

**ECONOMIC MOTIVATIONAL FACTORS AFFECTING WORK
PERFORMANCE AMONG HEALTHCARE WORKERS AT
KILIMANJARO CHRISTIAN MEDICAL CENTRE, TANZANIA**

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ABSTRACT

This study sought to assess the effects of economic motivational factors on work performance of healthcare workers at Kilimanjaro Christian Medical Centre (KCMC), Tanzania. The Two Factor Theory (TFT) was used to inform the study. A concurrent research design was used with a mixed research approach involving quantitative and qualitative data collection. The population of the study involved all employees of the KCMC Hospital 1,177 while the sampling frame was 666 healthcare workers. Data was collected through self-administered questionnaires and key informant interviews using an interview guide. Validity was insured through the literature review while reliability was ensured through a Chronbatch alpha coefficient. A sample of 250 participants was used with 7 key informant interviews being conducted. An assessment of the economic motivational factors was done using descriptive statistics and it was found that, proper salary scale according to levels have the lowest mean score followed by overtime payments for extra duties by 3.46 and 3.97 respectively indicating that healthcare workers would like to be paid more than what it is currently to be motivated to work more and thereby improve their economic status. Participation in research projects within and outside the hospital, salary increments each year and monetary prizes for employees; and good performance had the highest mean score indicating that these factors are positively accepted by healthcare workers. It is concluded that healthcare workers at KCMC are motivated to work hard by the economic motivational factors according to their opinion. The study recommend to the management of the hospital that, healthcare workers should be treated with care economically so that they are motivated to do their jobs well. This can be done in combination with other motivational factors like working conditions and social wellbeing of staff which are off the scope of this paper.

KEYWORDS: *Economic Factors, Healthcare Workers, Economic Motivational Factors, KCMC.*

1. INTRODUCTION

Economic motivational factors are important to workers to put their morale towards work positively. Studies in enhanced productivity and state of the art organisational management acknowledge that motivation is a prerequisite for better organisational performance (Gadsden *et al.*, 2021; Belrhiti *et al.*, 2020; Fillot *et al.*, 2019). Motivation may be described as the processes that account for an individual's intensity, direction, and persistence of effort toward attaining a goal (Maini *et al.*, 2019). In most cases, motivation curtails from a need which must be fulfilled, and this, in turn, leads to a specific behaviour (Maini *et al.*, 2019). Nonetheless, motivation is not only an inherent factor in individuals, but also a group incentive to act or not to act. It is defined as an intrinsic process that psychologically directs the behaviour of an individual (Liu and Hau, 2020). Furthermore, Nguyen *et al.*, (2019) relate motivation to organisational performance.

Especially in the developing economies, there has been a growing need strengthen health systems including good economic motivational factors for the healthcare workers to help meet the Millennium Development Goals (MDGs). According to Elsafty and Ragheb (2020), a key constraint to achieving the SDGs is the absence of a properly trained and motivated workforce and improving the performance of the health facilities. Furthermore, the other problem has been on the retention of healthcare workers through well-planned economic motivational schemes which keep the health system performances high with integrity. African countries need at least 1 million additional workers in order to offer basic services consistent with the SDGs. Instead, these countries are affected by health worker loss moving to other countries fetching for better pays.

In the healthcare field, attaining health objectives in a population depends to a large extent on the provision of effective, efficient, accessible, viable, and high-quality services by healthcare professionals who, technically, are driven by motivation (Nguyen *et al.*, 2019). Maini *et al.*, (2019) put forward that, the willingness of employees to work and stay in an organisation depends on the extent to which they are adequately motivated. Ideally, every employee will put up a better performance if the incentive packages are rewarding and in line with the capacity to meet the needs of the individual. In this regard, while economic factors play a crucial role in the motivation and retention of healthcare workers, including doctors and nurses, in-healthcare facilities and other work posts, other factors are equally as important to keeping their loyalty (Lohmann *et al.*, 2018).

The workforce in the health sector has specific features that cannot be ignored, and motivation can play an integral role in many of the compelling challenges facing healthcare today (Asante *et al.*, 2019). Currently, the task of motivating employees is complicated by the nature of the economic relationship between those using the system and the system itself (physicians, patients, and hospitals) and exacerbated by the management of the heterogeneity of the workforce (Taderera, 2021). Some studies contend that health organisations are faced with external pressures that cannot be effectively resolved without appropriate adjustments to the workforce; thus, the development of the workforce appears to be a crucial part of the health policy development process (El-Boghdady *et al.*, 2020; Blake *et al.*, 2020; Pak *et al.*, 2019).

