

Determinants of Physicians and Nurses' Professional Satisfaction at the Moi Teaching and Referral Hospital, Eldoret, Kenya

Dr. Wilson Kipkirui Aruasa

Chief Executive Officer, Moi Teaching and Referral Hospital, P. O. Box 3 - 30100, Eldoret, Kenya

Linus Kipkorir Chirchir*

Senior Systems Administrator, Moi Teaching and Referral Hospital, P. O. Box 3 - 30100, Eldoret, Kenya

Stanley Kulei Chebon

Deputy Manager, Planning Monitoring and Evaluation, Moi Teaching and Referral Hospital, P. O. Box 3 - 30100, Eldoret, Kenya

Abstract

The research addressed the factors affecting physicians' and nurses' professional satisfaction and implications for patient care at the Moi Teaching and Referral Hospital in Kenya. A descriptive quantitative research design was used. Data was collected using a structured questionnaire that was administered to a stratified sample of 82 Physicians and 220 Nurses. All the completed questionnaires were entered into IBM SPSS 21.0 statistical software and data analysed for descriptive statistics. The results were presented in tables and figures. The study was powered to 95% confidence interval. From the study findings it was deduced that most of the respondents were satisfied with the assessed factors that influenced their professional satisfaction. The factors can be classified as either intrinsic or extrinsic. These intrinsic factors included achievement, recognition, autonomy and advancement. Extrinsic factors include interpersonal relations, working conditions/workload and compensation. The study concluded that the factors that influence physicians and nurses' professional satisfaction include workload, compensation (salary/pay), working conditions, supervisors' role, physicians-nurses' relationship, career advancement and autonomy. Overall, the results clearly indicate the importance of intrinsic and extrinsic factors in influencing physicians' and nurses' professional satisfaction. The study recommends focused efforts towards improving both intrinsic and extrinsic factors that influence physicians' and nurses' professional satisfaction in order to translate to improved patient care. Healthcare systems need to mainstream organizational structure in order to facilitate patient care through consultative processes with physicians and nurses. The need for interdepartmental support and strengthened working relationships between physicians and nurses in healthcare environment is an important strategy to influencing satisfaction.

Keywords: Determinants, Factors, Physicians, Nurses, Professional Satisfaction, Moi Teaching, Referral Hospital, MTRH, Kenya

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1. Introduction

Motivated human resources are the most important assets of any health system (Homedes & Ugalde, 2005). This resource, especially the nursing department, works directly with the health consumers (patients). If the nurses are properly motivated, their work productivity increases resulting in good healthcare service outcomes. In recent years, it has been increasingly recognized that improving the motivation of health personnel should be at the core of any sustainable solution to patient outcomes. However, it is widely acknowledged that health systems are not producing the desired outcomes of health intervention due to factors such as insufficient skilled and experienced health personnel, demotivated health personnel, lack of management skills, poor working conditions and environment and inadequate remuneration.

During the fifty-second session of the World Health Organization (WHO) Regional Committee for Africa, Ministers of Health stated that insufficient health personnel, in terms of numbers and level of performance, is one major constraint to achieving the Millennium Development Goals (MDGs) for reducing poverty and diseases (World Health Organization, 2002). Some of the actions proposed to rectify this situation included improving motivation, retention, productivity and performance of health workers and mobilizing trained staff who are unemployed or working in other sectors to return to the health sector. African countries are trying to improve the function of the health care delivery systems to ensure that the populations they serve receive timely quality care. Healthcare is a labour-intensive sector, making human resources one of the most important inputs in the delivery of health care services.

The earliest works on job satisfaction were the Hawthorne studies of 1924 to 1933. Since then, the area of job satisfaction has been one of the most studied areas of organizational behaviour. Several factors have been identified as influencing job satisfaction. However, more studies still come up with new variables. Several of

these studies have also been consistent in establishing correlations between certain key variables and job satisfaction.

A literature review of job satisfaction among nurses in the western world by Wang, Tao, Ellenbecker and Liu (2011) revealed that poor job satisfaction leads to high intention to quit jobs by Chinese nurses. The current nursing shortage and high turnover is of great concern in many countries because of its impact on the efficiency and effectiveness of any health care delivery system. Recruitment and retention of nurses are persistent problems associated with job satisfaction. Wang *et al.* argued that the absence of a robust causal model incorporating organizational, professional and personal variables is undermining development of interventions to improve nurse retention. Another review focused on British, Australian, Germany and Canadian nurses only, according to the United States (US) Medscape Physician Compensation Report (Kane & Peckham, 2014). Overall, the specialists who ranked among the highest paid in 2013 reported the lowest levels of satisfaction with the profession. For example, anaesthesiologists, radiologists and orthopaedic surgeons were among the highest-paid subspecialists, but they reported the lowest levels of career satisfaction.

To assess the job satisfaction of nurses in South Africa, The Global Health Workforce Alliance (2009) developed a self-administered questionnaire to determine the extent of work satisfaction among nurses and to examine the variables influencing different aspects of job satisfaction like autonomy, relationship with colleagues, patient care, personal time, relationship with management, career opportunities, safety, pay, workload and satisfaction with the career. Private-sector nurses were generally found to be more satisfied with their jobs while public-sector nurses were generally dissatisfied. Public-sector nurses were most dissatisfied with their pay, the workload and resources available to them. Comparatively, the nurse-patient and physician-patient ratios in most public hospitals in Kenya is very low leading to burnout, frequent industrial activities and subsequent low satisfaction levels.

