zimbabwe College of Health Sciences, which trains the university's medical students. The hospital also has a school of nursing within the complex. Parirenyatwa hospital is headed by Mr A.J.V Maunganidze who is the acting Group Chief Executive having been appointed to the post in October 2019, replacing Mr Ernest Manyawo. He is deputised by Dr T.M Magure who is the acting Clinical Director. She assumed the position in September 2020 replacing Mr Maunganidze. The hospital executive also consists of a matron, an administrator, a pharmacist and a chief nursing tutor.

The findings of the research are expected to inform the government of Zimbabwe's approach in its design and implementation of incentive schemes for medical officers. They will also contribute to the scant global literature detailing the impact of effective remuneration strategies on efficiency of medical officers in developing countries. Moreover, the public in general will benefit from increased efficiency by medical officers, which may guarantee access to health care.

The paper consists of four parts. First, it reviews the existing literature relevant to remuneration and efficiency of medical officers. Then, the research methodology is presented and data analysis techniques discussed. Next,

the findings are discussed and summarised. The paper concludes with a discussion of managerial implications and suggestions for further research.

LITERATURE REVIEW

This part outlined the principles and concepts that have been explored and brought out by various authors in previous literature on remuneration strategies and efficiency of medical officers. It was noted that medical officers performed different specialised medical tasks and it was the integration of all their works as well as the interrelationship that existed in these different medical services that made the health system function effectively as a whole. Medical officers were the front line workers in the fight against the coronavirus, working long hours with limited resources, often at great risk to their own health. Thus, if any of these categories withheld services due to strikes or challenges caused by the Covid-19 pandemic, Parirenyatwa hospital may not function efficiently. This posed serious hardship to patients who may not have money to go to private hospitals. Covid-19 pandemic posed a threat to the delivery of healthcare services by increasing the pressure on limited resources to the detriment of people's lives.

IMPORTANCE OF REMUNERATION

The goal of all healthcare delivery systems should be to ensure the well-being of citizens where individuals have the right to access good quality healthcare. According to the payment of fair and equitable remuneration to experienced, competent and adequately trained medical officers contributed to accessibility of health services and essential medical drugs. Medical officers must therefore be paid reasonably for the work they do, asserted that the medical profession in Zimbabwe no longer enjoyed a privileged status neither did it guarantee comparatively better remuneration due to the failure of the government to match the remuneration packages of medical officers with the rising cost of living. Medical officers thus reluctantly accepted their current terms of employment and in some cases considered competing alternatives such as private practice and migrating to other countries in search for greener pastures, argued that medical officers needed to receive a remuneration which met their basic needs and an appropriate reference remuneration which is commensurate with their responsibilities and fair when compared with others in the same or equivalent jobs. The low remuneration of medical officers lowered their living standards and also negatively affected their efficiency at work. For example, a commuting medical officer, who relied on the unreliable public transport, was not able to respond effectively to emergencies of needy patients, contended that remuneration constituted a major source of income for medical officers, and remuneration increments were a primary lever for raising living standards. Remuneration of employees represented a cost at enterprise level, in that it was expenditure which had to be paid, whether an entity made profit or not. However, affirmed that at macroeconomic level equitable remuneration was essential to maximise aggregate demand. This implied that if average remuneration of medical officers increased, it boosted their capacity to demand both capital and consumer products. Whereas, excessive remuneration growth led to price inflation and declining exports or investment, weak remuneration growth represented a strain on household consumption and domestic demand. It was thus critical to strike a delicate balance between the legitimate quest for profit, and the need to preserve human dignity and professional status by remunerating medical officers fairly and appropriately.

EFFECTIVE REMUNERATION STRATEGIES FOR MEDICAL OFFICERS

The way medical officers were remunerated provided strong incentives for improving health worker efficiency and quality of care. Compensation for medical officers had to be fair so as to promote employee engagement and efficiency, stressed that pay for medical officers had different forms. It may be time-based, that is, salaries and allowances or in the form of salary supplementation, or a combination of both. Salary supplementation implied efficiency-based financing initiatives which rewarded medical officers on verified improvements in efficiency. They comprised monetary payments or non-monetary benefits paid to medical officers above the standard compensation for their position. The use of salary supplementation, particularly efficiency-based supplementation provided a direct link between remuneration and efficiency of medical officers. Carefully designed efficiency based approaches aligned the incentives of the health workers with the societal goals of improving the population's health. However, argued that there was a risk of unnecessary provision of care as medical officers increased their activity to a level that was too high relative to patient needs, that is, supplier-induced demand. There was therefore, a need to ensure that improvements in efficiency or quality of care, were rendered appropriately to patients who actually need the medical services.

EFFICIENCY GROWTH AND REMUNERATION POLICIES

Labour efficiency in relation to medical officers implied producing the maximum effective health services and health outcomes possible given the existing health workers and resources. According to the International

Labour Organisation, the relationship between the growth of average remuneration and that of labour efficiency was central to the definition of equitable remuneration policies. Therefore, attempts to improve medical officers' efficiency should aim at predominantly stimulating medical officers' job satisfaction and thus improve their capacity to perform effectively.

The potential casual pathways between remuneration and efficiency of medical officers may be evaluated using the amount of financial incentives; capability and sincerity of supervisors; amount of patient workload and working and living conditions. Financial incentives to medical officers should not be too small and unfair in proportion to workers' responsibilities and relative share of their peers, as this may reduce their intrinsic motivation. Conversely, if the incentive constituted a substantial portion of base remuneration, it pressurised them to work more so as not to lose the incentive. Improved working and living conditions may stimulate the efficiency of medical officers. The government should invest in improving the working conditions, that is, provision of personal protective equipment, medical equipment and drugs, which better enable medical officers to provide services for patients. Additionally, staff benefits such as loans for building private accommodation and building staff housing, may provide the extrinsic satisfaction and motivation to increase productivity.

Remuneration strategies usually entail group-based financial incentives, meaning that line managers would also receive a portion of the incentives. Thus managers would increase their supervision pressure on subordinates, so as to get the efficiency-based bonus. According to supervisors should thus be sincere and supportive not controlling in their work so as to encourage efficiency from their team members. Increased patient workload and longer working hours should be accompanied by a relative increase in staff earnings so as to enhance job satisfaction, but excessive workload may exhaust medical officers physically and mentally thus adversely affecting their productivity.

