

# **Determinants of Job Satisfaction Among Nurses: A Case of Embu Provincial Hospital**

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## DECLARATION

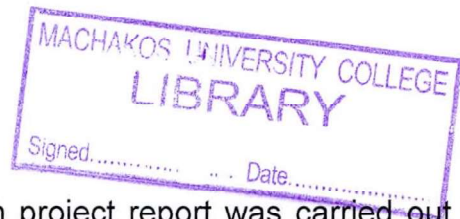
This research project report is my original work and has not been presented for a degree in any other university.

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I confirm that the work reported in this research project report was carried out by the candidate under my supervision as the University supervisor.

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## ABSTRACT

### **Factors affecting job satisfaction among nurses: A case of Embu Provincial General Hospital**

Understanding the determinants of job satisfaction is important because it has been linked inversely to staff turnover, quality of health care and clinical outcomes. The goal of the study was to identify the level and factors affecting job satisfaction among nurses working at Embu Provincial General Hospital.

The study design was a descriptive cross sectional survey. A systematic random sample of 105 nurses was selected from a list of 400 nurses working in Embu Provincial Hospital. A standardized multidimensional questionnaire adopted from Mueller and McCloskey satisfaction scale was used to collect data. Data was entered using EPI info version 6 software package and later analyzed using STATA<sup>®</sup> statistical package. Descriptive statistics, correlations and logistic regression procedure techniques were used to analyze data.

Findings from the study indicate that only 44.8% of the nurses were satisfied with their job. The nurses were satisfied with the organizational factors such as social support, praise/recognition, autonomy and stress levels. The respondents were dissatisfied with the following factors: pay, working environment, promotion chances and job involvement.

When the organizational and demographic factors were regressed on overall job satisfaction, results showed that predictors of job satisfaction among nurses at Embu Provincial Hospital are work environment ( $p=0.013$ ), Social support ( $p=0.028$ ) ; and praise and recognition ( $p=0.039$ ). The findings also show that organizational factors are the most important factors in determining job satisfaction in our environment compared personal correlates.

The findings have implications for policy, nursing practice and further research areas.

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## DEDICATION

Special dedication goes to my husband and friend Dr. Nicholas Muraguri and our son Keith for their spiritual, moral support and love.

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## ACRONYMS AND ABBREVIATIONS

EPGH	Embu Provincial General Hospital
HIV	Human Immunodeficiency Virus
WHO	World Health Organization
MOH	Ministry Of Health
ECSA	East Central Southern Africa Health Community
CDF	Constituency Development Fund
ARV	Anti Retro Viral Therapy
NCK	National Council of Kenya
HSRS	Health Sector Reform Secretariat
MMSS	Mueller McCloskey Satisfaction Scale
JSS	Job Satisfaction survey
NSS	Nurses Satisfaction Survey
MJS	Measure of Job Satisfaction



## OPERATIONAL DEFINITION OF TERMS

- Extrinsic job elements:** These are related to tangible rewards such as salary, promotion, working conditions and fringe benefits (Stemple, 2003)
- Intrinsic job element:** They are related to psychological rewards such as achieving appreciation, positive recognition and being given the opportunity to use one's ability (Stemple, 2003).
- Demographic factors:** This are the particular features of a population, they include People's age, sex, marital status, level of professional qualifications, job grades, current work station among others (Mullins, 2005)
- Organizational factors:** They include nature and size, formal structure, personnel policies and procedures, employer relations, nature of work, technology and work organization, supervision and styles of leadership, management systems, and working conditions. (Mullins, 2005)

# CHAPTER 1: INTRODUCTION

## 1.1 Background

Job satisfaction among health professionals has recently been the subject of much policy discussion globally and Kenya in particular (WHO, 2005). Health care delivery is highly labor intensive and its quality and efficiency is to some extent dependent on the level of job satisfaction among health workers. Job satisfaction is also associated with staff turnover, retention, patients' level of satisfaction and health outcomes (Bodur, 2002; Leiter *et al.*, 1998). Dissatisfied employees often exhibit an unethical behavior including taking unscheduled days off, tardiness and aggression towards other workers. Dissatisfaction at work leads to absenteeism, frequent complaints, expression of intent to leave, and poor performance (McNeese-Smith 1995). Replacement and training of health worker is expensive leading to added operations and staff development costs.

The challenge for each health system is therefore to identify factors influencing job satisfaction and subsequently develop appropriate policy interventions aimed at improving levels of job satisfaction. The Ministry of Health is currently implementing several reforms aimed at improving levels of Job satisfaction among its workers as one of the core strategy of improving quality of health services provided in the public health sector (MOH, 2002).