1.1 Intrinsic Factors Affecting Physicians' and Nurses' Professional Satisfaction

1.1.1 Advancement

Whitmore (2002) suggests that in order to create a climate for creativity among employees, cognizance must be made of the importance of two human needs that rise above all others and exist independent of race, creed and culture, namely the need for self-belief and the development of emotional intelligence, and the ever-present need that every human being has for a sense of meaning and purpose in their lives. Gupta (2004) states that promotions are an important aspect of a worker's career and life, affecting other facets of the work experience. They constitute an important aspect of workers' labour mobility, most often carrying substantial wage increases and can have a significant impact on other job characteristics such as responsibilities and subsequent job attachment. These findings have also emerged from the job satisfaction literature, showing that relative wages can be equally or more important to worker satisfaction than absolute income. Visser and Marais (2012) found that lack of opportunity for promotion was another strong reason for leaving the dietetic profession. Lack of promotion or progression was found to stifle achievement and dampen job satisfaction. An emphasis on career development would make employees view their jobs and their employers with positive attitudes.

The materialization of career advancement and promotional opportunities is effective in reducing occupational stress among professionals (Sengin, 2003). Medicine is dynamic, so that nurses keep upgrading their skills in order to meet the dynamic demands of their profession. Batista, Vieira, Cardoso and Carvalho (2005) found that among the five motivational factors on the current work of the nurses surveyed, listed in order of priority, are: To love what you do; good multidisciplinary relationship; the possibility of professional growth; the power of problem solving linked to commitment population; working conditions, and remuneration standing. During the upgrading, nurses increase their autonomy, salaries and recognition.

1.1.2 Autonomy

Autonomy in the workplace refers to how much freedom employees have while working. For some organizations, autonomy means employees are allowed to set their own schedules. In other organizations, autonomy means employees can decide how their work should be done. Job autonomy enhances performance because workers with high job autonomy will perceive that they are trusted to perform tasks. This perception positively affects their intrinsic motivation and the effectiveness of their work. Workers who are given high autonomy will feel that the results of their job are determined by their efforts, actions and decisions and, as such, will feel more satisfied.

Gellatly and Irving (2001) found positive effect of perceived autonomy on contextual performance. Managers who report greater autonomy in their work have a better performance than managers who report lower autonomy. The two scholars argue further that autonomy enhances job performance and hence satisfaction because workers perceive themselves as being capable and more resourceful in performing their tasks. Psychologically, such an employee will be more motivated to do the best, leading to enhanced job satisfaction. Therefore, a positive link is evident between job autonomy and job performance. In addition, the feeling of personal responsibility leads employees to develop favourable affective and behavioural reactions to their job

thereby increasing job satisfaction. Bandura (1997) premised that individuals with high self-efficacy tend to have greater job satisfaction because the feelings of competence and confidence that accompany self-efficacy make the job more enjoyable.

Nursing autonomy is a concept that is closely related to decision-making. "Nursing autonomy" is defined as the right of the nurse to determine her own course of action in accordance with the best judgment of the situation (Layman, 2003). In a study conducted by Stewart, Stansfield and Tapp (2004), nurses described autonomy as their ability to accomplish their patient care goals in good time using all accumulated knowledge, skills, experience and expertise to understand the condition and needs of a patient and to make a vital contribution to the overall plan for patient care. This contribution includes the assessment of patient needs and conditions, the effective communication of concerns and priorities during the course of patient care, and the assessment and coordination of the resources of the multidisciplinary team.

A study by Varjus, Suominen and Leino-Kilpi (2003) came to the conclusion that the autonomy that is extended to Finnish intensive care unit nurses fundamentally supports their sense of empowerment in the workplace. The majority of nurses in that study reported that they enjoyed greater autonomy in decision making about patient care than about unit operations. A sense of autonomy contributes both to fulfilment and satisfaction that nurses derive from their jobs. Several studies have provided evidence that autonomy is a strong predictor of job satisfaction (Sengin, 2003). Previous studies also indicate that autonomy contributes not only job satisfaction but also to promotion of quality of patient care, including better patient outcomes (Supametaporn, 2013).

1.1.3 Achievement of Set out Targets

Herzberg (1966) avers that most employees generally desire good results from their work. Therefore, it is the duty of management to find and place employees in positions that best utilize their talents and skills. Clear achievable goals and standards for each position should be set. Employees should also receive regular feedback on their performance. Kumar and Singh (2011) found that achievement of work motivation positively and significantly related to skill variety and task variety. Achievement was also correlated to feedback from self. Involving employees in decision-making or giving employees' special designations or titles, along with occasional performance bonuses, helps them value the need for achievement. When achievement needs are combined with affiliation needs the employee may become an effective manager or team leader and can help co-workers develop their need for achievement.