Work performance on the other hand has been said to be the expected value to the firm of the distinct behavioural events that an employee carries out over a standard period of time (Xu *et al.*,

2020; De Hert, 2020; van Pelt *et al.*, 2020). This is a slightly revised version of the definition of performance presented in some many previous publications in connection with a theory of individual differences in task and contextual performance (Balozzi *et al.*, 2021). One important idea that explains work performance is a property of behaviour. In particular, it is an aggregated property of multiple, discrete behaviours that occur over some span of time (Balozzi *et al.*, 2021; Nnko, 2022). A second important idea is that the property of behaviour to which work performance refers is its expected value to the organisation. Thus, the performance construct is a variable that distinguishes between sets of behaviours carried out by different individuals and between sets of behaviours carried out by the same individual at different times (Nnko. 2022). The distinction is based on how much the sets of behaviours (in the aggregate) are likely to contribute to or detract from organisational effectiveness. Normally, all around the world variance in performance is difference in the expected organisational value of behaviour towards the work and the expected output over a standard time (Balozzi, 2021).

Specifically in Africa, health workers face a hierarchy of motivations or disincentives generated by the work they do, the way they are paid, and the organisational and system context in which they work (Muthuri *et al.*, 2020). Motivational packages are generally designed to encourage providers to furnish specific services, encourage cost containment, support staff recruitment and retention; enhance productivity and the quality of services, and allow for effective management (Jonas *et al.*, 2018). According to the WHO, the African continent is currently facing a severe human resource crisis in the health sector which appears to have affected the delivery of quality and efficient healthcare services. Sub-Saharan Africa has the lowest health worker-to-population ratio in the whole world (Onigbinde, 2020). This trend is getting worse according to country specific case studies because of internal and external migration.

1.2 Statement of the Problem

Tanzania, like many other developing countries, struggles to ensure that there is high quality of standards in all healthcare delivery systems (URT, 2020). So the government is alert to ensure that all healthcare facilities are assisted at best to improve the sector. KCMC is one of four referral hospitals in Tanzania, and it serves a catchment area of 15,000,000 persons. It has 630 beds, and in 2021 admitted more than 24,000 patients and hosted 152,000 outpatient visits. As of January 2022, the hospital had a total of 1, 177 employees while the healthcare workers who are under this particular study are only 666 in number (KCMC, 2021). KCMC has consistently strived to attract its employees to remain and render noble services to the people through the organisational unique mission of healing including spiritual, training and research to free human beings from adverse effects of bondage of exposure to diseases, ignorance and poverty. KCMC also has tried to ensure recruitment of the right calibre of personnel, placement, and provision of training opportunities, counselling, work orientation and various allowances (KCMC Annual Report 2019). Despite all these struggles there have been occasions, certainly like healthcare workers are said to appreciate more money. Non-monetary motivations inspire and engage employees in ways that money is incapable of doing. This paper therefore was directed to assess the effects of economic motivational factors on work performance of medical staff at KCMC hospital.

1.3.1 Research Objective

The objective of the paper was to assess the economic motivational factors on work performance of healthcare workers at KCMC Hospital.

2. Theoretical Framework

The study was guided by the two factor theory also called the Motivation-Hygiene Theory or the dual-factor theory which was advocated by Frederick Herzberg in 1959 (Herzberg, 2005). The Herzberg theory states that the factors which cause job satisfaction are the opposite of those that cause job dissatisfaction. Herzberg surveyed a group of accountants and engineers and came to the conclusion that employees are influenced by two factors, namely motivators and hygiene factors. Motivators, which include achievement, recognition, autonomy, and other intrinsic aspects, create job satisfaction when an individual is fulfilled. According to Herzberg, motivators pertain to job content; they are intrinsic to the job itself and do not result from “carrot and stick incentives. They comprise the physiological needs for growth and recognition. The absence of these factors does not prove highly dissatisfying, but when present, they build strong levels of motivation that result in good job performance. They are therefore called satisfiers or motivators.

These factors include achievement, recognition, advancement, the work itself, the possibility of personal growth, and responsibility. Motivators are those factors that provide a feeling of satisfaction at work and influence the way work is done in a company; for example, giving a person responsibility for a large task within an organisation and providing that person with the necessary conditions will lead to his growth and advancement to higher-level tasks. Motivators that are intrinsic are those factors that come from within an individual. These factors could be achievement, interest in the task, responsibility of a large task, growth, and advancement to higher levels.

