Original Research Article

An Assessment of the Influence of Working Environment on Service Delivery in the Public Health Sector in Nyeri County, Kenya

Theuri et al.
An Assessment of the Influence of Working Environment on Service Delivery in the Public Health Sector in Nyeri County, Kenya

Mary W. Theuri1*, Stephen Macharia2, Alice Kamau2
Department of Human Resource Development, Karatina University, P.O. Box 1957-010101, Karatina, Kenya.

*Correspondence: marytheuri.mt@gmail.com

Received: Nov 29, 2019; Accepted: Jan 22, 2020

Copyright: Theuri et al. This is an open-access article published under the terms of Creative Commons Attribution License (CC BY). This permits anyone to copy, distribute, transmit, and adapt the work provided the original work and source is appropriately cited.

Citation: Theuri MW, Macharia S, Kamau A. 2020. An assessment of the influence of working environment on service delivery in the public health sector in Nyeri County, Kenya. Management and Economics Research Journal, Vol. 6, Article ID 961199, 8 pages. https://doi.org/10.18639/MERJ.2020.961199

Abstract
Globally, the health sector is an area that any government must focus on since health is a right of every human being. Kenya particularly initiated the idea of devolution and the Big Four Agenda to ensure service delivery to citizens was achieved. Nevertheless, the situation in the public health sector has been encountering challenges due to dissatisfaction of personnel culminating in strikes. The objective of this study was to explore the effect of the working environment on service delivery in the health sector in Nyeri County, Kenya. The study was guided by the person–environment fit theory. The descriptive cross-sectional research design was used. The target population was derived from public hospitals in Nyeri County. Proportionate stratified random sampling was utilized, where 141 respondents were targeted, comprising doctors, clinical officers, and nurses. Data was collected using a closed-ended questionnaire. A pilot study was conducted at Mukurwe-ini Hospital to enhance the validity and reliability of the data-collection instrument. A Cronbach alpha coefficient of 0.7 was used to ascertain the reliability of the instrument. Data was analyzed using descriptive and inferential statistics from the 78.7% respondents. The findings established that the working environment had positive and significant effects on service delivery ($\beta = 0.476$, $p$-value = 0.000) at the 5% level of significance, hence rejecting the null hypothesis. The study further established that the public health sector in Kenya should address the drug shortage, medical staff working hours, and machine maintenance as they would adversely affect quality of service delivery. The study recommends that the public health sector should provide health workers a conducive working environment and all necessary tools and equipment to enable them to discharge their duties effectively with a view to enhance service delivery to patients. Future research should focus on the importance of on-the-job training for effective service delivery in the public health sector.

Keywords: Working environment; Service delivery; Public health sector.

1. INTRODUCTION

Health is described as a state of total mental, social, and physical well-being and not just the absence of disease or illness. The World Health Organization (WHO; 2006) states that one of the essential rights of every individual, without peculiarity of religion, political belief, race, or social or economic condition, is the enjoyment of the highest achievable health standards. According to Syme and Ritterman (2011), many people feel that the major health inequalities observed within our society could be reduced significantly if every person had equal access to affordable as well as good-quality healthcare.

According to the WHO (2006), governments have a duty toward the health of the citizens, which can be attained simply by the provision of sufficient social as well as health services. To achieve this goal, most of the global nations such as Indonesia, India, Kenya, and Ghana, among others, have adopted units of governance
such as counties and have devolved health services to these units, according to Ndegwa (2002). However, they have continued to face serious challenges in their effort to deliver quality and efficient health services devoid of wastage of time and other resources. Bach and Bach (2016) have noted that global healthcare reformers often assumed that maximum success may still be attained without the required basic resources such as human and financial capital, among others. Diverse attempts at implementing these reforms have been hampered due to insufficient attention paid to innovation in human resource management (HRM) practices for meeting current challenges faced by human resources. This study focused on HRM practices, namely, employee resourcing, remuneration, training, and working environment, and their influence on service delivery in the public health sector in Kenya. Training, in particular, seeks to find out whether the health sector’s focus on e-medicine is a way of improving service delivery to clients who are the patients.