In the United States, a correlation has been found between hospital nurse staffing and patient mortality, nurse burnout and job dissatisfaction (Aiken *et al.*, 2001). This study concluded that in hospitals with high patient-to-nurse ratios, surgical patients experience higher risk-adjusted 30-day mortality and failure-to-rescue rates, and nurses are more likely to experience burnout and job dissatisfaction. Poor nurses' and physicians' satisfaction levels leads to low morale at work and hence poor care of patients and poor patient outcomes.

Goetz *et al.* (2015) used data from the Integrated Quality Management System (IQMS) for the health sector to document working atmosphere and job satisfaction of healthcare professionals in Kenya and explore association between job satisfaction, staff characteristics and working atmosphere. The health care staff indicated high commitment to provide quality services and low levels regarding the adequacy and functionality of equipment at their work station. IQMS, which also evaluates job satisfaction and working atmosphere of healthcare staff, provides a good framework for strengthening the recruitment and retention of health care staff as well as improving the provision of good quality of care.

The cost of health professionals' brain-drain in Kenya has been evaluated (Kirigia, Gbary, Muthuri, Nyoni & Seddoh, 2006). The total cost of educating a single medical doctor from primary school to university is estimated at USD 65,997; and for every doctor who emigrates, a country loses about USD 517,931. The total cost of educating one nurse from primary school to college of health sciences is USD 43,180; and for every nurse that emigrates, a country loses about USD 338, 868. Developed countries continue to deprive Kenya millions of dollars of investments embodied in human resources for health. If the current trend of poaching of scarce human resources for health (and other professionals) from Kenya is not curtailed, the chances of achieving the new Sustainable Development Goals (SDGs) would remain bleak. Such continued plunder of investments in human resources contributes to further underdevelopment of Kenya and to keeping a majority of its people in the vicious cycle of ill-health and poverty. Strategies to reverse these trends need to be developed and implemented urgently.

According to Ma, Samuels and Alexander (2003), a growing recognition of job dissatisfaction among registered nurses (RNs) in South Carolina hospitals has contributed to current problems with recruitment and retention. The cross-sectional study of secondary data was designed to identify individual, role and geographic factors that impact nursing job satisfaction at state level. For about two-thirds of the RNs, job satisfaction remained the same or had lessened over the past two years. In addition, statistically significant differences were found between job satisfaction and years of service, job position, hospital retirement plan, and geographic areas. These findings have implications for nurse managers and hospital administrators for planning and implementing effective health policies that will meet the unique needs of their staffs and organizations. Such research is

particularly relevant in this difficult time of nursing shortages throughout the healthcare industry.

In Kenya, Gross *et al.* (2010) showed that Emergency Hiring Plan for nurses significantly increased health services in Kenya's rural and underserved areas over the short-term. However, in the long-term, nurse retention will be the key issue to monitor. Fogarty *et al.* (2014), in their study, describe job satisfaction and intention to stay on the job among primary healthcare providers in countries with distinctly different human resources. The study questionnaire was used to assess job satisfaction, intention to stay on the job and five features of workplace environment, namely resources, performance recognition, financial compensation, training opportunities and safety. The multi-variable model for Afghanistan, with demographic, background and work environment variables, explained 23.9% of variance in job satisfaction ($F[9,73] = 5.08; P < 0.01$). For Malawi, the overall model explained only 9.8% of variance in job satisfaction, $F(8,332) = 4.19; P < 0.01$. Therefore, the construction of concepts of health care worker satisfaction and intention to stay on the job are highly dependent on the real context.

According to Dussault and Franceschini (2006), the geographical distribution of health personnel refers to their spatial allocation. It is said to be imbalanced when a norm is applied, such as population/personnel ratios, or more sophisticated needs-related indicators. Geographical distribution matters a lot, since it determines which services, and in what quantity and quality, will be available. Imbalances raise problems of equity (services not being available according to needs), of efficiency (surpluses/shortages) and of effectiveness of services, let alone satisfaction of users. The health-related Millennium Development Goals (MDGs) and Sustainable Development Goals (SDGs) cannot be achieved if vulnerable populations do not have access to skilled personnel and other necessary inputs. A perfect balance may not be attainable, but it is conceivable to achieve a better distribution through strategies based on a good understanding of its dynamics. Watch out for those last names only in the rest of the document.

Tabatabai, Prytherch, Baumgarten, Kisanga, Schmidt-Ehry and Marx (2013) assessed the magnitude, direction and underlying dynamics of internal health minor migration between public and faith-based health providers from a hospital perspective in Tanzania. Interviews revealed significantly inferior staff perspectives among faith-based respondents than their public colleagues. Main differences were identified regarding career development and training, management support, employee engagement and workload. Staff retention and motivation within faith-based hospitals needs to be addressed.