Herzberg’s hygiene factors create a suitable work environment, though they will not increase satisfaction. The hygiene factors are also referred to as the maintenance factors and comprise the physiological, safety, and amity needs from Maslow’s hierarchy of needs. They are factors not directly related to the job but to the conditions that surround doing the job. They operate primarily to dissatisfy employees when they are not present. However, the presence of such conditions does not necessarily include these factors; company policy and administration, technical supervision, interpersonal relations with supervisor, interpersonal relations with peers and subordinates salary, job security, personal life, work conditions and status. Herzberg’s two-factor theory is relevant to the current study as it holds that employers cannot choose between motivation and hygiene but instead must strive to improve both. In this case, the healthcare workers at KCMC also are supposed to do the same. The Management KCMC (employers) can tailor the Hospital policy to improve employee welfare and thus avoid low motivation and low hygiene simultaneously.

3. Empirical Literature Review

The literature about economic factors affecting job performance among healthcare workers in Africa and elsewhere in Africa is rich in explaining how the variables act as impediments or facilitating agents for job performance. Scholarly works on economic motivational factors from the rest of the world are also presented.

Berberoglu, (2018) and Albrecht *et al*, (2018) they all put forward that; professional healthcare workers in any organisation should be in the position to perceive that the resources at their disposal are adequate to meet their work demand. If there are no adequate resources they will find it difficult to get their work done, and will experience dissatisfaction. There must be adequate resources in terms of space, equipment and staff for any organisation to function effectively. Bakker & Demerouti (2018) add that the equipment must be adequate and

appropriate for specific jobs and must be fitted for individual workers. Employees must be given clear instructions on how to use the equipment. There must also be sufficient allocation of resources for the maintenance of the appliances and equipment; many hospitals in marginal financial conditions defer maintenance of equipment. Ultimately, the employees should be in the position to perceive that the resources at their disposal are adequate to meet their work demands.

Furthermore, Kašpárková (2018) explains that the availability of adequate equipment and appliances facilitate productivity. Failure to provide equipment, appliances and adequate protective clothing make it difficult for employees to carry out their jobs in an easy non-obstructive way. Employers have the responsibility to provide employees with optimal conditions to carry out tasks for which they have been trained. Hospitals have a responsibility to ensure patients' safety and well-being during hospitalisation, to satisfy this duty a hospital must not only select and retain competent staff, but must also provide reasonable economic care in maintaining safe and adequate facilities and equipment. According to Kašpárková (2018) when patient injury occurs because of equipment, the issue becomes one of whether the patient was injured due to a defect, due to the misuse or improper maintenance of the equipment. Managers should learn to lessen potential liability by ensuring that equipment is maintained properly and to ensure that storage of the equipment follows manufacturers' written guidelines adequately.

Many studies continue to establish the empirical significance of pay (remuneration) as an element of job satisfaction which in turn influences good performance (Martonot et al., 2018; Berliana et al., 2018). Didit and Nikmah (2020) defined pay as the dollar remuneration and fringe benefits received for work done and for which fulfils a range of other monetary needs. Using an equity theory approach, Sardjana *et al.* (2019) saw pay satisfaction as the balance between the effort of employees and the numeration received. In looking at the relationship of pay to job satisfaction or dissatisfaction, researchers found when undervalued, employees may engage in counterproductive behaviour at the workplace, resulting in a movement away from the profession (Koziol and Mikos, 2020; Ben-Yashar and Nitzan, 2019). Given such, Alwaki (2018) and Hartikainen *et al.* (2021) for instance contended that pay and its inherent financial benefits were important predictors of job performance in so far as they reduced the rate of exodus from the nursing profession. Muthuri, (2020) amplifies that; complaints about salaries are another issue that has been a cry to the healthcare workers in the East African Community. Employees complained that they do not earn enough salary compared to other civil servants of equitable professions. The complaints have been associated with less quality service provision which can be translated as a motivational effect due to unsatisfactory compensation.