According to Berman et al. (2011), research in six countries on the presence of health employees in their designated stations revealed that on average 35% of employees were not present at the time of the impromptu visit during official working hours. The majority of these employees, in spite of being salaried by their governments, were working privately and hence failed to deliver in their designated assignments. It was also noted that health workers who were graduating from training institutions required critical clinical skills to meet the massive and complex health demands of the 21st century. Management of health services and training should focus on serious skill training so as to mitigate existing skill gaps.

Nyeri County has had its share of challenges as experienced by other counties. Cheptum et al. (2016), in a study aimed at identifying the possible causes of stillbirths at Nyeri Referral Hospital using secondary data, found out that out of 22,919 deliveries recorded, 280 were stillbirths, implying 12.2 incidences per 1,000 births. It was noted that there were a significant number of stillbirths arising from referred clients and was a reason for the referral. It was recommended that more efforts should be focused on minimizing stillbirths by designing strategies aimed at antenatal care and delivery. It was also recommended that staff from peripheral facilities should be skill empowered on how to handle complications in order to minimize stillbirth emergencies. According to the Budget Proposals (2014) report, statistics provided in the county’s integrated development plan (2013—2017) showed that the ratio of doctors to the population is 1:7,610 while that of the nurses to the population is 1:834. The policy of free primary healthcare meant that more patients were frequenting the health facilities, which, in retrospect, was commendable, and therefore more support is needed for doctors and nurses attending the new influx of patients. In this background, the study focused on the effect of the working environment of medical staff on service delivery in the health sector.

1.1. Statement of the Problem
Globally, providing adequate health services has been a challenge despite healthcare being a fundamental right of all human beings. The yet-to-be invented diagnostic cures and management for various ailments and diseases, such as cancer, complicate the situation further. These challenges are even more noticeable in underdeveloped and developing countries. Syme and Ritterman (2011) observed that many people felt that the major health inequalities noted within society would be reduced if everyone had access to good-quality and affordable healthcare. According to the WHO (2006), it is the essential right of every individual to enjoy the highest achievable health standards. The health sector has been ailing particularly in Kenya, which is characterized by complaints from citizens, deaths, numerous strikes by service providers, and rising cases of diagnosis at the final stages of terminal illnesses. Recommendations from a study by Bach (2001) indicate that healthcare reformers often assumed that maximum success could still be achieved without the basic necessary resources such as human and financial capital. In cases such as Kenya, the health sector was devolved with the intention of bringing services closer to the people for proper human and financial capital management. This was a way of eradicating the major health inequalities. Despite efforts by the government make improvements in the sector through its service delivery, challenges continue to be posed to the sector in almost every county. This study therefore sought to investigate the effect of the working environment of medical staff on service delivery in the health sector.

1.2. Objective of the Study
The objective of the study was to assess the influence of the working environment of medical staff on service delivery in the public health sector in Nyeri County, Kenya.
1.3. Research Hypothesis

H₀: There is no significant relationship between the working environment and service delivery in the health sector in Nyeri County, Kenya.

2. LITERATURE REVIEW

This section comprises theoretical and empirical frameworks relevant to the study.

2.1. Theoretical Review

2.1.1. Person–Environment Fit Theory

The person–environment (PE) fit theory is grounded in Kurt Lewin's maxim (1935) that $B=(PE)$; behavior is a function of both person and environment. It comprises four models having the person and environment as the most distinct, according to Edwards et al. (1980). The PE fit theory is generally defined as the compatibility between individuals and their environment. Having a job and fitting into it are different things. A person is attracted to joining an organization and succeeds in getting the job but eventually fails to fit into the environment. The model of PE fit can therefore be defined as the compatibility between individuals and their environment, which is the organization. According to Chebor et al. (2014), the nursing practice environment is described as the institutional work setting characteristics that facilitate or restrain expert practice in the organization. A study by Alhatmi (2011) on safety within healthcare services had become a focal point and been receiving impetus over the year. Yanchus et al. (2014) focused on psychologically unsafe as well as safe medical care surroundings, with the findings indicating that perceptions of work-related communication differed across clinical provider groups, with high versus low psychological safety. The PE fit is therefore a necessary theory to rely on in the workplace to ensure employee–environmental fit for obtaining good results in service delivery.