Several definitions of job satisfaction exist but there is consensus that the term is a multi faceted construct that includes employee's feelings about a variety of both intrinsic and extrinsic job elements (Pearson, 2003). According to Pearson (2003), Job satisfaction is defined as an employee's affective reaction to a job based on comparing

actual outcomes with desired outcomes. Employees expect a job to provide an accumulation of features (e.g. pay, promotion, autonomy) for which an employee has a certain preferential values. The range and importance of these values vary across an individual, but when the accumulation of unmet expectation becomes sufficiently large, job satisfaction is lower, and there is great probability of withdrawal behavior including resignation. Where employment opportunities are few, dissatisfied workers tend to stay on but perform dismally (Pearson, 2003). Spector defines Job satisfaction as simply how people feel about their jobs and different aspects of their jobs. It is the extent to which people like (satisfaction) or dislike (dissatisfaction) their jobs (Curtis, 2007).

Levels of Job dissatisfaction among nurses is of great concern to the Ministry of Health because nurses form the largest proportion of health workers estimated to be 60% of the total Workforce (MOH, 2006). In a recent review of human resources capacity and performance in selected hospitals majority of nurses (63%) reported that overall they were dissatisfied with their current jobs (MOH, 2005).

In Kenya, factors that have been hypothesized to contribute towards job dissatisfaction include inadequate pay, poor working environment due to shortage of drugs and equipments, shortage of technical staff (doctors), increasing work load, lack of supervision, and stagnation in one job group with little chance of getting promotion. Of late, workers are also concerned by the level of insecurity in some parts of the country leading to frequent requests for transfers from insecure areas. (MOH, 2005). Poor pay is assumed to be the main factor leading to job dissatisfaction, however there are other individual or institutional factors as well.

Due to their large numbers and responsibilities, nurses are considered to be the backbone of the public health sector, particularly in the rural areas. Currently, Kenya like other developing countries has been experiencing exodus of health workers particularly the nursing cadre to Europe, United States, Middle East, and other African states such as South Africa. Based on applications requesting for clearance it is estimated that an average of 320 nurses leave Kenya each year which is approximately one nurse per day (MOH, 2005). Between 1993 and 2005 alone 4393 nurses sought clearance for foreign registration and are assumed to have left the country (MOH, 2005). More nurses may have left the country without the knowledge of the Ministry of Health and therefore the figures available may be an underestimate of the actual numbers that have left. Table 1.0 indicates the magnitude of nurses seeking registration abroad between 1999 and 2005.



**Table 1.0 Nurses seeking licensure in foreign countries**

<b>Year</b>	<b>Number of nurses certified by the Nursing Council of Kenya (NCK) for foreign registration</b>
1999	152
2000	283
2001	917
2002	607
2003	939
2004	642
2005	491
Total	4,031

**Source: Ministry of Health, 2007**

According to the 2006 annual report of Embu Provincial Hospital, the facility loses about 100 nurses per year. The loss is partly due to active recruitment of health workers by foreign-based nurses who had previously worked in this hospital.

Unfortunately, most of those leaving are the highly skilled health workers in key leadership positions in the public health system. Many pay fees equal to 10 months of wages to private recruitment firms in order to qualify and register to work abroad (WHO, 2005).

The exodus of nurses has a major impact on service delivery in Kenyan hospitals and the need for more nurses continues to rise every year. This is due to the increasing

population, huge disease burden, building of new health facilities particularly through Community Development Fund (CDF), and the introduction of more labor-intensive health programs such as Anti-Retroviral Therapy<sup>1</sup> (Division of nursing, 2007).

In Kenya, the actual total need of nurses for optimal facility operations in the public sector is estimated to be 42,848 nurses against the current staff establishment of 16,144 nurses. In addition, community health services would require 18,800 more nurses, putting overall national requirement to 61,648 nurses (NCK, 2004). Therefore, the shortage of nurses is estimated to be 45,504. The World Health Organization (WHO) recommended staffing norm is 1 nurse per 1000 population (WHO, 2001).

Staff shortages have led to closure of some health facilities due to shortage of staff. In a study done by Ministry of Health in 2003, it was found that 40 health facilities had closed while another 50 health facilities were being manned by unqualified staff (MOH 2004). Staff shortage has greatly limited the Ministry of Health's capacity to scale up interventions such as provision of anti retro viral treatment. Further, the closure of health facilities has led to congestion of the existing ones thus compromising the quality of care. The few nurses left behind are usually overworked due to the existing huge disease burden (MOH, 2006).

## **1.2 Statement of the Problem**

Over the last 4 years the government has been implementing reforms aimed at improving quality of health services offered in the Public Health Sector (MOH, 2004). One of the Key components of the reforms has been the recruitment of 4000 additional

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<sup>1</sup> Anti Retro Viral Therapy – HIV care program involving provision of anti retroviral drugs.

health workers and improving their remuneration packages in order to boost staff morale, performance, as well as retention (MOH, 2005). Basic salary has doubled and new allowances have been introduced such as commuter, medical and risk allowances. The government has further improved working conditions by strengthening drug supply, procuring new equipments and safety programs such as HIV workplace programs. Despite these major changes nurses continue to leave the public health services. Job dissatisfaction has been identified in the literature as the best predictor of the intentions to leave an organization (Shaler *et al.*, 2001).