Whereas, remuneration was essential for satisfying needs, however it was suggested that money incentives motivate only if employees perceive a strong linkage between performance and rewards. Excessive focus on financial incentives in the public sector led to negative consequences. Workers viewed monetary rewards as more significant than other rewards such as praise from supervisors or appreciation by the civic society, and experienced struggle between their own view of public sector values and messages about working for financial gain. In the case of the medical officers, monetary and non-monetary work circumstances were key determinants in medical officers' overall work satisfaction. Poor remuneration of medical officers caused them to reallocate critical patient time towards more profitable alternatives away from the public sector to meet their target income. This was however, subject to the availability of opportunities in the private sector. It was thus critical for policy purposes to understand better the elasticity of remuneration, and identify a threshold for those combinations of labour and remuneration below which medical officers may start leaving the public sector.

COMPOSITION OF MEDICAL OFFICERS

A medical officer, also known as medical consultant implied a senior medical practitioner who was registered in terms of the Health Professions Act, Chapter 27: 19. They included general medical practitioners and specialist physicians. Specialist physicians may be classified as follows: Anaesthetist; Cardiothoracic Surgeon; General Surgeon; Neuro Surgeon; Otorhinolaryngologist; Obstetrician and Gynaecologist; Paediatric Surgeon; Ophthalmologist; Orthopaedic Surgeon; Paediatrician; Pathologist; Psychiatrist and Urologist. The term specifically excluded junior medical doctors, who were recent graduates from medical college, and were yet to complete the mandatory two-year internship.

Currently, only three Zimbabwe universities offer training in medicine namely University of Zimbabwe College of Health Sciences, Midlands State University Medical School and the National University of Science and Technology. The Medical and Dental Practitioners Council of Zimbabwe was mandated in terms of Section 30 (1) of the Health Professions Act (Chapter 27:19) to evaluate, monitor, enforce and improve the standards of Medical and Dental Education and Training in Zimbabwe from undergraduate through to postgraduate specialist training. The undergraduate students undergo a rigorous five year training period after which they undertake compulsory internship, which is a compulsory supervised period, which is two years for Medical Interns and one year for Dental Interns in a Central Hospital or an approved Designated Health Institution so as to gain clinical experience. During the period interns are expected to develop professional values and advance their knowledge, skills and attitudes. Internship training provides an environment for the intern to learn whilst providing services. The first year interns do compulsory six monthly clinical rotations in medicine and surgery. During the 2nd year the interns undertake compulsory four monthly clinical rotations in Paediatrics, Obstetrics and Gynaecology and a choice of either Anaesthetics or Psychiatry. During the internship period, interns are assessed against standards of competencies required. Using the internship logbook, interns are assessed their capabilities in dealing with patients in the fields of clerking, physical examination, carrying out relevant investigation, coming up with a working clinical diagnosis, coming up with a treatment plan, initialising treatments in line with the instruction from the supervising senior and preparation of some patients for specific specialised therapies. In addition to these professional requirements the first year intern are also

monitored on their relationship with supervisors, peers, colleagues particularly nurses, administrative staff and patients.

EFFECT OF MEDICAL OFFICERS' INDUSTRIAL ACTION

Parirenyatwa hospital is the largest and most sophisticated health facility in Zimbabwe offering both teaching and referral facilities. The indiscriminate and incessant industrial actions by medical officers implied that there was limited capacity to care for patients especially during the Covid-19 pandemic. , contended that industrial conflict arose when there was deviation from the expectation relating to the terms and conditions of work especially when it affected the employees. Industrial conflict also arose as a result of incompatible interest of workers and employees in the working and employment, clashes resulting from opposing view held by workers about their relationship. , argued that industrial conflict emanated from unsatisfactory working conditions and unfair remuneration and were evidenced by absenteeism, output restriction, break of contract of policy and unconscious forms of protests. According to most health workers' strikes were caused by poor remuneration, lack of medical supplies, inadequate infrastructure, poor working environment and perceived government insincerity to the demands of medical officers.

The industrial action by medical officers disrupted the efficiency of the health delivery system at Parirenyatwa hospital contributing to the country's poor health indices. The government had on numerous occasions declared the strikes illegal and institutionalised the "no work, no pay" rule on strike actions by medical officers . Despite these government interventions, the industrial actions continued unabated. Several patients including those in critical conditions were forced to discharge themselves following paralysis of medical and clinical services. During strikes, the accident and emergency department were usually manned by skeletal staff from the uniformed forces. This tended to negatively impact on the health care system, leading to several avoidable deaths and outgoing medical tourism, as the elite members of society seek health services abroad . There needed to be an efficient interplay between medical officers and government in its capacity as the employer. Strikes were sustained because this interplay was not efficient enough and so disharmony became the order of the day in the health sector to the detriment of vulnerable patients.

Strike actions worsened the general socioeconomic status of every individual within the catchment area of Parirenyatwa hospital. Equally, foreign currency reserves were depleted as most wealthy people sought or even established health care centres abroad. As the government procrastinated in meeting the demands of medical officers, strikes prolonged causing avoidable deaths, health complications and spread of diseases. According to industrial action by medical officers caused emotional distress and long hours of work for those who chose not to participate in the strike action. Further, whether or not their demands are finally met, medical officers who had been involved in strikes usually ended up disillusioned and de-motivated and ended up emigrating overseas or relocating within the country thereby leading to internal or external brain drain.

EFFECT OF COVID-19 ON EFFICIENCY OF MEDICAL OFFICERS

The coronavirus disease 2019 (COVID-19) was first identified in Wuhan City in December 2019, after which, the disease spread throughout Hubei Province and other parts of China. The virus spread fast across all countries globally and threatened to greatly affect Zimbabwe as well. According to the Ministry of Health and Child Care (MoHCC) the country had a cumulative 8 531 cases and 253 deaths as at 08 November 2020 (MoHCC, 2020). According to the World Health Organisation the pandemic has so far had devastating effects in predominately high and middle-income countries with total cases exceeding fifty million and total deaths in excess of one million. Medical officers being frontline workers faced a considerably higher risk of infection and death due to excessive COVID-19 exposure. Given this inherent risk, there was need to focus on protecting medical officers at Parirenyatwa hospital through provision of personal protective equipment (PPE), training, addressing fatigue, stress and anxiety.

The Covid-19 pandemic posed severe challenges in Zimbabwe where public health infrastructure, medical supplies, as well as the supply of medical equipment were severely compromised. Furthermore, prolonged PPE usage led to skin damage along the nasal bridge. According to medical officers suffered from fatigue and their ability to deal with work-related stress was compromised due to excessive working hours. Covid-19 pandemic implied a change in working hours so as to cope with increased demand for medical services during the pandemic.