2.2. Empirical Review

2.2.1. Working Environment and Service Delivery

According to Chebor et al. (2014), the nursing practice environment is described as the institutional work setting characteristics that facilitate or restrain expert practice of nursing, and is based on relationships with physicians and managers, and is concerned with the nurse’s status within the hierarchy of the hospital. In a study aimed at investigating the perceptions of employee communication within psychologically unsafe as well as safe medical care environments at the Veterans Health Administration in the United States, Yanchus et al. (2014) found out the distinction in frequencies of communication correlated themes across the compared categories matched the expected pattern of problem-laden communication depicting psychological unsafe workplaces.

According to Alhatmi (2011), there is need to address safety culture elements of communicated values and objectives ensuring the are measured. The study focused on measuring as well as addressing the safety goal as an organization's main concern based on its beliefs, values, policies, operations, and goals. This study noted that hospitals had started to implement significant steps in ensuring delivery of healthcare services, which are safer and, at the same time, closer to excellence. The recommendations included addressing safety culture elements of communicated values and objectives, adopting safety goals that matches the hospital environment while ensuring proper tracking of input and progress.

Goetz et al.'s (2015) research focused on documenting the working environment as well as job satisfaction of medical care experts in Kenya. At the same time, they explored associations between job satisfaction factors, which were identified as vital for the best standards of delivery of healthcare services. Staff characteristics and the working atmosphere were the focus of the study. Findings indicate that job satisfaction and the work environment were significant aspects for the employment and retention of healthcare personnel while providing the best quality of care. Motivational factors such as increase in financial incentives, career development provisions, or improved work equipment were also important. However, they could only achieve the desired results if a supportive work environment was in existence. Paying concentration to protecting employees from risks of occupation was said to make employees feel more valued.
Chebor et al.’s (2014) study was conducted at the Moi Teaching and Referral Hospital on nurses to assess the perception of their work environment. The findings indicated that there was low morale among the nursing staff at the hospital and the working relationship between nurses and physicians was poor. The study recommended that there was a need to engage nurses in morale-boosting activities such as through refresher courses, recognition of a job well done, and engaging them more often in decision-making activities could result in improved service delivery.

According to Dieleman and Harnmeijer (2006), the majority of the problems of performance could be accredited to deficits in skills, uncertain expectations, a lack of motivation, or shortage of equipment or resource. Such problems arise due to a deteriorating system of healthcare, low salaries, tough living and working environments, and unsuitable training. The same study indicated that improving the health worker’s performance required training the teams responsible for quality improvement, especially, on how to analyze own data, locally solve problems, utilize own data, and work in groups.

2.2.2. Service Delivery in the Public Health Sector
The purpose of measuring the effect of working environment on service delivery in the public health sector is not only to establish whether or not the working environment had an influence on service delivery, but also to ascertain specific areas that the public health sector should focus on in order to offer quality services to the patients. A service is said to be something that the community is in need of, for instance, transport, communication, hospitals, or supplies of energy or facilities. The English Dictionary further states that a service is offered in an organized as well as planned manner by an official body or government. Mujeeb (2012) observed that Human Resource Management was a term that meant employing individuals; increasing the capacities; and utilizing, compensating, and maintaining their services in line with the task organization’s requirements. Rajak and Mishra (2015) cited HRM as the function of a management mandated with employing, training and developing, motivating, and maintaining employees within an institution. El-Jardali et al. (2009) indicated that to allow hospitals to offer excellent quality services and healthcare that is safe, improving HRM was important. Cogin et al. (2016) stated that there was rising proof that practices of HRM implemented by institutions could have an important impact on the performance of a firm. Burma’s (2014) study indicated that the employees were the biggest support that an institution needed during re-engineering periods meant to improve service delivery in organizations. This scenario is more so in the health sector.