1.2 Extrinsic Factors Affecting Physicians' and Nurses' Job Satisfaction

1.2.1 Compensation

According to Gupta (2004), when all other factors are held constant, higher pay and better opportunities lead to higher satisfaction. Similarly, Towers Perrin (2003) found that the importance given to pay varies by objective. Competitive base pay ranked second and pay raises based on individual performance ranked eighth for attracting employees. Competitive base pay ranked sixth in retaining employees. According to Towers Perrin, pay is probably more important in job choice than in decisions to quit, in part because pay is one of the few characteristics people can know with certainty before taking a job. In contrast, once a person has been on the job for a while, other factors (such as quality of supervision) come into play. Another general explanation for the importance of pay is that pay is frequently used as a yardstick for social status and personal accomplishment. Status and accomplishment-based signals associated with compensation appear to be particularly sensitive to relative pay, or pay comparisons, rather than absolute levels of pay. Moreover, Taylor (1911) advocated the establishment of incentive wage systems as a means of stimulating workers to higher performance, commitment and eventually satisfaction. Banjoko (1996) also observes that many managers use money to reward or punish workers. This is done by rewarding employees for higher productivity by instilling fear of loss of employment. The desire to be promoted and the extra pay that comes with the promotion can also motivate workers.

1.2.2 Interpersonal Relations

Co-worker support has the ability to make a working environment a pleasure or an unpleasant place to spend one's time. There have been a number of studies done previously on social support in the workplace, in particular concentrating on supervisor support. As Hodson (1997) convincingly argued, the social relations of the workplace may make a key contribution to employees' job satisfaction, productivity and well-being. Co-worker support refers to the act of co-workers assisting one another in their tasks when needed by sharing knowledge and expertise as well as providing encouragement and support (Zhou & George, 2001). Co-worker support can also provide or fail to provide a basis for solidarity and united resistance to management. An opposing view to the research stated above is that co-worker support could in fact have negative interpretations. Co-workers' behaviours may be viewed as political or self-enhancing exercises and, therefore, may not always be associated with constructive work attitudes. Accepting support from co-workers may suggest incompetence on the part of the person accepting support. Specifically, because peers are usually regarded as equal, support from co-workers may also suggest a lack of ability or independence (Ng & Sorensen, 2008).

Jex (2002) used Festinger's Social Comparison Theory to explain that employees look to co-workers to

make sense and develop attitudes towards their work environment. As such, if employees see other workers being positive and satisfied with their work they are more likely to be positive as well. He also used this theory to explain that new hires can also be “tainted” during the training and socialization processes if they are placed around employees who are dissatisfied. Coordination also becomes difficult when interpersonal relationships are strained and this affects the team work as well as the satisfaction among individual employees. Harmer and Findlay (2010) suggest that the quality of co-worker relationships significantly and positively impacts on overall job satisfaction. They found that more than half of the variability in overall job satisfaction in their study was accounted for by the quality of one’s co-worker and direct supervisor relationships. They further report that greater employee cohesiveness and the prevalence of workplace friendships resulted in reduced turnover intentions.

The role of social support has been extensively studied by researchers. Manion (2005) has shown that a lack of proper support from supervisors is even more pernicious than a lack of support from co-workers. Managers have a role to play in ensuring that the social aspect of their workers is taken into consideration. Notably, Japan was successful because it dealt much on the social aspect of employees.

1.2.4 Communication

Communication plays a vital role in designing the rules, regulations and responsibilities and presenting them to members of the organization. Employees need to understand and coordinate their work activities if they are to complete the task and complete it properly. Victor (2012) argues that an element of a good relationship with management is evidenced through effective communication. When there are open lines of communication supervisors can respond more effectively to the needs and problems of their employees. Effective communication from senior management can provide the workforce with proper direction. Gupta (2004) supports this argument, positing that communication plays a major role in one’s job satisfaction, which is usually measured in multidimensional terms. Gupta explains this role as “how an employee perceives a supervisor’s communication style, credibility, and content as well as the organization’s communication system will to some extent influence the amount of satisfaction (morale) he or she receives from the job”.

1.2.5 Workload

Awang (2010) found that the amount of workload assigned to lecturers in a university did have a significant impact on their job satisfaction levels. The high volume of workload was one of the reasons that academic staff was not satisfied with their jobs. Satisfaction among nurses was found to also be impacted by the high demands of their jobs. A study by Kekana, Rand and Wyk (2007), among South African nurses, found that long working hours and increased demands on their time are factors that affected their satisfaction. The employee workload thus needs to be considered in order to achieve a reasonable level of satisfaction in order to enhance employee loyalty and a promising organizational performance. Workload characteristics such as number of patients seen per week or time spent on administrative work have been found to be associated with job satisfaction. Visser and Marais (2012) found that the younger generation of registered dietitians reported being overworked and under staffed. Increased demands on staff were associated with increased stress and decreased levels of job satisfaction among the dietitians. High workload and job stress were further linked to have negative impact on health worker practice and increase the risk for occupational health hazards. Higher workload among health workers also leads to lowering of standards of care (Kingma, 2001).

1.2.6 Job Enrichment

Job enrichment is an attempt to motivate employees by giving them opportunity to use the range of their abilities. Herzberg (1959) states that a well-enriched job should contain a range of challenges of varying difficulties, meaningful tasks, feedback, encouragement and communication. A study by Parsons and Broadbride (2006) set out to confirm Herzberg’s Two Factor Theory and its effect on motivation within a retail setting. The researchers found that intrinsic factors such as responsibility, self-development and personal recognition increased job satisfaction and work motivation.