The purpose of this study therefore was to identify determinants of job satisfaction among nurses using the case of Embu Provincial General Hospital, which is one of the major referral health facility in Eastern Province. A thorough understanding of nurses' job satisfaction was extremely important to the nursing administration and public health system. If nursing managers comprehend what makes nurses satisfied, they are able to develop appropriate policies to improve their satisfaction. It has been demonstrated that maintaining a satisfied nursing work force is linked to many positive organizational outcomes, such as retention, innovation in practice, reduced absenteeism, improved standards of nursing care hence better patient satisfaction and health outcomes.

### **1.3 General Objective**

To investigate the determinants of job satisfaction among nurses in Embu Provincial General Hospital.

### **1.4 Specific Objectives**

1. To Evaluate the overall level of job satisfaction among nurses working at Embu Provincial Hospital (Kenya).



2. To determine individual and organization related factors that affect job satisfaction among nurses working at Embu Provincial General Hospital.
3. To identify the demographic/ social characteristics of dissatisfied nurses.
4. Based on the results, make appropriate policy recommendations.

## **1.5 Research Questions**

1. What was the overall level of job satisfaction among nurses working at Embu Provincial Hospital (Kenya)?
2. What were the individual and organization factors that affect job satisfaction among nurses?
3. What were the social and demographic profiles/characteristics of dissatisfied nurses?
4. What were the implication of the research findings on Human Resource Management policies and strategies for retaining health workers?

## **1.6 Justification of the study**

The intent of this study was to identify the determinants of job satisfaction and therefore provide relevant information on factors that can be targeted to guide the development of relevant policies aimed at improving job satisfaction among nurses. Improved job satisfaction has led to enhanced job performance, better service delivery and retention of workers. It was envisaged that the study would identify a number of non-financial factors that could be implemented at minimal cost.

## **1.7 The Scope of the study**

Why Embu Provincial Hospital?

The study was done at Embu Provincial Hospital because of the following reasons:

- The hospital had a large population of nurses (400) and provided an appropriate population able to show variance and diversity of factors affecting job satisfaction.
- The management was willing to allow me to undertake the study.
- The facility was one of the sites for piloting health reforms (HSRS, 2006).

## CHAPTER 2: LITERATURE REVIEW

### 2.1 Introduction to Literature review

This chapter contains a theoretical framework of job satisfaction, using description of Maslow's Hierarchy of needs theory, Herzberg's motivation – hygiene theory, Lawler's Facet/ overall satisfaction theory, Locke's Goal setting theory and lastly Vroom's expectancy theory. The chapter also includes a review of current empirical literature related to job satisfaction and lastly it provides a critical review of major issues.

### 2.2 Theories of job satisfaction

There are many theories that have been developed to explain job satisfaction. Stemple (2003) notes that the classic theories of Maslow's (1970), Herzberg's (1968), Lawler's (1973), Locke's (1983) and Vroom (1964) have served as a basis for the evolution of job satisfaction research. A brief outline and key features of each of the theories is given below.

- **Maslows Hierarchy of needs theory**

The basic proposition of Maslow's Hierarchy of needs theory (1970) is that people are wanting beings, they always want more, and what they want depends on what they already have. He suggests that human needs are arranged in a series of levels, a hierarchy of importance. The lowest – level needs (physiological and safety) must be satisfied before the highest – level needs (esteem and self – actualization). According to this theory the satisfaction or dissatisfaction that individuals feel will depend upon the

fulfillment of their lower level needs and high level needs. Once a lower need has been satisfied, it no longer acts as a strong motivator. The needs of the next higher level in the hierarchy demand satisfaction and become a motivating influence. Only unsatisfied needs motivate a person. Thus Maslow asserts that a satisfied need is no longer a motivator.

However, there is a problem in relating to Maslow's theory to the work situation. It does not cater for a complete understanding of people's private and social life, it only considers their behaviour. It does not also take into account individual differences, people's feelings about the environment and organizational context where an individual work.

- **Herzberg's Motivation – Hygiene Theory**

Herzberg's (1966), Motivation – Hygiene theory extended Maslow's hierarchy of need theory and is more directly applicable to the work situation. Herzberg's theory was based on "motivators" and hygiene factors. The motivators are those favourable things that spur people to high achievement and include sense of achievement, recognition, responsibility, nature of the work and personal growth and advancement. These factors are related to job context or extrinsic factors of the job. The motivators (satisfiers) are associated with long- term positive effects in job performance.

The "hygiene" factors are related to job contents or the intrinsic factors of the job, and include salary, job security, working conditions, level and quality of supervision, company policy and administration, and interpersonal relations. According to the theory,



the absence of hygiene factors can create job dissatisfaction, but their presence does not motivate or create satisfaction. The hygiene factors (dissatisfaction) consistently produce only short-term changes in job attitudes and performance.