Mujeeb (2012) conducted a study on the Sri Lankan public healthcare system and observed that this system was the chief player in delivering services of health in Sri Lanka. The study noted that it was vital to maximize the utilization of accessible employees of healthcare within the public sector by properly running their welfare. Most excellent practices of HRM cited by the study were continuous salary review and promotions which were found as essential to meet this goal.

A study conducted by Mbindyo et al. (2013) on rating the quality of outpatient visits to medical officers within Kenya indicated that patients were more comparatively content with their relations with medical officers than with the access to healthcare. The conclusion of the study indicated that patients see room for enhancement in their visits to medical officers and the need to educate medical officers on customer handling. Ondimu’s (2011) study focused on the quality and availability of obstetric services of care in the province of Nyanza. The study indicated that Kenya had identified a steady decline in the health services quality chiefly those within the public sector. Also indicated was that patients feared of being ill-treated, facing drug shortage, and having to pay high fees. The study further showed that patients only used the health facilities when in absolute danger and at times it may be late, leading to severe complications.

3. METHOD(S)

The study was carried out in Nyeri County, Kenya. The population under study was derived from primary data sourced from medics, mainly the doctors, clinicians, and nurses. The units of observation were Nyeri Referral Hospital in Nyeri County and two public subcounty hospitals in Karatina and Othaya. Proportionate stratified random sampling was utilized where 141 respondents were targeted. Primary data was collected using closed-ended questionnaires administered through drop and pick. A pilot study was conducted at Mukurwe-ini
Hospital to enhance the validity and reliability of the data-collection instrument. Cronbach alpha coefficient of 0.7 was used to ascertain the reliability of the data-collection instrument. According to Johanson and Brooks (2010), the closer the Cronbach’s alpha coefficient is to 1.0, the greater the internal consistency of the items on the scale. An Alpha value of 0.7 or above was considered to indicate that the instrument is reliable.

Descriptive statistics was used to provide summaries about the collected data while inferential statistics was used to assess the relationship between the working environment and service delivery. The study employed the simple regression model expressed as:

\[ Y = B_0 + B_1 X_i \]

where \( Y \) is the dependent variable (service delivery), \( B_0 \) is the constant, \( B_1 \) is the beta-coefficient, and \( X_i \) is the working environment. The results were then presented using frequency tables and percentages.

4. RESULTS

The objective of the study sought to assess the effect of working environment of medical staff on service delivery in the health sector in Nyeri County. Descriptive statistical analysis was generated from the questionnaire items for working environment, which were written in the form of statements using a 5-point Likert-type scale ranging from (1) strongly disagree to (5) strongly agree. The results of the findings are shown in Table 1.

As shown in Table 1, the majority of the study respondents concurred that staff–client relationships, employee interrelationship, and comfortable working area were rated above average with a mean score of 3.70, 3.55, and 3.39, respectively. This implies that a good employee–client relationship will definitely have a major impact on service delivery as this results in customer satisfaction based on services rendered to them. In addition, employees’ interrelationships, conducive working area, and proper equipment at workplace improve service delivery. Staff-counseling sessions, drug shortage, working hours, and machine maintenance were the work environment issues that were lowly rated. This implies that the public health sector in Kenya should address the drug shortage, medical staff working hours, and machine maintenance in order to enhance quality of service delivery. A study by Goetz et al. (2015), focusing on environment of working as well as satisfaction of job of medical care experts in Kenya, found out these were significant pointers for employment and withholding of healthcare personnel as well as provision of best quality healthcare. Chebor et al. (2014) conducted a study on nurses’ perception of their work environment, whose findings indicated that there was low morale among the nursing staff at the hospital. Lack of or low morale was found to affect the quality of service delivery.