Lambrou, Kontodimopoulos and Niakas (2010) reported that job attributes that encompass intrinsic motivators such as decision-making, creativity and skill exploitation appeared to motivate doctors more than nurses and specifically the respondents in managerial positions. Weiner (2000) found that the nature of work itself, encompassing job challenge, autonomy, variety and scope was one of the best predictors of overall job satisfaction as well as other important outcomes like employee retention. As such, to understand what causes people to be satisfied with their jobs, the nature of the work itself should be the beginning point for human resource practitioners.

1.2.7 Supervision

Mathauer and Imhoff (2006) posit that employees within a hospital criticized the low frequency and irregularity of supervision as well as the top-down approach used by supervisors. Supervision that involved discussions of health workers’ conduct in the presence of patients was seen as particularly demotivating. Despite these, the employees considered supervision useful and desirable to the extent that it helped improve personal performance, to avoid mistakes and to update knowledge. Gupta (2004) concurs, suggesting that considerate supervision tends

to improve job satisfaction among workers. The opportunities accorded to workers to participate in decision making processes may lead to higher job satisfaction. Supervisors should thus use positive feedback whenever possible and establish a set means of employee evaluation and feedback so that no one feels singled out or left out. Supervision practices are an important factor that influences employees' job satisfaction.

The manner in which subordinates perceive supervisors' behaviour can positively or negatively influence job satisfaction. An employee who feels that his superior is constantly trying to find fault with him or antagonizes him, will have low levels of satisfaction. Studies consistently provided opinions from health workers who stated that their supervisor's management and leadership skills were inadequate and this led to demotivation of the workforce (Chen & Boufford, 2005). Skilled managers have the ability to motivate their employees, however often in resource-poor institutions, management roles are assigned to staff who are not adequately trained. Effective managers are also responsible for lobbying on behalf of health workers and without their commitment factors affecting health worker motivation will not be identified or addressed.

According to Mbindyo, Gilson, Blaauw and English (2009), organizational factors are considered to be an important influence on health workers' uptake of interventions that improve their practices. These are additionally influenced by factors operating at individual (altruism, prestige and professionalism) and the broader health system levels. Organizational level factors include physical constraints (shortage of staff, drugs and non-medical supplies, old buildings), relationships between /among colleagues, recognition and appreciation, communication, commitment of managers to improve staff conditions and career development). It is clear that factors influencing healthcare motivation are interconnected, complex and operate at different levels.

Currently in Kenya, most of the factors at a national level (e.g. implementation of schemes of service, training, budgetary allocation) negatively influence health workers' motivation in district hospitals. However, it is noteworthy that some improvement in motivation can be attributed to how well a hospital's management organizes and runs the hospital. Workers' financial considerations cannot be gainsaid; nonetheless, implementing single non-financial measures to improve worker motivation (e.g. offering lunch to staff working in critical areas or providing a separate room for sick staff; recognizing best performing staff) may also have effect. Interventions that aim to change worker practice simply by offering training are likely to fare poorly unless attention is paid to those factors influencing the motivation of health workers to change and perform well at individual, organizational, and system levels.

A number of business-related and organizational development studies have examined the factors affecting job satisfaction among employees in different sectors in Kenya (Kithuku, 2012; Ombima, 2014; Mokaya, Musau, Wagoki & Karanja, 2013; Chepkwony & Oloko, 2014). They identified a range of factors that affect job satisfaction, either positively or negatively. Such factors include performance appraisal methods, staff turnover, job rotation, career development, time management, job performance and teamwork.

1.2.8 Personal Attributes

Visser and Marais (2012), in an analysis of the demographic variables in relation to the level of job satisfaction, identified age only as having a significant positive correlation. As age increased, so did the overall job satisfaction with those between the ages of 40-49 experiencing the highest levels of job satisfaction. Earlier, Hofstede (2001) had come to the conclusion that while men's concerns are mostly earnings, promotion and responsibility, women value friendly atmosphere and usually concern prestige, challenge, task significance, job security, co-operation and their work environmental conditions. Clark (1997) examined the relationship between job satisfaction and gender. His study found women to be more satisfied than men. Generally, it has been argued that women are more satisfied than men. However, the results of other gender studies have been contradictory. Others have found men to be more satisfied than women.

1.3 Statement of the Problem

Health service delivery is affected by a number of factors that include human resources for health, health service delivery systems and health infrastructures. Among these factors, human resource is a vital component in delivering health services. Health systems cannot function effectively without sufficient number of skilled, motivated and supported health workers. The presence of highly qualified and motivated staff is a key aspect of health system performance. Job satisfaction of the health workers is highly important in building up employee motivation and efficiency as it determine better employee performance and higher level of patients' satisfaction as a result of good patient care. Conversely, job dissatisfaction would result in burn out and staff turnover which could exacerbate under staffing of health facilities.