To motivate workers to give of their best the manager must give proper attention to the motivators or growth factors, and they should never deny people proper treatment at work. On the other hand hygiene factors are necessary to avoid unpleasantness at work and to deny unfair treatment. These are variables, which actually motivate people.

Herzberg's work has had a considerable effect on the rewards and remuneration packages offered by corporations. Increasingly, there has been a trend towards various benefits in which people can choose from a range of options. In effect, employees can select the elements they recognize as providing their own motivation to work. Similarly, the current emphasis on self-development, career management and self – managed learning can be seen as having evolved from Herzberg's insights.

- **Lawler's Facet/overall satisfaction Theory**

Lawler's (1973) facet satisfaction theory has contributed greatly towards job satisfaction. Lawler (1973) distinguished between 'overall satisfaction' and "facet satisfaction". Facet satisfaction refers to people affection and reactions to particular aspects of their job, such as pay, supervision and opportunities for promotion while overall satisfaction referred to a person effective reaction to his total work.

To Lawler, the distinction was important because most theories argue that job satisfaction is determined by some combination of people's effective reactions to

various facets of their job. This theory of facet satisfaction represents the most advanced approach available for investigating satisfaction in organizational settings (Mullins, 2005).

- **Locke's Goal Setting Theory**

Locke (1968) first proposed the idea that working towards goals was itself a motivator. The basic premises of goal theory are that people's goals or intentions play an important part in determining behaviour. The thinking behind goal theory is that motivation is driven primarily by the goals or objectives that individuals set for themselves. People strive to achieve goals in order to satisfy their emotions and desires. Goals guide people's responses and actions. Goals also direct work behaviour and performance, and leads to certain consequences or feedback. Locke subsequently pointed out that goal setting is more appropriately viewed as a motivational technique rather than as a formal theory of motivation.

Goal theory has a number of practical implications for the manager. For example, specific performance goals should be identified and set in order to direct behaviour and maintain motivation. Next, goals should be set at a challenging but realistic level. Difficult goals lead to higher performance. However, if goals are set at too high a level, performance will suffer. Lastly goals can be determined either by a superior or by individuals themselves. Goals set by other people are more likely to be accepted when there is participation. Employee participation in the setting of goals may lead to higher performance.

- **Vroom's expectancy theory**

Victor Vroom's (1969) was the first person to propose an expectancy theory aimed specifically at work motivation. His model is based on three key variables, namely: Valence (the emotional orientation people hold with respect to outcomes that is reward), Instrumentality (the perception of employees whether they will actually get what they desire) and Expectancy (employees have different expectations and levels of confidence about what they are capable of doing). Vroom assumes that behaviour results from conscious choices among alternatives whose purpose is to maximize pain. He also realized that an employee's performance is based on individuals' factors such as personality, skills, knowledge, experience and abilities.

## **2.3 Empirical Literature**

### **2.3.1 Migration of health workers**

Reasons why nurses leave the civil service has been classified as either push or pull factors. Push factors are influences that arise from within the source country and facilitate a potential migrant decision to leave (Davlo *et al.*, 2003). They include, low and eroding wages and salaries, unsatisfactory living conditions, lack of transport and housing, under-utilization of qualified personnel, lack of satisfactory working conditions, low prospects of professional development, lack of freedom, declining quality of education systems, discrimination in appointments and promotions, lack of research funds, lack of professional equipment and tools.



The pull factors reflect actions and omissions of recipient countries that create the demand for, or encourage potential migrants to leave home (Davlo *et al.*, 2003). These factors include higher wages and income, higher standards of living, better working conditions, job and career opportunities and professional development, political stability, modern education system, meritocracy, transparency, intellectual freedom and substantial funds for research, advanced technology, modern facilities and availability of experienced support staff.

### **2.3.2 Determinants of job satisfaction**

A number of studies on job satisfaction have been done in various nursing care settings using varied types of tools and research methodologies. This section is a highlight of key studies on determinants of job satisfaction.

Cumber and Alexender (1998) conducted a study to determine the relationship between organizational variables such as structure, technology, and environment with job satisfaction among 883 public health nurses in south-eastern state in the United States using the McCloskey/ Mueller Satisfaction Scale. He found out that job satisfaction was significantly correlated with nurses' category and years of experience. The researchers concluded that, organizational structure (vertical participation, horizontal participation, and formalization) was a critical predictor of job satisfaction.

Mrayyan (2005) conducted a descriptive study to identify factors that influence job satisfaction among nurses working in Public health facilities in Jordan. She used Mueller McCloskey job satisfaction scale which has 7 categories of organization factors

and 6 demographic factors. The organization factors included in the Mueller McCloskey job satisfaction scale are: external rewards, scheduling of work, family/work balance, coworker and working environment, control and responsibility; and interaction opportunities.