| Working Environment Statements | SD (%) | D (%) | N (%) | A (%) | SA (%) | Mean | Std. Dev. |
|--------------------------------|--------|-------|-------|-------|--------|------|----------|
| Cordial staff–client relationships | 4.5    | 9.9   | 18.0  | 45.9  | 21.6   | 3.70 | 1.058    |
| Cordial employee inter-relationship | 7.2    | 9.9   | 19.8  | 46.8  | 16.2   | 3.55 | 1.102    |
| Comfortable working area availed | 5.4    | 18.0  | 24.3  | 36.9  | 15.3   | 3.39 | 1.113    |
| Proper equipment availed | 14.4   | 20.7  | 24.3  | 28.8  | 11.7   | 3.03 | 1.247    |
| Staff counseling undertaken | 16.2   | 22.5  | 28.8  | 25.2  | 7.2    | 2.85 | 1.185    |
| Drug shortage experienced | 11.7   | 31.5  | 33.3  | 15.3  | 8.1    | 2.77 | 1.103    |
| Satisfied with working hours | 36.0   | 21.6  | 11.7  | 12.6  | 18.0   | 2.55 | 1.524    |
| Routine machine maintenance | 29.7   | 33.3  | 18.0  | 10.8  | 8.1    | 2.34 | 1.239    |

Key: SD= Strongly Disagree, D= Disagree, N= Neutral, A= Agree, SA= Strongly Agree, Std. Dev. = Standard Deviation

Vol. 6, Iss./Yr. 2020, Pgs. 8 https://doi.org/10.18639/MERJ.2020.961199
According to the Sirili et al.’s (2014) study on human resources, health crisis, delay of salary, difficult working environment, inadequate career opportunities as well as job insecurity were of major concern. Ondimu’s (2011) study on the quality and availability of obstetric care services indicated that patients feared being ill-treated, facing drug shortage, and having to pay high fees. The challenges faced by the health sector in Nyeri County and Kenya, in general, are a replica of the health sector in East Africa and the continent. In Uganda, the reviewed literature indicated that public health facilities were characterized by inadequate supply of medicines as well as other health equipment, low motivation, and shortage of human resource. Similarly, Tanzanian public health facilities were characterized by delay of salary, difficult working environment, inadequate career opportunities as well as job insecurity. Kabene et al. (2006) concluded that appropriate HRM was vital in providing healthcare services high quality. Hence, there is the great need to focus on management of human resource in healthcare.

4.1. Regression Analysis
This section provides results of the findings of the equation $Y = \beta_0 + \beta_1 X_1$, which was used to test the hypothesis $H_0$: There is no significant relationship between the working environment and service delivery in the health sector. In testing the hypothesis, the parameters used to measure the working environment were aggregated by computing the average. Table 2 shows the regression results for the influence of working environment and service delivery in the health sector.

The $R$ value of 0.344 in the model summary portrayed a weak positive linear association between working environment and service delivery in the public health sector. The $R^2$ value of 0.118 implied that 11.8% of the variation in changes in service delivery was explained by working environment when other factors are

| Table 2. Influence of Working Environment and Service Delivery in the Health Sector. |
| --- |
| **Model Summary** |
| Model | $R$ | $R$ Square | Adjusted $R$ Square | Std. Error of the Estimate |
| 1 | 0.344$^a$ | 0.118 | 0.11 | 0.68591 |

| **ANOVA** |
| --- |
| Model | Sum of Squares | Df | Mean Square | $F$ | Sig. |
| 1 | Regression | 6.862 | 1 | 6.862 | 14.59 | 0.000$^b$ |
| Residual | 51.282 | 109 | 0.47 | |
| Total | 58.144 | 110 | | |

| **Coefficients** |
| --- |
| Model | Unstandardized Coefficients | Standardized Coefficients |
| | $B$ | Std. Error | Beta | $T$ | Sig. |
| 1 | (Constant) | 1.868 | 0.383 | | 4.88 | 0.000 |
| Working Environment | 0.476 | 0.125 | 0.344 | 3.82 | 0.000 |

$^a$Dependent variable: Service Delivery.
$^b$Predictors (constant): Working Environment.