There are few studies that have looked into factors affecting physicians and nurses' professional satisfaction in Kenya in general, and in MTRH in particular. On its part, MTRH (2014, 2015) has undertaken two surveys to explore the overall staff satisfaction, but none of these surveys have been specific to physicians and nurses. These two surveys were conducted largely for Government of Kenya Performance Contracts requirements and did not have any particular theoretical construct/model utilized. From the surveys, employee satisfaction has remained largely the same, which in 2014 was 58% and in 2015 was 55%. These results were despite of general

improvements in staff basic salaries and other allowances. Therefore, it was necessary to explore other possible reasons or factors affecting physicians' and nurses' professional satisfaction at MTRH.

2. Materials and Methods

The research design for this study was a descriptive cross sectional survey. The study population included doctors (physicians) and nurses working at the Moi Teaching and Referral Hospital. There were 338 physicians (32 medical Officers, 36 registrars and 270 specialists/subspecialists). Nurses were 901 (151 specialised nurses and 750 non-specialised). The sampling frame that was used in the study was the full list of physicians and nurses employed at MTRH. The sampling frame followed the MTRH straight numerical system of personnel staff numbers. The inclusion criteria were: Qualified physicians and nurses on permanent and pensionable terms, and registered and licensed physicians and nurses with relevant professional regulatory body. The exclusion criteria were: Physicians and Nurses on contract basis, and physicians and nurses who are currently on interdiction or suspension.

The respondents were stratified into Physicians and Nurses. Every 5th doctor in the list was interviewed, so long as the next interviewee was from a different department. If the 5th doctor was not from a different department as the immediate predecessor, the 6th was taken and so on. Every 10th Nurse in the list was interviewed, so long as the next interviewee was from a different department. This sampling procedure was based on the calculated sample size, the number of research assistants needed to cover this sample size and the need for the sample to be representative of the population. The sample size for physicians and nurses was calculated using Taro Yamane's formula (Yamane, 1967). By using Yamane's formula of sample size with an error limit of 5% and with a confidence coefficient of 95%, the calculation from a target population of 1239 physicians and nurses in MTRH arrived at a sample size of 302.

Primary data was collected by the use of a questionnaire by the principal investigator, assisted by 5 research assistants who were hired and trained. Empirical validation of the study on factors affecting Physicians' was conducted using a questionnaire administered to 82 physicians and 220 nurses. The data collected were stored in appropriate format that permits statistical analysis. The analysis entailed computer-aided statistical manipulation. All the data collected were entered into the statistical package and data cleaned for missing values and data entry errors. Data analysis was done using International Business Machines Statistical Package for the Social Science (IBM SPSS), version 21.0. Quantitative data were analysed to generate descriptive statistics which included frequencies, percentages and means. The study was powered to 95% confidence interval. Interpretation of the statistical outputs was done and discussed in the presentation of results and findings.

3. Results

The study sought to understand the factors that influence physicians and nurses professional satisfaction. The factors that were assessed in the study were: Workload, compensation (salaries/pay), interpersonal relations, autonomy and career advancement.

3.1 Workload

Workload was measured in the study using the following variables: Time to complete assigned work, amount of work, variation of work, working conditions and working times. From the study, 68% percent of the respondents indicated satisfaction with time to complete their assigned work, 70.5% indicated satisfaction with amount of work and 67.0% indicated satisfaction with the variation of work tasks. About 67.5% of the respondents indicated satisfaction with working conditions whereas 72.5% were satisfied with working times as reflected in Table 1 below.

Table 1. Workload

S. No	Variable	Physicians		Nurses		Mean
		Freq(n)	Percent (%)	Freq(n)	Percent (%)	
1	Satisfaction time to complete assigned work.	82	71%	220	65%	68.0%
2	Satisfaction with the amount of work.	82	73%	220	68%	70.5%
3	Satisfaction with work variation	82	67%	220	67%	67.0%
4	Satisfaction with work conditions.	82	66%	220	69%	67.5%
5	Satisfaction with work times.	82	76%	220	69%	72.5%
	Mean Satisfaction		70%		67%	68.5%

3.2 Compensation

The study sought to know whether or not the respondents were satisfied with salary as compensation for work done. It emerged that about 74.0% of the respondents indicated satisfaction with the salary paid. Of this, 73% were Physicians and 75% were Nurses as shown in Table 2 below.

Table 2. Compensation

S. No	Variable	Physicians		Nurses		Mean
		Freq(n)	Percent (%)	Freq(n)	Percent (%)	
1	Satisfaction with salary/pay.	82	73%	220	75%	74.0%
	Mean Satisfaction		73%		75%	74.0%

3.3 Interpersonal Relations

The study sought to establish how interpersonal relations influence Physicians and Nurses professional satisfaction. The parameters for interpersonal relations included satisfaction with supervisors, colleagues and job briefings. About 70.5% of the respondents indicated that they are satisfied with the supervisors whereas 71.0% indicated satisfaction with colleagues. About 73.5% of the respondents indicated that they are satisfied with job briefings as demonstrated in Table 3 below.