To calculate a score for each category of Mueller McCloskey scale, mean score was calculated for each variable. As the instrument is rated on a 5 point likert scale, any variable having a mean value of above 3 was scored as "satisfactory" Any variable with a score less than 3 was classified as "unsatisfactory"

Mrayyan (2005) analysed her data using descriptive and inferential statistics following a 3 stage approach. Stage I involved calculating descriptive statistics (mean, standard deviation, frequencies) for all the 13 variables. During stage 2, analysis involved chi square test of association between Independent variables and overall job satisfaction. During stage 3, additional analysis was performed using multiple regressions to determine whether the organization and demographic variables were predictive of nurses' job satisfaction. All independent variables that were found to be statistically associated with job satisfaction were included in a stepwise logistic regression model. Odds ratios and 95% confidence intervals were calculated to identify factors influencing job satisfaction.

From the study, she reported that most of the nurses (60%) were dissatisfied with their jobs. The determinants of job satisfaction were: scheduling of work, external rewards (salary), praise/recognition, level of qualification, marital status, & current area of work. Overall, rewards (salary) was the best predictor of job satisfaction.

One Jordanian study assessing nurses job satisfaction and retention by Suliman and Abu Gharbieh (1996), identified factors that influence Jordanian nurses' job dissatisfaction and further estimated the magnitude of anticipated withdrawal from practice. The authors concluded that Jordanian nurses were dissatisfied with many work variables such as payment, career opportunities, nursing and hospital administrators' support, transportation, and childcare facilities. The withdrawal rate of Registered Nurses (RNs) was 18.4%.

A research done by McNeese-Smith (1999) among nurses working in California explored factors that lead to nurses' job satisfaction and dissatisfaction through a qualitative research design. Determinants of job satisfaction identified by McNeese-Smith (1999) were the actual work which included, patient care (providing good care, recognition from patients or their families, seeing improvement in patients' health, sharing important moments in patients' lives, and a feeling of an emotional or spiritual reward), the environments and a balanced workload. Other determinants of job satisfaction were, personal factors (work at convenient location, financial benefits for family, avenue through which personal goals can be met, and congruence of work and personal values or religious convictions), the nurses' cultural background (work as a way to improve living conditions and value hard work and serving others) and their career stage (change leads to opportunities, mentoring, mature appreciation for the job, and being able to focus on the job instead of family responsibilities). Relations with co-workers (friendship and rapport with staff, interdependence and cooperation, and rapport with/appreciation from physician), salary and benefits, and professionalism



(provide direct patient care, independent thinking, involvement in the organization, learning, and professional growth) were additional satisfiers (McNeese-Smith, 1999).

According to McNeese-smith (1999), determinants of job dissatisfaction that had to do with nurses' actual work included, abuse from patients , patients not responsive to nursing care or teaching, and the fear of, or actually making errors. Other factors influencing job dissatisfaction also included, personal factors (problems with family) and the nurses' career stage, moreover, relations with coworkers was also considered as an important factor. A category that was listed as a dissatisfier and not a satisfier was organizational factors, which included the possibility of layoffs, politics in the organization, unfairness, and the potential for physical danger (McNeese-smith, 1999).

According to an analysis done by Saane, *et al.*, (2003) on published studies that attempted to identify factors that affect job satisfaction, the following 10 domains were noted as determinants of job satisfaction:

**Work content** (Variety in skills, complexity of a job, or the challenge in a job, role ambiguity, routine).

**Autonomy** (Individual responsibility for work, control over job decisions)

**Growth/development** (Personal growth and development, training or education)

**Financial rewards** (Salary, fringe benefits, or employee benefits)

**Promotion** (Possibility of career advancement, or job level)

**Supervision** (Support of supervisor, recognition of supervisor, or being treated with fairness)

**Communication** (Counseling opportunities, feedback)

**Co-workers** (professional relations with co-workers, or adequacy of co-workers)

**Workload** (Time pressure subjectivity perceived, tedium social problems, interpersonal conflict, or stress)

**Work demand** (Involuntarily doing extra work or procedures, structural complexity, insecurity of work situation, or emotional commitment) (Saane, *et al.*, 2003)

### 2.3.3 A Model of studying job satisfaction

Price, Mueller and colleagues developed a model consisting of eight exogenous variables to assess and identify factors that influence job satisfaction (Chu *et al.*, 2003).

The eight exogenous factors in the model are described below.

#### **Job involvement**

Job involvement is defined as a worker's willingness to exert effort on the job. Price (2001) believes that specific job involvement is an exogenous variable that impacts turnover by its positive impact on job satisfaction. He argues that, because highly involved employees exert more effort and receive greater rewards for this effort, they, in turn, get more satisfied with their jobs.

- **Autonomy**

Autonomy refers to the degree of power that an employee can exercise over his/her job and work environment. Most literature reviews have asserted that autonomy has a positive impact on job satisfaction (Price & Mueller 1986). Price & Mueller's (1986) model argues that increases in autonomy raise job satisfaction.