4. Methodology

The study adopted a concurrent research design with a mixed research approach. This design was useful in understanding inconsistencies between quantitative results and qualitative findings. The target population for the study was all 1,777 employees of KCMC and the sampling frame from which the sample was drawn is 666 healthcare workers of the KCMC Hospital (KCMC Annual Report, 2021). A sample size of 250 determined by Yamane (1964) formula was used for a known and small population (Appendix 1). From each of the healthcare workers cadre, a proportionate sampling was done to ensure that each cadre is appropriately represented. Validity was insured through the literature while reliability was tested using a Chronbatch alpha coefficient where a 0.762 coefficient was obtained. Quantitative data were collected by using a

survey approach with a structured questionnaire whereby a total of 250 copies of the questionnaire were administered to healthcare workers.

Likewise, the study used Key Informant Interviews (KII) to collect qualitative data. KIIs were conducted with 7 key informants selected based on their knowledge on KCMC employees' economic motivation factors and their work performance at the Hospital. Quantitative data collected were cleaned, sorted, coded and entered into the Statistical Package for Social Sciences (SPSS). The information from the spreadsheet was made into frequency tables of chosen variables. The data was presented using tables of percentages and mean scores to show data distribution among healthcare workers at the Hospital. Qualitative data was analysed using content analysis where themes were developed.

5. Findings and Discussion

5.1 Economic Motivational Factors and Work Performance of Healthcare Workers

Table 1 presents the level of agreement and disagreement by healthcare workers on the economic motivational factors affecting their work performance at KCMC hospital. A total of ten (10) economic motivational factors were assessed on a scale of 1 to 5 indicating a strong agreement to the statement to strongy disagreement.

TABLE 1: LEVEL OF AGREEMENT FOR HEALTHCARE WORKERS ON ECONOMIC MOTIVATIONAL FACTORS

Economic Motivational Factor	1 SA		2 A		3 N		4 D		5 SD		Mean
	F	%	F	%	F	%	F	%	f	%	
	Proper salary scales according to levels	71	28.4	81	32.4	35	3.5	39	8.1	24	
Overtime payments for extra duties	77	41.9	74	39.7	27	5.1	42	5.9	30	7.4	3.97
Leave payments as required by the labour law	61	44.1	52	38.2	6	4.4	10	7.4	8	5.9	4.07
Proper equipment for work support	60	44.9	51	37.5	5	3.5	11	8.1	8	5.9	4.07
Payments for conducting patients' procedures like operations	58	42.6	54	39.7	8	5.9	8	5.9	8	5.9	4.07
Honoraria for special duties within the hospital	63	45.6	48	35.3	10	7.4	8	5.9	8	5.9	4.07
Compensation for innovations in work performance	49	44.8	50	37.6	9	4.9	11	5.8	10	6.9	4.07

Participation in research projects within and outside the Hospital	52	41.2	52	38.2	9	6.6	9	6.6	10	7.4	4.08
Salary increments each year as stipulated by the labour law	50	44.1	52	38.2	6	4.4	8	5.9	10	7.4	4.08
Monetary prizes for employees good performance	53	46.3	49	36.0	6	4.4	8	5.9	10	7.4	4.09

SA=strongly agree, A=Agree, N= Neutral, D=Disagree, SD= strongly disagree

Source: Field data (2022)

Findings indicated that proper salary scales according to levels have the lowest mean score followed by overtime payments for extra duties by 3.46 and 3.97 respectively. The explanation of the lowest mean score indicates that healthcare workers would like to be paid more than what they are currently paid. It is either the salary scale allocated to the healthcare workers at KCMC is lower than the labour market or it is at the same level to the labour market only that the remuneration is not proportional to the service rendered. This finding is in line with that of Martonot *et al*, (2018) who found that healthcare workers especially in Africa are not paid according to jobs they do. Likewise Berliana *et al*, (2018) found that healthcare workers attend to more patients than required and still they are paid the same salary and sometimes with no overtime. As a result, healthcare workers are not motivated to do their jobs or make an indication that this factor is not satisfactorily articulated at the organisation. Some incidences of patients mistreatment, slower pace of service delivery and healthcare workers demanding money to attend patients may be noticed (Ştefan *et al.*, 2020).