Table 3. Interpersonal Relations

S. No	Variable	Physicians		Nurses		Mean
		Freq(n)	Percent (%)	Freq(n)	Percent (%)	
1	Satisfaction with Supervisor.	82	74%	220	67%	70.5%
2	Satisfaction with Colleagues.	82	76%	220	66%	71.0%
3	Satisfaction with Job Briefings.	82	73%	220	74%	73.5%
	Mean Satisfaction		74%		69%	71.7%

3.4 Autonomy and Career Advancement

The research endeavoured to determine whether or not autonomy and career advancement influenced physicians and nurses' professional satisfaction. This was measured using independence in decision making and education to improve on career perspectives. Seventy percent of the respondents indicated that they could determine how they did their work whereas 70.5% indicated that they could take part in decisions concerning work. On career advancement, 70.5% of the respondents were satisfied with education and training to improve their career prospects as shown in Table 4 below.

Table 4. Autonomy and Career Advancement

S. No	Variable	Physicians		Nurses		Mean
		Freq(n)	Percent (%)	Freq(n)	Percent (%)	
1	Autonomy					
	Can determine how they do their work.	82	73%	220	67%	70.0%
	Can take part in decisions concerning work.	82	74%	220	67%	70.5%
2	Career Advancement					
	Satisfied with education and training to improve my career perspectives.	82	74%	220	67%	70.5%
	Mean Satisfaction		74%		67%	70.5%

On average, the factors that affect physicians' and nurses' professional satisfaction were rated at 70.0%.

3.5 Chi-square Test of Association

As already mentioned, the factors that were found to significantly affect physicians and nurses professional satisfaction ($p < 0.05$) were categorized into the following variables: Workload, compensation, interpersonal relations, autonomy and career advancement. The factors that were found to significantly affect physicians and nurses professional satisfaction under workload included Time provided to complete work, amount and variation of work, working conditions and working times ($p < 0.05$) as shown in Table 5 below.

Table 5. Chi Square - Workload

S. No	Variable	Chi- square values	df	P-value (<0.05)
1	Satisfaction with time to complete work	39.999	9	0.000
2	Satisfaction with the amount of work to be done	44.612	12	0.000
3	Satisfaction with variation of work tasks	54.656	12	0.000
4	Satisfaction with working conditions	34.413	12	0.000
5	Satisfaction with work times	40.993	9	0.001

Salary (pay) as a means of compensation of physicians and nurses was found to be significant in influencing professional satisfaction ($p < 0.05$) as shown in Table 6.

Table 6. Chi Square - Compensation

S. No	Variable	Chi-square values	df	P-value (<0.05)
1	Satisfaction with salary(pay)	46.822	12	0.000

The factors that were found to significantly affect physicians and nurses professional satisfaction under interpersonal relations included satisfaction with supervisors, colleagues and job briefings from the supervisors ($p < 0.05$) as shown in Table 7.

Table 7. Chi Square - Interpersonal Relations

S. No	Variable	Chi-square values	df	P-value (<0.05)
1	Satisfaction with Supervisor	31.354	9	0.000
2	Satisfaction with Colleagues	36.625	12	0.000
3	Satisfaction with Job Briefings	32.525	12	0.001

Autonomy and career advancement were found to significantly influence physicians and nurses' professional satisfaction ($p < 0.05$) as shown in Table 8.

Table 8. Chi Square - Autonomy and Career Advancement

S. No	Variable	Chi-square values	df	P-value (<0.05)
1	Can determine how work is done	17.28	9	0.045
2	Can take part in decisions concerning my work	36.47	12	0.000
3	Education and training in my job improve my career perspectives	34.673	12	0.001

A cross-tabulation of respondents' age and the factors that influence job satisfaction was done. The results were as indicated in Table 9 below.

Table 9. Cross-Tabulation: Respondents' Age and Factors Influencing Job Satisfaction

Factor	Chi-square	p-value(Age)	p-value(gender)
Workload			
Satisfaction with the time to complete work	17.528	0.061	0.027
Satisfaction with the amount of work	26.584	0.009	0.031
Satisfaction with variation of work tasks	14.556	0.005	0.038
Satisfaction with working conditions	15.419	0.04	0.212
Satisfaction with work times	14.223	0.582	0.052
Compensation			
Satisfaction with salary	21.144	0.03	0.013
Interpersonal Relations			
Satisfaction with Supervisor	19.078	0.265	0.046
Satisfaction with Colleagues	16.923	0.152	0.035
Satisfaction with job briefings	32.951	0.008	0.104
Autonomy			
I can determine how I do my work	16.092	0.047	0.014
I can take part in decision concerning my work	25.346	0.024	0.040
Career Advancement			
Education in my job improve my career perspectives and training	20.863	0.000	0.015

With regards to age, the factors that were found to significantly influence physicians 'and nurses' job satisfaction included amount and variation of work, working conditions, salary, job briefings, work autonomy and career advancement. With regards to gender, the factors that were found to significantly influence physicians 'and nurses' job satisfaction included time, amount, variation of work, working conditions, working times, salary, supervisors, colleagues, work autonomy and career advancement.