The pandemic also negatively affected the efficiency of medical officers in that increased workload upset the work-leisure time balance leading to reduced effectiveness. Medical officers at Parirenyatwa hospital opted to find alternative employment opportunities in the private sector or chose to stay in their current employment, but worked less intensely in response to the worsening conditions. According to dealing with COVID-19 on the frontline made medical officers susceptible to psychological distress. This manifested in the form of high levels of depression, stress, anxiety, distress, anger, fear, insomnia, and post-traumatic stress disorder among medical officers.

The increased risk of infection by COVID-19 further exacerbated the existing shortage of skilled workforce, as emergency departments were operating at full capacities with limited material resources. According to the Covid-19 pandemic caused medical officers to have high levels of fear of infection and infecting family members, emotional disturbance, uncertainty, and stigmatisation from the community. Risk factors for mental health included overwhelming situations, social disruption of daily life, feeling vulnerable, at risk of getting infected, fear of transmitting the disease to families, and loved ones. The effects of the Covid-19 pandemic may however be less pronounced on medical officers in that being senior physicians they inherently had higher resilience of the profession and of the wider health system than their inexperienced junior counterparts. Medical officers thus built intrinsic resistance, thus improving their efficiency in the face of deteriorating working conditions and increased workload.

MEDICAL OFFICERS' WORKLOAD AND PATIENT SAFETY

The increased amount of workload inherently affected the efficiency of medical officers, thus endangering the safety of patients who had to endure medical service from inattentive personnel. According to the judgement of medical officers was seriously impaired by fatigue emanating from working long hours and attending to increased number of patients per day. Patient safety was thus compromised when the mental and physical capacity of medical officers was overstrained. The prevailing Covid-19 pandemic had double-edged effects on the workload of medical officers and safety of patients. On one hand, the pandemic overburdened the already understaffed medical officers by increasing the workload. On the other hand, the safety of patients during the Covid-19 pandemic was hugely compromised due to shortages in medical supplies such as personal protective clothing which should mitigate the transmission of the virus within the hospital complex. It was pertinent, therefore, to ensure the provision of medical supplies based on needs, type, quality, and quantity. This ensured that medical officers focused on service provision. It was critical for the government to provide appropriate psychological support to medical officers during pandemics so as to mitigate the psychological impacts of the virus on medical officers. The COVID-19-specific psychological interventions for medical officers included psychological intervention support teams, psychological counselling, availability of helpline, establishment of shift systems in hospitals, online platforms for medical assistance, financial incentives, providing adequate breaks and time offs, providing a place to rest and sleep, leisure activities such as meditation and exercise, and motivational sessions. Protecting the well-being of medical officers through appropriate measures is a crucial tool in enhancing their efficiency.

CONCEPTUAL FRAMEWORK

The conceptual framework in Figure 2 below depicts the determinants of medical officers' efficiency using a systems approach, which involves a seven phase process comprising situational analysis; input; process; output; outcomes, effects and impact. The approach explored how human resource management interventions improved health workers' performance in low and middle income economies. The approach also resonated well with the Expectancy Theory which was developed by Victor Harold Vroom in 1964 through his study of the motivations behind decision making. The Conceptual Framework for this study illustrated that enhanced efficiency of medical officers was influenced by overall job contentment, which emanated from the interplay between determinants of macro, micro and individual living circumstances of medical officers.

SITUATIONAL ANALYSIS

The situational analysis dealt with the determinants of optimal performance in respect of medical officers. The factors were divided into three namely: macro health system, micro health facility level and individual living circumstances of each medical officer. Macro factors dealt with the aggregate policies and strategies at national level that set priorities and regulations in the workplace. The efficiency in the health sector at the macro level may be stimulated or constrained by factors in the national context beyond the health systems. The micro health facility level such as Parirenyatwa hospital referred to establishments where health policies are operationalised and implemented as specific programmes. It also implied the service delivery level where there was an interface between health systems and users. The size of the hospital and the way services were organised within it had a direct influence on the deployment of human, financial and material resources to each health facility.

Inputs

Human resources were one of three principal health system inputs, with the other two major inputs being financial and material resources. The financial resources were used to purchase inputs that are of both human and material resources. Investment decisions in health involved substantial financial commitments which were difficult to reverse or downsize. A case in point is the Covid-19 procurement scandal, in which former Health

Minister Obadiah Moyo, unilaterally and procedurally awarded a US\$60 million tender to Drax Consult SAGL which prejudiced the country of critical medical supplies .

Process

This segment of the conceptual framework dealt with the human resource management interventions which aimed to improve availability of medical services, productivity, responsiveness and competencies, and job related support systems which created an enabling environment for medical officers to perform effectively. The main objective in this case was to coordinate the human, financial and material resources so as to provide optimal medical services to needy patients. Employee performance management was a critical yardstick in evaluating and assessing the efficiency of medical officers . The managerial toolkit for effective performance management included surveillance mechanisms, effective communication, training and efficiency assessment.