Likewise, five other factors: leave payments as required by the labour law, proper equipment for work support, payments for conducting patients' procedures like operations, honoraria for special duties within the hospital and compensation for innovations in work performance had the same mean score at 4.07. The five economic motivational factors seem to have moderate effects to work performance to the healthcare workers at KCMC. Looking at these factors, most of them are occasional variables with an exception of the proper equipment for work support. Being occasional, it depends on how an employee participated in different activities mentioned. However, Proper equipment is mandatory and enforceable by laws and work ethics of which this study findings explains that, they are taken constant by employees that they should be available for them to work. This study finding is supported by Kašpárková (2018) who explains that the availability of adequate equipment and appliances facilitate productivity. Thus, the availability of equipment and state of the art appliances for healthcare workers motivates them to work hard, support ease of operations and hence reach excellent levels of performance. The finding of the study is also supported by one key informant who mentioned that:

“We do not have problems with the work equipment. The employer is trying at best to make sure that healthcare workers are equipped with what is necessary for them to conduct their duties”.(Interview conducted on 6th July, 2022 at 11:00hrs)

Furthermore, participation in research projects within and outside the hospital, salary increments each year as stipulated by the labour law and monetary prizes for employees' good performance

had the highest mean score. The findings were a bit shocking especially with the annual increments scoring that high mean as the government of Tanzania has not been able to increase employees salary for the past five years. But again, this can be explained by the fact that the hospital is not fully owned by the government of Tanzania but being operated in partnership. According to the key informant interviews by the management of the hospital, the director informed the researcher that Kilimanjaro Christian Medical Centre is one among the four Zonal Consultant hospitals in Tanzania. It was formally established in 1971 as a Zonal Referral Consultant hospital owned by the Evangelical Lutheran Church of Tanzania (ELCT) under the Good Samaritan Foundation (GSF). Later on as part of the government to improve the health sector in the country, some partnership arrangements were done with the government. With this explanation, it is obvious that some other economic motivational aspects to employees might not be exactly the same as those advanced to healthcare workers of the fully owned health facilities in the country.

As for research projects and monetary prizes for employees' good performance with a mean score of 4.08 and 4.09 respectively, it implies that most healthcare workers whenever there is a chance to participate in research projects at the hospital and outside the hospital they enjoy a return out of the work they do. Likewise, monetary prizes for employees on good performance is very good as indicated by their agreement to the statement in a likert scale. All key informants also were in agreement with what the respondents have said where one of the key informant said that:

'The hospital encourages employees to do their best so that the performance of the organisation is always kept at the highest position. For instance, the best employee of the year entat the International Workers Day (Mei Mosi) this year (2022) went home with a prize of 1million Tanzanian Shillings as an appreciation of an excellent job he/she had done for the year. '(Interview conducted on 6th July, 2022 at 11:00hrs).

This is evidence that healthcare workers are economically motivated to stretch and do better in their designated positions at the hospital. The findings are consistent with that of Diet and Nikmah (2020) who found that monetary appreciation to employees motivates them to do better as they create an impression that employers are able to see them and compensate them for the good work they do. Furthermore, Diet and Nikmah (2020) add that, payments in the form of remuneration and fringe benefits received for work done and for which fulfils a range of other monetary needs is a huge motivation to them in their social and economic lives. Findings of this study also acknowledge that, any economic benefits received in the form of monetary compensation is obviously directed at fulfilling some economic needs of the healthcare workers in the form of bill payments, personal developments and meeting social obligations. Findings of the study also indicated that, there is an agreement with the two factor theory that, employers cannot choose between motivation and hygiene but instead they must strive to improve both.

6. CONCLUSION AND RECOMMENDATIONS

With regards to the findings of this study, respondents has indicted that, economic motivational factors have effects on work performance of the Kilimanjaro Christian Medical Centre healthcare workers. The effects goes in terms of increasing their cash savings, fulfilling social and economic obligations and psychologically that the employer is watchful and appreciates what they do. As highlighted by the two factor theory by Frederick Herzberg that, factors which cause

job satisfaction are the opposite of those that cause job dissatisfaction is confirmed by the findings of the study. The factors like pays according to scales which came out to be an economic motivational factor with the lowest mean score is an indication of what Herzberg was propagating in his theory as motivators according to him include achievement, recognition, autonomy, and other intrinsic aspects which create job satisfaction and in turn motivates the individual to do better. Therefore, the study concluded that economic motivational factors have effects on work performance among healthcare workers at KCMC Hospital. It is concluded that healthcare workers at KCMC as the rest of the workers at hospital stand a better chance of improving their economic status with regards to their opinion. The study recommends to the management of the hospital that healthcare workers should be treated with care economically so that they are motivated to do their jobs well. This can be done in combination with other motivational factors like work conditions and social wellbeing of staff which are off the scope of this paper combined to keep up the motivation of healthcare workers at KCMC.