- **Distributive and procedural justice**

Greenberg (1990) indicated that organizational justice might potentially explain many organizational behaviour outcome variables. The following dimensions of organizational justice are most often cited:

Distributive justice represents the degree to which rewards and punishments are related to performance inputs; Procedural justice represents the degree to which rights are applied universally to all members of an organization (Price, 1997). Price & Mueller's model asserts that both distributive and procedural justice decrease turnover by their positive impact on job satisfaction (Price & Mueller, 1986).

### **Job stress**

Job stress refers to the extent to which job duties are difficult to fulfill and can be categorized into the following four dimensions.

- Role ambiguity, which refers to unclear job obligations (Price and Mueller, 1986)
- Role conflict, which refers to inconsistent job obligations or the degree to which work demands from two or more people are incompatible (Chu *et al.*, 2003),
- Work overload is the degree to which work-role demands are excessive (Price and Mueller, 1986), and
- Resource inadequacy, which refers to the lack of means to perform the job (House, 1981). Job stress has been associated with poor work group relationships (Chu *et al.*, 2003) and diminished performance. The Price &



Mueller (1986) model asserts that job stress is negatively related to employees' job satisfaction.

### **Pay**

Pay can be defined as money and its equivalents that employees receive for their contribution to the employer (Chu *et al.*, 2003). Low pay can lead to job dissatisfaction and the intention to leave a particular job.

### **Promotional chances**

Promotional chances are the degree of potential occupational upward mobility within an organization, and it is an important variable to managers because of their concerns with vertical mobility in an organization. Price & Mueller (1986) suggested that while pay is concerned with current incentives distributed by the employer, promotional chances focus on future incentives. Accordingly, their model indicates that an increase in promotional chances raises job satisfaction.

### **Social support**

Social support is assistance with job-related problems provided by co-workers, supervisors and family members (Chu *et al.*, 2003). An employee who is highly supported by a social support system consisting of co-workers, supervisors and family members, can buffer stress. Price & Mueller's model indicates that social support could raise employees' job satisfaction.

### **Control Variables**

Control variables, such as age, education level, rank and tenure are related to job satisfaction and other organizational variables (Price & Mueller, 1981).



Control variables are not shown in the model specifically because they are used to control confounding and to enhance precision.

#### **2.3.4 Nurse retention**

Many health care organizations strive to retain their staff. The main reasons why nurses should be retained are to minimize the high cost of recruitment and orienting new staff. Predictors of nurse retention include supervision, work environment, organization and context-specific, personal factors such as experience, education, and age (Al-Ma'aitah *et al.*, 1996) Pay is considered as the most important predictor of nurse retention (Bare, 2004).

Another significance issue regarding the retention of nursing staff is lack of formal and informal mentorship, which occurs partly because of the decrease in the amount of experience in the workforce (Bare, 2004). Thus the establishment of a relationship between novice and expert nurses is important for the safety of patients and the proper development of inexperienced or newly recruited staff. It is necessary to have experienced staff available to offer guidance, answer questions, and assist in difficult or unfamiliar situations (Bare, 2004). According to Polifroni (2002), mentoring can lead to better retention of new nurses, increased job satisfaction among new nurses, and improved patient care.

#### **2.3.5 Instruments used to measure job satisfaction**

There are several multidimensional job satisfaction instruments that are commonly used to measure job satisfaction. Based on an analysis done by Saane *et al.*, (2002) on

reliability and validity of available instruments, the following 4 were identified as the best tools for measuring job satisfaction:

- Mueller McCloskey Satisfaction Scale (MMSS) (1990),
- Price-Mueller Job Satisfaction Survey (JSS) (Price and Mueller, 1986),
- The Nurses Satisfaction Scale (NSS) (Ng, 1993),
- Measure of Job Satisfaction (MJS) (Traynor, 1993).

The four key instruments are briefly discussed below.

### **Mueller McCloskey Satisfaction Scale (MMSS)**

The multidimensional instrument used to measure nurses' job satisfaction and the one adopted for use in this study is the Mueller and McCloskey Satisfaction Scale (MMSS). In an effort to entwine the idea of job satisfaction multidimensionality in theory and instrumentation, Mueller and McCloskey created the Mueller and McCloskey Satisfaction Scale (MMSS) (Mueller and McCloskey, 1990). The authors' claim their aim was to produce a job satisfaction measure specifically for use in nursing that was reliable, valid and simple to use. There are 31 items and the response format is a five-point Likert scale ranging from 'very dissatisfied' (1) to 'very satisfied' (5).

### **Price-Mueller Job Satisfaction Survey (JSS)**

Price Mueller Job Satisfaction Scale instrument was created in 1981 to measure multiple dimensions of nurses' job satisfaction (Price and Mueller, 1981). This instrument proposes to measure five domains such as, routinization, intergration, distributive, justice, autonomy and promotional opportunity. The instrument utilizes a five point Likert type scale for 30 (Price and Mueller, 1981).

### **The Nurses Satisfaction Scale (NSS)**

The Nurses Satisfaction Scale (NSS) was developed by Ng (1993) to measure job satisfaction among nurse. The instrument is multidimensional and has 24 items. The response format is seven-point Likert Scale, ranging from 'strongly agree, (1) to 'strongly disagree' (7).