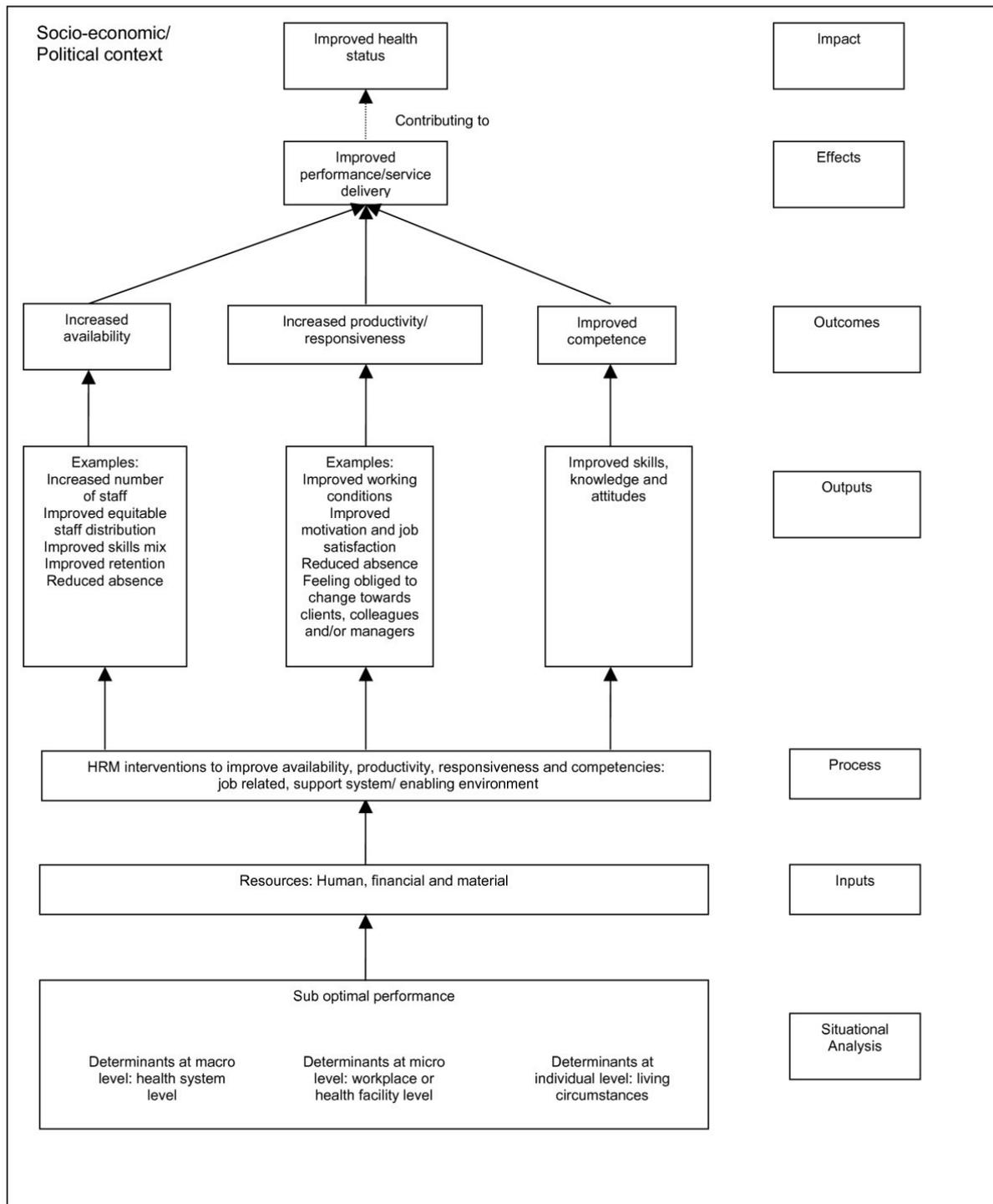


Figure 2: Conceptual Framework for improving medical officers' performance and productivity
Source:

<https://www.gapinterdisciplinaries.org/>

Outputs and Outcomes

The intended outputs, as depicted in the conceptual framework should emanate seamlessly from the work process. Thus increased availability may be in the form of increased number of medical officers availing themselves to work at Parirenyatwa hospital, improved staff equitable distribution, improved skills mix, improved retention and reduced absenteeism. On the other hand increased productivity or responsiveness may be evidenced by improved working conditions, improved motivation and job satisfaction. Improved competence will be demonstrated by improved skills, knowledge and attitudes. The intended outputs thus lead to desired outcomes.

RESEARCH METHODOLOGY

This part focused on discussing the philosophical assumptions and the design strategies underpinning the present research. The research methodology outlined the methods and research design used by the researcher to gather, organise, examine and present data in the research. The researcher adopted the positivism paradigm in which the role of the researcher is limited to data collection and interpretation in an objective and value-free way. This philosophy was appropriate to this study in that it eliminated the researcher's bias which tended to distort the research findings. Positivism enhanced the integrity of the study by ensuring that only the independent views of medical officers were generated by the research instrument and analysis tool. This philosophy blended well with the research under study which sought to unravel the role played by remuneration in impacting the efficiency of medical officers during the Covid-19 pandemic. used the positivism paradigm in his research entitled "The Socio-Economic Effects of Medical Unions Strikes on the Health Sector of Akwa Ibom State of Nigeria", while used the same methodology in their research entitled "Rural health workers and their work environment: the role of inter-personal factors on job satisfaction of nurses in rural Papua New Guinea". The research pursued exploratory and explanatory research designs, as the researcher endeavoured to establish the link, if any, between remuneration and the efficiency of medical officers during the Covid-19 pandemic. The research design assisted in translating the research questions into the actual research project by integrating different components of the study in a coherent and logical way, thus ensuring that the study effectively addressed the research problem. An exploratory design was appropriate for this research since the review of literature revealed that there were few or no earlier studies to refer to or rely upon in relation to the research problem. The Covid-19 coronavirus was a new phenomenon whose variants were yet to fully-understood by scientists. Exploratory research comprised collecting through open-ended questionnaires, based their research work on an exploratory design and on the work of a group of academics and performance-based financing practitioners. On the other hand explanatory research was used to establish and understand causal relationships between remuneration and efficiency of medical officers through closed-ended questionnaires, successfully applied explanatory research in their studies on "Exploring public sector physicians' resilience, reactions and coping strategies in times of economic crisis; findings from a survey in Portugal's capital city area". Their research was in many ways similar to the researcher's studies on the efficiency of medical officers. Explanatory studies tended to be naturally compatible with quantitative data analysis in establishing a correlation between variables.

SAMPLING

The target or study population comprised 35 medical officers at Parirenyatwa Hospital. The eligibility criteria of the target population denoted that a medical officer should have undergone a five year training period at a reputable medical college after which they undertook compulsory 2 year internship in a Central Hospital or an approved designated health institution so as to gain clinical experience. The unit of analysis was the individual medical officer. The population under study was relatively small, which implied that the researcher should use the normal approximation to the hyper-geometric distribution because it gave accurate results. However, this approximation required the researcher to sample 34 of the 35 medical officers, which was not feasible due to the prevailing coronavirus pandemic which limited feasibility of an extensive research through restricted access to Covid-19 hotspots. The sample size for the study thus consisted of 20 medical officers at Parirenyatwa Hospital. The study employed stratified random sampling technique whereby medical officers at the hospital complex were categorised according to their functional area, for example, Main Complex, Annex hospital, Sekuru Kaguvi Eye hospital and Mbuya Nehanda Maternity Home. The respondents were then randomly chosen from the various strata for research, contended that the application of stratified random sampling reduced selection bias and ensured the test sample was a true and accurate representation of the entire population. Stratified random sampling was an appropriate probability sampling method for this research because the entire population could be divided into multiple non-overlapping and homogeneous groups (see Table 3.1). The method was cost effective and improved the efficiency of the research. The final realised sample consisted of 20 usable questionnaires, representing a 100% response rate. All 20 questionnaires were analysed.