4. Discussion

The study established a significant impact of time to complete tasks, amount and variation of work, working times and working conditions with physician and nurses satisfaction ($p = 0.000$). This finding corroborated that of Awang (2010) that the amount of workload assigned to employees did have a significant impact on their job satisfaction levels. High volume of workload was one of the reasons that academic staff was not satisfied with their jobs. Satisfaction among nurses was found to also be impacted by the high demands of their jobs. A study by Kekana *et al.* (2007) among South African nurses found that long working hours and increased demands on their time is an important factor that affected their satisfaction. Employee workload thus needs to be considered in order to achieve a reasonable level of satisfaction in order to enhance employee loyalty and a promising

organizational performance. Workload characteristics such as number of patients seen per week or time spent on administrative work have been found to be associated with job satisfaction. Visser and Marais (2012) found that increased demands on staff were associated with increased stress and decreased levels of job satisfaction. High workload and job stress were further linked to negative impact on health worker practice and increase the risk for occupational health hazards. Higher workload among health workers also leads to lowering of standards of care (Kingma, 2001).

The study further revealed a significant relationship between salary and physicians' and nurses' job satisfaction ($p = 0.000$). This finding is reiterated that by Gupta (2004) which indicated that when all other factors are held constant, higher pay and better opportunities lead to higher satisfaction. According to Towers Perrin (2003), pay is probably more important in job choice than in decisions to quit, in part because pay is one of the few characteristics people can know with certainty before taking a job. In contrast, once a person has been on the job for a while, other factors (such as quality of supervision) come into play. Another general explanation for the importance of pay is that pay is frequently used as a yardstick for social status and personal accomplishment. Similarly, Taylor (1911) advocated the establishment of incentive wage systems as a means of stimulating workers to higher performance, commitment and eventually satisfaction.

Supervisors' engagement with physicians' and nurses' job satisfaction was found to have a significant association with job satisfaction ($p = 0.000$) and briefings about their work progress ($p=0.001$). Mathauer and Imhoff (2006) found that employees within a hospital criticized the low frequency and irregularity of supervision as well as the top-down approach used by supervisors. Supervision that involved discussions of health workers' conduct in the presence of patients was seen as particularly demotivating. Despite these, the employees considered supportive supervision useful and desirable to the extent that it helped improve personal performance, to avoid mistakes and to update knowledge. Supportive supervision is the creation of an environment that allows staff to develop professionally and enhances performance of staff regardless of current level of performance or professional expertise. Gupta (2004) further concurs suggesting that considerate supervision tends to improve job satisfaction among workers. The opportunities accorded to workers to participate in decision making processes may lead to higher job satisfaction. Supervisors should thus use positive feedback whenever possible and establish a set means of employee evaluation and feedback so that no one feels singled out or left out. Supervision practices are an important factor that influences employees' job satisfaction.

The study further revealed a significant association between Colleagues and Physicians and Nurses Professional Satisfaction ($p=0.000$). As Hodson (1997) convincingly argued, social relations of the workplace may make a key contribution to employees' job satisfaction, productivity and well-being. Co-worker support refers to co-workers assisting one another in their tasks when needed by sharing knowledge and expertise as well as providing encouragement and support (Zhou & George, 2001). Co-worker support can also provide or fail to provide a basis for solidarity and united resistance to management. An opposing view to the research stated above is that co-worker support could in fact have negative interpretations. Co-workers' behaviours may be viewed as political or self-enhancing and therefore it may not always be associated with constructive work attitudes. Accepting support from co-workers may suggest incompetence on behalf of the person accepting the support. Jex (2002) used Festinger's Social Comparison Theory to explain that employees look to co-workers to make sense and develop attitudes towards their work environment. Thus if employees see other workers being positive and satisfied with their work they are more likely to be positive as well. He also uses this theory to explain that new hires can also be "tainted" during the training and socialization processes if they are placed around employees who are dissatisfied. A study by Harmer and Findlay (2010) also suggested that the quality of co-worker relationships significantly positively impact on overall job satisfaction.

This study revealed significant association between autonomy and physicians' and nurses' job satisfaction; taking part in decisions concerning work and self-direction in performance of work. ($p=0.045$, $p=0.000$). Autonomy in the workplace refers to how much freedom in professional decision making employees have while working. Workers given high degree of autonomy will feel that the results of their job are determined by their efforts, actions and decisions so, they will feel more satisfied. A study by Gellatly and Irving (2001) found positive effect of perceived autonomy on contextual performance. Employees who report greater autonomy in their work have a better performance than employees who report lower autonomy. It is argued in the study that autonomy enhances job performance and hence satisfaction because they perceive themselves capable and more resourceful in performing the task.

Another study by Varjus *et al.* (2003) concluded that the autonomy that is extended to Finnish intensive care unit nurses fundamentally supports their sense of empowerment in the workplace and hence improved job satisfaction. The study argued that a sense of autonomy contributes both to the sense of fulfilment and satisfaction that nurses derive from their jobs. Indeed, as Sengin, (2003) observed, several studies have provided evidence that autonomy is a strong predictor of job satisfaction.

5. Conclusion and Recommendations

In order to influence physicians and nurses professional satisfaction, organizations need to address intrinsic factors, without losing focus on some extrinsic factors. These intrinsic factors include achievement, recognition, autonomy and advancement. Extrinsic factors include interpersonal relations, working conditions/workload and compensation. Specifically, health organizations should invest in internal esteem factors such as self-respect, autonomy and achievement and external esteem factors such as status, recognition and attention to improve professional satisfaction of physicians and nurses.

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