The relationship in Table 2 is represented by the following equation:

Service Delivery $= 1.868 + 0.476X_1$
held constant. The result of ANOVA (analysis of variance) shows an $F$ ratio of 14.59 at a $p$ value 0.000<0.05, which indicates a statistically significant model.

where 1.868 is the constant, while $X_1$ is the working environment index, which implies that an increase of working environment by one unit would increase the service delivery of the public health sector by 0.476. The $p$-value of the working environment was 0.000, which indicates a statistically significant effect. This shows that the working environment has a significant influence on service delivery.

5. DISCUSSION

The results of the descriptive analysis established that a conducive working environment is necessary as long as there exists a cordial relationship between the clients and service providers as well as among the employees. Such an environment was found to have great impact on service delivery in the public health sector as it leads to effective communication among all the parties. Working area was also found to play a big role in the service delivery in the public health sector. This can be attributed to the comfort of the staff while discharging duties where appropriate tools of trade are availed together with proper equipment. The finding of this study reaffirms earlier findings by Goetz et al. (2015), who noted that job satisfaction and work environment were significant factors for the employment and retention of healthcare personnel as well as for provision of best-quality care. The study further established that drug shortage had a negative impact on service delivery in the public health sector. This may be attributed to the lack of medications that have been used following the diagnosis of certain medical issues. That being the case, the patients walking into the public hospital may have to be sent elsewhere for medication, thereby, lowering their satisfaction level with these institutions. Moreover, lack of proper equipment and breakdown of machinery thus, warranting maintenance during working hours adversely affect service delivery. This scenario may lead to delayed diagnosis, which may result in more complicated health issues occurring in patients.

The result of regression analysis established that working environment significantly affects service delivery. Therefore, staff of the public health sector should be provided with a conducive work environment to enable them to discharge their duties effectively and efficiently. These findings concur with the PE fit theory, which focuses on the compatibility between individuals and their environment within an organization. The theory describes the person as subjective, while the environment is referred as the objective. The perception of an employee's attributes being self-identity or self-concept relating well with the events or situations in the workplace ensures a fit that allows the individual to deliver services as required.

6. CONCLUSION

The study results established that working environment influences service delivery in the public health sector. The study concludes that lack of a conducive working environment, inadequate working tools such as proper instruments and adequate drugs, and unreasonable working hours have an adverse effect on service delivery in the public health sector.

7. RECOMMENDATIONS

With reference to the findings of the study, it is recommended that the public health sector provide medical staff with a conducive working environment such as adequate working tools and proper and adequate drugs, among others. Guidelines or work instructions should be made clear and available, a work schedule should be established, and adequate funding is needed to procure the necessary sophisticated equipment and drugs.

Author Contributions
I am the only author of this manuscript, other two are supervisors.
Conflict of Interest
None.