Table 3.1 Response Rate of Questionnaires

Work Station	Questionnaires Distributed	Questionnaires Completed	Response Rate (%)
Main Complex	08	08	100
Mbuya Nehanda Maternity Home	04	04	100
Sekuru Kaguvi Eye Hospital	04	04	100
Annexe Psychiatric Unit	04	04	100
Total	20	20	100

Table 3.2 provides a socio-demographic profile of respondents who participated in the study. The study was dominated by male respondents (65%) and the majority of respondents fell in the over 45 category. Approximately 75% of respondents had a post-graduate medical related qualification while a further 15% had a post graduate qualification not related to the medical field, indicating the respondents' desire to assume leadership roles. 75% of respondents had medical experience of over 20 years, while 30% of the respondents had been stationed at Parirenyatwa Hospital for a period of between 10 to 20 years.

Table 3.2 Socio-Demographic Profile of Respondents

Gender	Frequency	Percentage (%)	Cumulative (%)
Male	13	65	65
Female	07	35	100
Total	20	100	100
Age Range	Frequency	Percentage (%)	Cumulative (%)
Below 35	02	10	10
35 – 44	06	30	40
Above 45	12	60	100
Total	20	100	100
Highest Educational Level	Frequency	Percentage (%)	Cumulative (%)
Graduate	02	10	10
Post Graduate - Medical	15	75	85
Post Graduate – Non Medical	03	15	100
Total	20	100	100
Medical Experience (years)	Frequency	Percentage (%)	Cumulative (%)
Below 10	02	10	10
10 – 20	03	15	25
Above 20	15	75	100
Total	20	100	100
Length of Service at Parirenyatwa Hospital	Frequency	Percentage (%)	Cumulative (%)
Below 10	04	20	20
10 – 20	06	30	50
Above 20	10	50	100
Total	20	100	100

DATA COLLECTION

Data for the main study was collected during February 2021. The methodological approach adopted for the study was quantitative method which was a survey technique that included use of structured questionnaire in collecting relevant data from sampled respondents. Structured questions implied that questions were presented with exactly the same wording and in the same order to all respondents to ensure that all respondents reply to the same set of questions. The form of the questions was both closed and open (see Annexure 1). This approach enabled study respondents to reveal their attitudes and motives on the subject under investigation. The 20 questionnaires were transmitted electronically using Google Forms, which enabled the forms to be distributed through social media platforms such as Whatsapp, Twitter, Facebook and email. This model created both flexibility and convenience to respondents thus increased the chances of attaining a higher response rate. No incentives were provided to respondents to complete the survey.

MEASUREMENT

A multi-dimensional measure was used to determine the extent to which the efficiency of respondents was influenced by different remuneration forms and strategies. This measure was based on the Likert scale with scale points labelled as follows: 1. Strongly agree; 2. Agree; 3. Neutral; 4. Disagree and 5. Strongly disagree. A composite score was calculated for each of the five sub-components by averaging the respondents' responses across the items in each sub-dimension. The higher the composite score on a particular dimension, the more he/she is influenced by that particular form of remuneration. To fulfil the objectives of this research, a descriptive statistics method was employed to compile a spreadsheet which summarised results from 20 questionnaires. The E-Views 11 Student Version was utilised for the analysis, investigation and presentation of the numerical data obtained. The quantitative data was tested for consistency so as to prove its reliability using internal consistency reliability to assess the reliability of data collected. This implied that respondents answered the same for each similar question. No internal inconsistencies were noted during analysis of data. The researcher included at least two questions in the questionnaire that measured the same thing (see Annexure 1). The data was also tested for validity, which is the capacity of an instrument to measure what it is supposed to measure, implying the accuracy of the measure used. The researcher used content validity to test the validity of data collected. Content validity denoted the extent to which the items on a test are fairly representative of the entire domain the test seeks to measure. The study used stratified sampling to ensure that the test items were representative of the entire population.

RESULTS ANALYSIS

This part presented the data and analysed the findings of the study based on the methodology used to gather the data. The presentation of data consisted of three distinct stages, namely editing, coding and data entry. These stages allowed the researcher to assign meaning to vast amount of data collected so as to enable easy presentation of the data in summary form with the aid of visual aids such as bar graphs, pie charts and tables.

IMPACT OF REMUNERATION ON EFFICIENCY OF MEDICAL OFFICERS

The study revealed that there was a positive correlation between remuneration and efficiency of medical officers, indicating that remuneration is a source of motivation on the efficiency of medical officers at Parirenyatwa Hospital. This is in line findings made by who stated that there is strong relationship between remuneration and efficiency of medical workers. However, medical officers are poorly remunerated by the government leading to concerns over worker motivation and efficiency. The research showed that increasing the remuneration of medical officers was a demonstration of government support for the brave individuals who were at the forefront of the pandemic. The government was reluctant to pay appropriate overtime or hardship allowances, which made medical officers reluctant to render their services and embark on an industrial action. The study highlighted that suboptimum remuneration including salary supplementation were the most pertinent grievances and key determinants of performance for medical officers.

CHALLENGES FACED BY MEDICAL OFFICERS DURING COVID-19 PANDEMIC

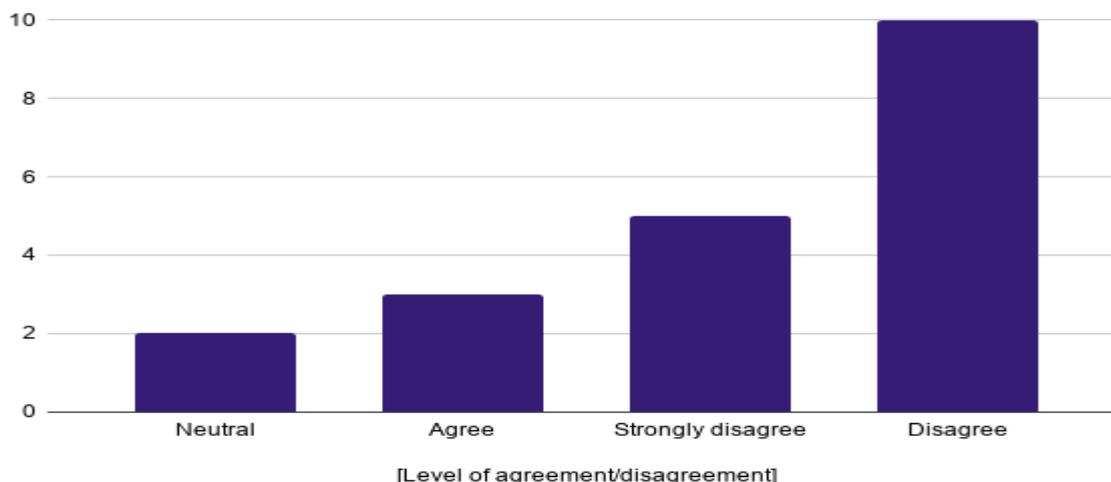
The research outcomes indicated that medical officers, as the front lines workers in the fight against the coronavirus were often at a great risk of contracting the deadly coronavirus due to lack of critical medical supplies and personal protective equipment. The study showed that there was a shortage of medical officers at Parirenyatwa Hospital and this had adversely affected the institution's drive to provide quality health services to needy patients. The study also highlighted that medical officers decried unfavourable working hours, suboptimum remuneration, lack of medical drugs and poor working conditions. For example, most medical officers did not have motor vehicles which were essential in responding to medical emergencies. The research indicated that the pandemic had severely strained existing human resources along with poor and inadequate infrastructure.