### **Measure of Job Satisfaction (MJS)**

The MJS by Traynor (1993) is a multidimensional instrument designed for use in the community nurse sector. It has 38 items. The stem question is 'how satisfied are you with this aspect of your job?' Respondents are asked to rate their degree of job satisfaction on a five – point Likert Scale, ranging from very dissatisfied including a neutral response choice.

## **2.4 Critical review of major issues**

After reviewing various literatures, it is evident that a wide range of variables relating to individual, social, cultural, organizational and environmental factors, affects the level of job satisfaction. These variables can be summarized as,

- **Individual factors:** Include personality, education and qualifications, intelligence and abilities, age, marital status, orientation to work.
- **Social Factors:** Include relationships with co-workers, group working and norms, opportunities for interaction, informal organization.
- **Cultural factors:** Include underlying attitude, beliefs and values.
- **Organizational factors:** Include nature and size, formal structure, personnel policies and procedures, employee relations, nature of work, technology and work organizations, supervision, and styles of leadership, management systems, and working conditions.

- **Environmental factors:** Include economic, social, technical and governmental influences.

The factors summarized above affect job satisfaction among certain individuals and their importance may differ from one setting to another.

Human resources are the most important assets in any organization and strategies are usually put in place to recruit and retain the best workers. To be able to retain workers managers must always understand and explore any factors that may be leading to satisfaction.

Whereas a lot of studies on factors influencing job satisfaction have been done in developed countries, little has been published from developing countries. This study will therefore identify predictors of job satisfaction among nurses working in a public health facility in a developing country setting. This study will also test whether factors identified in developed countries apply in our setting.



## CHAPTER 3 METHODOLOGY

### 3.0 Introduction

This study was adopted from a methodology from a study done by Mrayyan (2005). The researcher studied factors affecting job satisfaction among nurses working at a public health facility in Jordan and used the Muller McCloskey job satisfaction scale. Data was analyzed using descriptive and inferential statistics.

### 3.1 Study Design

This was a descriptive cross – section research design.

### 3.2 Setting and target population

The study was carried out among the 400 nurses working at Embu Provincial General Hospital.

#### **Inclusion Criteria**

- All nurses employed full time
- Nurses who have worked at least 1 year at Embu Provincial Hospital  
(Nurses rotate after every 3 months in the main 4 departments in the hospital – surgical, medical, pediatric , obstetrics and gynecology wards

#### **Exclusion Criteria**

- Nurses on part time employment, or study leave.
- Nurses at management positions e.g. matrons in charge of departments  
(Nurses in management positions were excluded because there may be differences in levels of job satisfaction related to their job responsibility)

### **3.3 Sampling design**

A systematic random sample of 110 Nurses was selected from the database of all nursing staff currently working at the hospital and meeting the inclusion criteria.

#### **3.3.1 Sample size determination**

Sample size was calculated using the William Cochrans method for a survey assuming 50% level of job satisfaction, a normal deviate (z) set at 95% (1.96), and 80% statistical power. There are 400 full time nurses working at Embu Provincial Hospital (See appendix 3 for details of the sample size calculation).

#### **3.3.2 Sampling Procedure**

Based on sample size required (110 nurses) and total population of nurses at the hospital (400 nurses), a systematic sampling procedure was employed whereby every 3<sup>rd</sup> nurse starting with nurse number one on the list was picked until a total of 110 nurses was obtained.

#### **3.3.3 Data collection procedures**

All the identified study participants were given the questionnaire to fill after providing a written consent. The researcher was available to clarify any issue on the instrument that may not be clear. Caution was taken to ensure that the researcher doesn't influence the responses of the nurses in the process of providing clarity.

### **Variables**

The dependent variable of this study was overall job satisfaction. Independent variables were the 10 dimensions of the Mueller McCloskey satisfaction scale namely, pay, scheduling of work, social support, co-workers and working environment,

,praise/recognition and autonomy, job involvement, promotion chances, workload and job stress. In addition, the following demographic variables were collected: sex, age, marital status, level of professional qualification, current work station(department), years of service in the civil service, years of service at Embu Provincial Hospital, and the most common work shift.

To ensure anonymity, no names or other identifying information was requested.

### **3.4 Research Instrument**

This study used a modified version of the Mueller and McCloskey satisfaction scale (MMSS), which is a well-established tool for measuring job satisfaction (Saane, 2003). Some questions were changed to make them context specific and relevant in Kenya.

The tool had 38 items rated on a 5 point likert scale. (5=very satisfied; 4= satisfied; 3=neither satisfied nor dissatisfied ( Not sure ) ; 2= dissatisfied; 1= very dissatisfied). Therefore, the higher numerical values represent greater levels of satisfaction.

The MMSS tool takes approximately 10 minutes to complete.