REFERENCES

- Albrecht, S., Bredahl, E., & Marty, A. (2018). Organisational resources, organisational engagement climate, and employee engagement. *Career Development International*.
- Alwaki, M. N. (2018). An evaluation of the impact of remuneration on employee attitude and performance in organisations. *International Journal of Academic Research in Business and Social Sciences*, 8(7), 410-420.
- Asante, J. O., Li, M. J., Liao, J., Huang, Y. X., & Hao, Y. T. (2019). The relationship between psychosocial risk factors, burnout and quality of life among primary healthcare workers in rural Guangdong province: a cross-sectional study. *BMC health services research*, 19(1), 1-10.
- Bakker, A. B., & Demerouti, E. (2018). Multiple levels in job demands-resources theory: Implications for employee well-being and performance. *Handbook of well-being*.
- Balozi, M. A., Othman, S. Z., & Isa, M. F. M. (2018). Mediating effects of subjective norms on the relationship between career advancement and job characteristics and knowledge sharing behaviour among Tanzanian healthcare professionals. *Gadjah Mada International Journal of Business*, 20(2), 187-203.
- Belrhiti, Z., Van Damme, W., Belalia, A., & Marchal, B. (2020). Unravelling the role of leadership in motivation of health workers in a Moroccan public hospital: a realist evaluation. *BMJ open*, 10(1), e031160.
- Ben-Yashar, R., & Nitzan, S. (2019). Skill, value and remuneration in committees. *Economics Letters*, 174, 93-95.
- Berberoglu, A. (2018). Impact of organisational climate on organisational commitment and perceived organisational performance: empirical evidence from public hospitals. *BMC health services research*, 18(1), 1-9.
- Berliana, M., Siregar, N., & Gustian, H. D. (2018). The model of job satisfaction and employee performance. *International Review of Management and Marketing*, 8(6), 41.
- Blake, H., Bermingham, F., Johnson, G., & Tabner, A. (2020). Mitigating the psychological impact of COVID-19 on healthcare workers: a digital learning package. *International journal of environmental research and public health*, 17(9), 2997.

- De Hert, S. (2020). Burnout in healthcare workers: prevalence, impact and preventative strategies. *Local and regional anaesthesia*, 13, 171.
- Didit, D. D., & Nikmah, N. R. S. (2020). The Role of Remuneration Contribution and Social Support in Organisational Life to Build Work Engagement. *Journal of Islamic Economics Perspectives*, 1(2), 20-32.
- El-Boghdady, K., Wong, D. J. N., Owen, R., Neuman, M. D., Pocock, S., Carlisle, J. B., & Ahmad, I. (2020). Risks to healthcare workers following tracheal intubation of patients with COVID-19: a prospective international multicentre cohort study. *Anaesthesia*, 75(11), 1437-1447.
- Elsafty, A. S., & Ragheb, M. (2020). The role of human resource management towards employees retention during Covid-19 pandemic in medical supplies sector-Egypt. *Business and Management Studies*, 6(2), 5059-5059.
- Fillol, A., Lohmann, J., Turcotte-Tremblay, A. M., Somé, P. A., & Ride, V. (2019). The importance of leadership and organisational capacity in shaping health workers' motivational reactions to performance-based financing: a multiple case study in Burkina Faso. *International journal of health policy and management*, 8(5), 272.
- Gadsden, T., Jan, S., Sujarwoto, S., Kusumo, B. E., & Palagyi, A. (2021). Assessing the feasibility and acceptability of a financial versus behavioural incentive-based intervention for community health workers in rural Indonesia. *Pilot and Feasibility Studies*, 7(1), 1-10.
- Hartikainen, H., Järvenpää, M., & Rautiainen, A. (2021). Sustainability in executive remuneration-A missing link towards more sustainable firms?. *Journal of Cleaner Production*, 324, 129224.
- Jonas, K., Crutzen, R., Krumeich, A., Roman, N., van den Borne, B., & Reddy, P. (2018). Healthcare workers' beliefs, motivations and behaviours affecting adequate provision of sexual and reproductive healthcare services to adolescents in Cape Town, South Africa: a qualitative study. *BMC health services research*, 18(1), 1-13.
- Kašpárková, L., Vaculík, M., Procházka, J., & Schaufeli, W. B. (2018). Why resilient workers perform better: The roles of job satisfaction and work engagement. *Journal of Workplace Behavioural Health*, 33(1), 43-62.
- Koziol, W., & Mikos, A. (2020). The measurement of human capital as an alternative method of job evaluation for purposes of remuneration. *Central European Journal of Operations Research*, 28(2), 589-599.
- Liu, Y., & Hau, K. T. (2020). Measuring motivation to take low-stakes large-scale test: New model based on analyses of "Participant-Owned-Defined" missingness. *Educational and Psychological Measurement*, 80(6), 1115-1144.
- Lohmann, J., Muula, A. S., Houliort, N., & De Allegri, M. (2018). How does performance-based financing affect health workers' intrinsic motivation? A Self-Determination Theory-based mixed-methods study in Malawi. *Social science & medicine*, 208, 1-8.
- Maini, R., Lohmann, J., Hotchkiss, D. R., Mounier-Jack, S., & Borghi, J. (2019). What happens when donors pull out? Examining differences in motivation between health workers who recently had performance-based financing (PBF) withdrawn with workers who never