RELATIONSHIP BETWEEN REMUNERATION AND EFFICIENCY OF MEDICAL OFFICERS

The study established that there was bias during promotion exercises for medical officers. The upgrading of medical officers was not being done on merit disregarding the competency, skill-set and experience of members. As depicted in Figure 4.1 below the study the survey revealed that 75% of respondents were of the opinion that promotion of medical officers was not based on meritocracy but was biased in favour of preferred candidates. This had a negative effect on the efficiency of competent medical officers who would have been

overlooked during the promotion exercise. However, a paltry 15% contended that promotion was based on merit, while a further 10% chose to remain neutral in their responses.

Figure 4.1 Promotion of Medical Officers on Merit



Medical officers who were snubbed during promotion viewed the process as a form of economic discrimination and felt less motivated to improve their efficiency. Financial and non-financial incentives proved to be critical indicators of employees' worth and thus an essential component of improving the efficiency of medical officers. The study revealed that efficiency of medical officers is enhanced by their collective efforts as a team, thus team-based incentives were preferred to individual rewards. Medical officers felt that their employment classification and grading was done in an arbitrary manner and did not take into account their skills and experience, thus negatively affecting their efficiency.

EFFECT OF COVID-19 PANDEMIC ON EFFICIENCY OF MEDICAL OFFICERS

The study indicated that Covid-19 pandemic has resulted in emotional distress among medical officers due to excessive workload and inadequate medical supplies. Medical officers were forced to work long hours due to a spike in Covid-19 cases and the perennial shortage of medical officers at Parirenyatwa Hospital. The findings also indicated that medical officers suffered from anxiety disorders and depression. The majority of respondents further bemoaned the lack of moral and psychological support from the top management of Parirenyatwa Hospital to deal with the mental effects of Covid-19.

DISCUSSION OF FINDINGS

Principal Findings

This study sought to assess the impact of remuneration on efficiency of medical officers during Covid-19 pandemic at Parirenyatwa Hospital. The medical officers embarked on an industrial action in 2019 and 2020, thus endangering the lives of patients in need of basic health care. According to , the strike by medical officers coincided with the advent of Covid-19 virus, which put pressure on the limited medical resources. The researcher adopted the positivism paradigm in which the role of the researcher was limited to data collection and interpretation in an objective and value-free way. The study pursued exploratory and explanatory research designs to resolve the research problem. The methodological approach adopted for the study was a quantitative survey technique that included use of a questionnaire in collecting relevant data from sampled respondents. The form of the questions was both closed and open. This approach enabled study respondents to reveal their attitudes and motives on the subject under investigation.

The study revealed that there was a positive correlation between remuneration and efficiency of medical officers. The study revealed that medical officers were not fairly remunerated for their services, working with limited personal protective equipment often at great risk to their own health. The study showed that there was a shortage of medical officers at Parirenyatwa Hospital and this had adversely affected the institution's drive to provide quality health services to needy patients. The study highlighted several challenges faced by medical officers such as suboptimum remuneration, unfavourable working hours, lack of medical drugs and medical supplies and poor working conditions. Resultantly, medical officers were being overworked, demoralised and enduring work-related stress. The majority of respondents further lamented the lack of moral and psychological support from top management of Parirenyatwa Hospital.

Interpretation of Findings in Context of Literature

The challenges outlined by this study resonate well with the grievances outlined by , who singled out low remuneration in a hyper-inflationary environment as the catalyst for the industrial action undertaken by medical doctors working in public hospitals in 2019. Furthermore, the study showed that remuneration is a source of motivation on the efficiency of medical officers at Parirenyatwa Hospital. This is in tandem with the work of , and which also showed that rewards have positive and significant effects on employees' performance.

The result also revealed that there was a positive and significant relationship between remuneration and efficiency of medical officers which strengthens the reinforcement and expectancy theory of remuneration especially the concept of Thorndike's Law of Effect meaning a response followed by a reward is more likely to recur in the future .

The study indicated that Covid-19 pandemic led to emotional distress due to excessive workload and inadequate medical supplies. The findings are in line with the outcome of research done by , , and which concluded that Covid-19 pandemic caused anxiety disorders and depression among medical officers. The majority of respondents further lamented the lack of moral and psychological support from top management of Parirenyatwa Hospital.

IMPLICATIONS

The research buttressed the findings by other researchers that there was a strong and positive correlation between remuneration and the efficiency of medical officers. The study did not find any evidence of negative correlation between the two variables as observed by and . This implied that these studies did not take into account the country-specific factors such as poor economic performance, which make Zimbabwe and other developing countries unique cases.

The study showed that though the Covid-19 pandemic had put additional demands and risks on medical officers as frontline workers, medical officers contended that these risks may be compensated by both financial and non-financial incentives. This may imply that medical officers prioritise monetary benefits over health-related occupational risks. The research did not obtain any evidence that proved that the payment of incentives, mitigated the occupational health risks instigated by Covid-19 pandemic.

The challenges highlighted in this study should be addressed by the government in its capacity as the employer and also through public-private partnerships with corporates and non-governmental organisations. The study showed that medical officers are prepared to exert the required effort in their duties if their grievances are adequately addressed.

There needs to be a deliberate policy to invest in continuous professional development programmes for junior doctors to qualify as medical officers in different specialities. The number of medical colleges should also be expanded from the current three to cover all state universities so that the country may reduce the doctor-patient ratio which is very high.