References

Alhatmi Y. 2011. Safety as a hospital organizational priority: a case study. https://doi.org/10.1108/14777211111153831
Bach S. 2001. Hr and new approaches to public sector management. Improving HRM Capacity, Workshop on Global Health Workforce Strategy Annecy, France, 9-12 December 2000.
Bach S, Bach S. 2016. Health sector reform and human resource management: Britain in comparative perspective. The International Journal of Human Resource Management 11(5):925-942. https://doi.org/10.1080/095851900422357
Berman P, Pallas S, Smith AL, Curry L, Bradley EH. 2011. Improving the Delivery of Health Services: A Guide to Choosing Strategies. World Bank: Washington, DC.
Burma ZA. 2014. Human resources management and its importance for today’s organizations. International Journal of Education and Social Science 1(2):85-94.
Chebor A, Simiyu K, Tarus T, Mangeni J, Obel M. 2014. Nurses perception of their work environment at a referral hospital in Western Kenya. Journal of Nursing and Health Sciences 3(6):1-6.
Cheptum JJ, Muiruri N, Mutua E, Gitonga M, Juma M. 2016. Correlates of stillbirths at Nyeri provincial general hospital, Kenya, 2009-2013: a retrospective study. International Journal of MCH and AIDS 5(1):24-31.
Cogin JA, Ng JL, Lee I. 2016. Controlling healthcare professionals: how human resource management influences job attitudes and operational efficiency. Human Resources for Health 14(1):55.
Dieleman M, Harmeijer JW. 2006. Improving health worker performance: insearch of promising practices. WHO Evidence and Information for Policy, Department of Human Resources for Health, Geneva, September.
Edwards JR, Caplan RD, Harrison RV. 1998. Person-environment fit theory: conceptual foundations, evidence, and directions for future research InTheories of Organizational Stress, Cooper CL (ed). Oxford: Oxford University; 28-67.
El-Jardali F, Tchaghchagian V, Jamal D. 2009. Assessment of human resources management practices in Lebanese hospitals. Human Resources for Health 7, Article No. 84. https://doi.org/10.1186/1478-4491-7-84
Goetz K, Marx M, Marx I, Brodowski M, Nafula M, et al. 2015. Working atmosphere and job satisfaction of health care staff in Kenya: an exploratory study. BioMed Research International 2015. https://doi.org/10.1155/2015/256205
Johanson GA, Brooks GP. 2010. Initial scale development: sample size for pilot studies. Educational and Psychological Measurement 70(3):394-400
Kabene SM, Orchard C, Howard JM, Soriano MA, Leduc R. 2006. The importance of human resources management in health care: a global context. Human Resource for Health 4, Article No. 20. https://doi.org/10.1186/1478-4491-4-20
Lewin K. 1935. A Dyanamic Theory of Personality. NewYork: McGraw-Hill.
Mbinyo P, Blaauw D, English M. 2013. The role of clinical officers in the Kenyan health system: a question of perspective. Human Resource for Health 11(1):32. https://doi.org/10.1186/1478-4491-11-32
Mujeeb LM. 2012. Importance of best human resource management practices and the need for a Human Resource Information System (HRIS) for the public health sector in Sri Lanka. Sri Lanka Journal of Bio-Medical Informatics 3(2):55-62. https://doi.org/10.4038/sljbmi.v3i2.2449
Ndegwa SN. 2002 Decentralization in Africa: a stock-taking survey. Africa working Paper Series No. 40, the World Bank, Washington, DC.
Nyamjoom O. 2011. Devolution in Kenya’s new constitution. Constitution Working Paper Series No.4, Society for Internal Development (SID), Kenya Regal Press Kenya Ltd, Nairobi, Kenya.
Ondimu KN. 2000. Availability and quality of obstetric care services in Nyanza Province, Kenya: a situation analysis. International Journal Quality Assurance of Health Care 13(3):124-133.
Rajak L, Mishra K. 2015. Human resource management practices in government & private hospitals (A empirical study in Indian Context). International Journal of Advanced Research 3(10):1696-1700.
Ritterman ML, Leonard Syme S. 2009. The importance of community development for health and well-being. Community Development Investment Review 3:1-13.
Sirili N, Kiwara A, Nyongole O, Frumence G. 2014. Addressing the human resource for health crisis in Tanzania: the lost in transition syndrome. Tanzania Journal of Health Research 16(2):104-111.
World Health Organization. 2006. Constitution of the World Health Organization. Basic Document Forthy-Fifth Edition (January 1984): 1–18. https://www.who.int/governance/eb/who_constitution_en.pdf
Yanchus NJ, Derickson R, Moore SC, Bologna D, Osatuke K, et al. 2014. Communication and psychological safety in veterans health administration work environments. Journal of Health Organization and Management 28(6):754-776. https://doi.org/10.1108/JHOM-12-2012-0241