- received PBF in the Democratic Republic of Congo. *International journal of health policy and management*, 8(11), 646.
- Martonot, S., Khoiruddin, M., & Wulansari, N. A. (2018). Remuneration reward management system as a driven factor of employee performance. *International Journal of Business & Society*, 19.
- Mumba, M., Hall, A., & Lewallen, S. (2007). Compliance with eye screening examinations among diabetic patients at a Tanzanian referral hospital. *Ophthalmic Epidemiology*, 14(5), 306-310.
- Muthuri, R. N. D. K., Senkubuge, F., & Hongoro, C. (2020). Determinants of motivation among healthcare workers in the East African Community between 2009–2019: a systematic review. In *Healthcare* (Vol. 8, No. 2, p. 164). Multidisciplinary Digital Publishing Institute.
- Nguyen, T. M., Nham, T. P., Froese, F. J., & Malik, A. (2019). Motivation and knowledge sharing: a meta-analysis of main and moderating effects. *Journal of Knowledge Management*.
- Nnko, E. E. (2022). *Flexible Work Arrangements on Performance of Nurses in Regional Hospitals in Tanzania* (Doctoral dissertation, JKUAT-COHRED).
- Onigbinde, O. A., Babatunde, O., & Ajagbe, A. O. (2020). The Welfare of Healthcare Workers amidst COVID-19 pandemic in Sub-Saharan Africa: A call for concern. *Ethics, Medicine, and Public Health*, 15, 100555.
- Pak, K., Kooij, D. T., De Lange, A. H., & Van Veldhoven, M. J. (2019). Human Resource Management and the ability, motivation and opportunity to continue working: A review of quantitative studies. *Human Resource Management Review*, 29(3), 336-352.
- 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), 136-150.
- Ştefan, S. C., Popa, Ş. C., & Albu, C. F. (2020). Implications of Maslow's hierarchy of needs theory on healthcare employees' performance. *Transylvanian Review of Administrative Sciences*, 16(59), 124-143.
- Taderera, B. H., Hendricks, S. J. H., & Pillay, Y. (2021). Human resource for health reform in peri-urban areas: a cross-sectional study of the impact of policy interventions on healthcare workers in Epworth, Zimbabwe. *Human resources for health*, 15(1), 1-13.
- van Pelt, S., Massar, K., van der Eem, L., Shields-Zeeman, L., de Wit, J. B., & Ruiter, R. A. (2020). "If you don't have enough equipment, you're not going to provide quality services": Healthcare workers' perceptions on improving the quality of antenatal care in rural Tanzania. *International Journal of Africa Nursing Sciences*, 13, 100232.
- Xu, W., Pan, Z., Li, Z., Lu, S., & Zhang, L. (2020). Job burnout among primary healthcare workers in rural China: a multilevel analysis. *International journal of environmental research and public health*, 17(3), 727.
- Yin, R. K. (1994). Discovering the future of the case study. *Method in evaluation research. Evaluation practice*, 15(3), 283-290.
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Appendix 1

Sample Size Calculation

The sample size was determined using Yamani, (1964) at 95% confidence level and $p=0.05$, the size of the sample is calculated as:

$$n = \frac{N}{1 + N(e)^2}$$

$$1 + N(e)^2$$

Where;

n=the sample size,

N= the size of the population,

e=the error of 5% points (level of precision)

Substitution in the formula yields a sample size of 250 healthcare workers as:

$$N = \frac{666}{1 + 666(0.05)^2}$$

$$= 249.9$$

$$= 250$$