LIMITATIONS

The research was carried out during the Covid-19 pandemic under lockdown restrictions which negatively affected the researcher's ability to move from one place to another during the research process. The research also revolved around Parirenyatwa Hospital which was a Covid-19 hotshot and thus a restricted area. The researcher mitigated the challenges by adopting ICT technologies such as Google Forms to obtain convenient and cost effective access to respondents through social media platforms such as twitter, whatsapp, facebook and email. The majority of researchers, however, deliberately chose not to answer open-ended questions opting to fully respond to close-ended questions. Indications from the majority of respondents showed that respondents complained that the questions were too many and they did not have too much time to answer all questions put forward by the researcher. A sizeable number of respondents chose to remain neutral in their responses, this indicated the high sensitivity of issues under study and thus fear of victimisation from authorities.

SUGGESTIONS FOR FURTHER RESEARCH

This study was conducted during the peak of the coronavirus pandemic, which enabled the study to reveal useful insights into government response and how medical officers were coping with the novel disease. However, the timing of the research also acted as a constraint in that it was not practicable to carry out an extensive research. Therefore, in view of this, the researcher recommends that this study be replicated after the Covid-19 pandemic so as to thoroughly evaluate the effects of remuneration on efficiency of medical officers. It is recommended that further research be conducted on medical officers in private practice as a comparative study, to examine the impact of remuneration on their efficiency. Further, it is recommended that other survey techniques such as focus groups and in-depth interviews should be used, where feasible in future studies to validate the findings of this study.

REFERENCES

- [1] Adrian, M., Muurlink, O., Awan, N. & Townsend, K., 2019. HRM and the health of hospitals. *Health Services Management Research*, 32(2), pp. 89-102.
- [2] Alwaki, M. N., 2018. An Evaluation of the Impact of Remuneration on Employee Attitude and Performance in Organizations. *International Journal of Academic Research in Business and Social Sciences*, 8(7), p. 410-420.
- [3] Biana, H. T. & Biana, R. T., 2020. COVID-19: Prioritizing healthcare workers. *Journal of Public Health*, pp. 1-2.
- [4] Bimpong, K. A. A. et al., 2020. Relationship between labour force satisfaction, wages and retention within the UK National Health Service: a systematic review of the literature. *BMJ Open*, 10(7), pp. 1-7.
- [5] Bivens, J. & Mishel, L., 2015. *Understanding the Historic Divergence between Productivity and a Typical Worker's Pay: Why It Matters and Why It's Real*, Washington, DC: Economic Policy Institute.
- [6] Buljac-Samardzic, M., Doekhie, K. & van Wijngaarden, J., 2020. Interventions to improve team effectiveness within health care: a systematic review of the past decade. *Human Resources for Health*, 18(2), pp. 1-42.
- [7] Buselli, R., Baldanzi, S., Corsi, M. & Chiumiento, M., 2020. Psychological Care of Health Workers during the COVID-19 Outbreak in Italy: Preliminary Report of an Occupational Health Department (AOUP) Responsible for Monitoring Hospital Staff Condition. *Sustainability*, 5039(12), pp. 1-16.
- [8] Calvin, O. Y., 2017. The Impact of Remuneration on Employees' Performance: A Study of Abdul Gusau Polytechnic, Talata-Mafara and State College of Education Maru, Zamfara State. *Nigerian Chapter of Arabian Journal of Business and Management Review*, 46(2), pp. 284-309.
- [9] Dieleman, M., Gerretsen, B. & van der Wilt, G. J., 2009. Human resource management interventions to improve health workers' performance in low and middle income countries: a realist review. *Health Research Policy and Systems*, 7(1), pp. 1-13.
- [10] Dobre, O.-I., 2013. Employee motivation and organizational performance. *Review of Applied Socio-Economic Research*, 5(1), p. 53.
- [11] Dzinamarira, T. et al., 2020. Coronavirus Disease 2019 (COVID-19) Response in Zimbabwe: A Call for Urgent Scale-up of Testing to meet National Capacity. *Clinical Infectious Diseases*, 60(20), pp. 1-8.
- [12] Essien, M. J., 2018. 'The Socio-Economic Effects of Medical Unions Strikes on the Health Sector of Akwa Ibom State of Nigeria'. *Asian Business Consortium*, 8(2), pp. 83-90.
- [13] Greenberg, N., Docherty, M., Gnanapragasam, S. & Wessely, S., 2020. Managing mental health challenges faced by healthcare workers during covid-19 pandemic. *The BMJ*, 368(1), pp. 1-4.
- [14] Huang, Y. & Zhao, N., 2020. Generalized anxiety disorder, depressive symptoms and sleep quality during COVID-19 outbreak in China: a web-based cross-sectional survey. *Psychiatry Research*, 288(1), pp. 1-7.
- [15] ILO, 2016. *World Wage Report 2016/7: Wage Inequality in the workplace*, Geneva: International Labour Organisation.
- [16] Jayasuriya, R., Whittaker, M. & Matineau, T., 2012. 'Rural health workers and their work environment: The role of inter-personal factors on job satisfaction of nurses in rural Papua New Guinea'. *BMC Health Services Research*, 156(12), pp. 1-12.
- [17] Kadungure, A., Brown, G., Loewenson, R. & Gwati, G., 2021. Adapting results-based financing to respond to endogenous and exogenous moderators in Zimbabwe. *Journal of Health Organization and Management*, ahead of print (ahead of print), pp. 1-9.
- [18] Koehn, H. et al., 2020. Remuneration systems of community health workers in India and promoted maternal health outcomes: a cross-sectional study. *BMC Health Services Research*, 1(1), pp. 1-9.
- [19] Kokoroko, E. & Sanda, M. A., 2019. Effect of workload on job stress of Ghanaian OPD nurses: The role of coworker support. *Safety and Health at Work*, 10(3), pp. 341-346.
- [20] Kovacs, R. J. et al., 2020. How are pay-for-performance schemes in healthcare designed in low- and middle income countries? Typology and systematic literature review. *BMC Health Services Research*, 20(1), pp. 1-14.
- [21] Kuranchie-Mensah, E. B. & Amponsah-Tawiah, K., 2016. Employee motivation and work performance: A comparative study of mining companies in Ghana. *Journal of Industrial Engineering and Management*, 9(2), pp. 255-309.
- [22] Lawrence, R. Z., 2016. *Does Productivity Still Determine Worker Compensation? Domestic and International Evidence.*, Washington, DC: American Enterprise Institute Press.
- [23] LEDRIZ, 2016. *Wage Structure and Labour Costs in Zimbabwe: An Analysis of Flexibility, Competitiveness and Equity*, Harare: Labour and Economic Development Research Institute of Zimbabwe.
- [24] Lee, G.-S., Hong, K. & Son, C., 2019. 'An Estimation of Sensitive Attribute Applying Geometric Distribution under Probability Proportional to Size Sampling'. *Mathematics*, 11(7), pp. 1-16.
- [25] Lin, A., Katz, K., Williams, V. & Groves, H., 2020. What can early Canadian experience screening for COVID-19 teach us about how to prepare for a pandemic?. *Canadian Medical Association Journal*, 192(12), pp. 314-318.
- [26] Machakaire, T., 2020. 'State builds its Case as Obadiah Moyo appears in court', Harare: Daily News.

- [27] Makoni, M., 2020. COVID-19 worsens Zimbabwe's health crisis. *The Lancet Global Health*, 396(1), p. 457.
- [28] Mangundu, M., Roets, L. & Janse van Rensburg, E., 2020. Accessibility of healthcare in rural Zimbabwe: The perspective of nurses and healthcare users. *African Journal of Primary Health Care & Family Medicine*, 12(1), pp. 1-7.
- [29] Meyers, T., 2020. *As Zimbabwe Doctors' Strike Drags On, Hospital Hallways Fall Silent*, Harare: UN Office for the Coordination of Humanitarian Affairs.
- [30] Murewanhema, G. et al., 2020. A descriptive study of the trends of COVID-19 in Zimbabwe from March-June 2020: policy and strategy implications. *The Pan African Medical Journal*, 37(1).
- [31] Murpin, J., Fatihudin, D., Mochklas, M. & Holisin, I., 2020. Banking Employee Performance During Pandemic Covid-19: Remuneration And Motivation. *Journal of Xi'an University of Architecture & Technology*, 7(7), pp. 64-71.
- [32] Natasha, S., Daniyal, M. A. & Junaid, R., 2020. Physical and mental health impacts of COVID-19 on healthcare workers: a scoping review. *International Journal of Emergency Medicine*, 13(40), pp. 1-8.
- [33] Ndanyi, M. D., 2019. Performance management and health service delivery in the local governments of Uganda. *Journal of African Studies and Development*, 11(6), pp. 84-93.
- [34] Nyagetuba, J. K. M. & Adam, M. B., 2019. 'Health worker strikes: are we asking the right questions?'. *The Lancet Global Health*, 7(7), p. 831-832.
- [35] Ong'ayo, G., Ooko, M., Wang'ondu, R. & Bottomley, C. N. A., 2019. Effect of strikes by health workers on mortality between 2010 and 2016 in Kilifi, Kenya: a population-based cohort analysis. *The Lancet Journal*, 7(7), pp. 961-967.
- [36] Rathzel, N. & Uzzell, D., 2019. The future of work defines the future of humanity and all living species. *International Journal of Labour Research*, 9(1), pp. 145-171.
- [37] Risley, C., 2020. Maintaining Performance and Employee Engagement During the COVID-19 Pandemic. *Journal of Library Administration*, 60(6), p. 653-659.
- [38] Rothan, H. & Byrareddy, S., 2020. The epidemiology and pathogenesis of coronavirus disease (COVID-19) outbreak. *Journal of Autoimmun*, 10(1), pp. 24-33.
- [39] Russo, G. et al., 2017. Exploring public sector physicians' resilience, reactions and coping strategies in times of economic crisis; findings from a survey in Portugal's capital city area. *BMC Health Services Research*, 207(17), pp. 1-8.
- [40] Sardjana, E., Sudarmo, S. & Suharto, D. G., 2019. The Effect of Remuneration, Work Discipline, Motivation on Performance. *International Journal of Multicultural and Multireligious Understanding*, 5(6), pp. 136-150.
- [41] Saunders, M. L. P. & Thornhill, A., 2019. *Research Methods for Business Students' Chapter 4: Understanding research philosophy and approaches to theory development*. 8th ed. Harlow: Pearson Education.
- [42] Sfakianakis, G., Grigorakis, N., Galyfianakis, G. & Katharaki, M., 2020. The impact of macro-fiscal factors and private health insurance financing on public health expenditure: evidence from the OECD countries for the period 2000-2017. *EuroMed Journal of Business*, ahead of print(ahead of print).
- [43] Stansbury, A. & Summers, L., 2018. *On the link between US pay and productivity*, Cambridge: Harvard University Press.
- [44] Sudiardhita, K. et al., 2018. The Effect of Compensation, Motivation of Employee and Work Satisfaction to Employee Performance. *Academy of Strategic Management Journal*, 17(4), pp. 1-8.
- [45] Truijens, D. & Hanegraaff, M., 2021. The two faces of conflict: how internal and external conflict affect interest group influence. *Journal of European Public Policy*, ahead of print(ahead of print), pp. 1-23.
- [46] Truscott, R., 2020. Covid-19: Health worker strikes, limited testing, and clinic closures hamper Zimbabwe's response. *BMJ*, 370(1), p. 1.
- [47] Turner, D. P., 2020. Sampling Methods in Research Design. *The Journal of Head and Face Pain*, 60(1), pp. 8-12.
- [48] Vindegaard, N. & Benros, M. E., 2020. COVID-19 pandemic and mental health consequences: Systematic review of the current evidence. *Brain, Behavior, and Immunity*, 89(1), pp. 531-542.
- [49] WHO, 2020. *WHO Health Emergency Dashboard*. [Online] Available at: <https://covid19.who.int/> [Accessed 22 November 2020].
- [50] Witter, S. et al., 2020. Human resources for health interventions in high- and middle-income countries: findings of an evidence review. *Human Resources for Health*, 43(18), pp. 1-17.
- [51] Witter, S. et al., 2013. 'Performance-based financing as a health system reform: Mapping the key dimensions for monitoring and evaluation'. *BMC Health Services Research*, 367(13), pp. 1-10.
- [52] Zhang, W. R. et al., 2020. Mental Health and Psychosocial Problems of Medical Health Workers during the COVID-19 Epidemic in China. *Psychotherapy and Psychosomatics*, 89(4), pp. 242-250.
- [53] ZHDA, 2019. *Kubatana.net*. [Online] Available at: <http://kubatana.net/2019/10/21/zimbabwe-hospital-doctors-association-press-conference-21-10-19/> [Accessed 17 December 2019].