### **Psychometric properties of the Mueller and McCloskey scale**

Psychometric properties such as internal consistency, test-retest reliability, criterion – related and construct validity have been determined to be acceptable (Priscilla *et al.*, 2006; Saane , 2003).

Misener *et al.*, (1996) evaluated the suitability of Mueller and McCloskey scale in different health systems and concluded that the instrument was a reliable job satisfaction measure to use with different cultures. He further pointed out that the instrument was a useful “international measure of job satisfaction.”

### **Theoretical foundation of Mueller and McCloskey scale**

The Mueller and McCloskey scale was developed based on the theoretical framework of Maslow’s hierarchy of needs. The basic premise of Maslow’s works claims that self-actualization; the highest level of fulfillment cannot be attained until more basic needs are satisfied. In developing the tool Mueller and McCloskey considered job satisfaction as an important factor in striving for and reaching self actualization (Priscilla *et al.*, 2005).

### **Pre – test of instrument**

The research instrument was pre-tested and revised to remove ambiguity and customized to the Kenyan context.



### 3.5 Data analysis

Data was entered using EPI Info Version 6 Software package and later analyzed using STATA<sup>®</sup> statistical package.

Prior to data analysis, the survey questions were re-coded. A mean for each of the 10 sub categories (*Pay, scheduling of work, Social support, coworkers and working environment, praise/ recognition, autonomy, job involvement, promotional chances, workload, job stress*) of the job satisfaction scale was calculated. As the instrument is rated on a 5 point likert scale, any item having a mean value of above 3 was re-coded as “**satisfied**” while items scoring less than 3 was re-coded as “**not satisfied**”

For the purpose of this study, overall level of job satisfaction was evaluated using the question “how satisfied are you with your job ? ” and scored on a 5 point likert scale (very dissatisfied, dissatisfied, not sure, satisfied, very satisfied). For analysis however, this was collapsed into 2 categories. Those indicating that they were satisfied or very satisfied were considered to be “**satisfied**” with their jobs, while all others were considered “**not satisfied**” with their jobs.

Statistical analysis involved the following 3 procedures:

- **Descriptive statistics**

Descriptive (means, standard deviations, frequencies) information for each of the demographic and organization related variables was calculated.

- **Univariate analysis**

Chi- square test of association between job satisfaction and the possible explanatory variables was conducted to identify demographic and organization factors that are significantly associated with job satisfaction.

- **Multivariate analysis**

Stepwise logistic regression procedures was done to identify predictors of job satisfaction.

Model for the logistic regression analysis is given by:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k + \varepsilon$$

Where: Y- is the dependent variable

$X_{1-n}$  – are the independent variables

$\beta_0$  is the constant

$\beta_{1-n}$  – are the regression coefficients or change induced in Y by each X

$\varepsilon$  is the error

Thus Y = Job satisfaction

$X_1$  = Pay

$X_2$  = Scheduling of work

$X_3$  = Social support

$X_4$  = Coworkers and working environment

$X_5$  = Praise/ recognition

$X_6$  = Autonomy

$X_7$  = Job involvement

$X_8$  = Promotion chances

$X_9$  = Job stress

$X_{10}$  = Age

$X_{11}$  = marital status

$X_{12}$  = years of service

$X_{13}$  = duty station

$X_{14}$  = level of professional education

Variables that were found to be significantly associated with job satisfaction were included into the logistic regression model. A probability level of <0.05 was used to

determine statistical significance. Adjusted odds ratios and 95% confidence intervals was calculated.

Logistic regression analysis has several advantages. The procedure doesn't require any normal distribution assumptions of the explanatory variables and doesn't assume linearity of relationships between dependent variable and independent variables. The technique allows for control of confounding variables and is therefore ideal for determining predictors of dependent variable.

## **Measurement of variables**

### **Job satisfaction**

This was measured by asking nurses how satisfied they were with their job on a 5 point likert scale .

### **Pay from government employment**

Nurse's level of job satisfaction to pay was measured in 2 dimensions: gross monthly salary and annual leave allowances.

### **Scheduling of work**

Nurse's level of job satisfaction to scheduling of work was measured in 5 dimensions: weekends offs, flexibility in scheduling their weekends offs, opportunity to work 8-5 schedules, compensation for their working weekends and total number of hours they work per month. Currently nurses are expected to work for 40 hours per week.

### **Social support**

Nurse's level of job satisfaction to social support was measured in 3 dimensions: opportunity for part time, maternity leave time (60 days), and child care facilities.

### **Coworkers and working environment**

Nurse's level of job satisfaction to coworkers and working environment was measured in 4 dimensions: the doctors they work with, nursing colleagues, availability of equipment for nursing care, and availability of supplies for nursing care.

### **Praise/ recognition**

Nurse's level of job satisfaction to praise/ recognition was measured in 4 dimensions: their immediate supervisor, recognition of their work from peers, recognition of their work from superiors, and the amount of encouragement and positive feedback from supervisor.

### **Autonomy**

Nurse's level of job satisfaction to autonomy was measured in 4 dimensions: their control over work, their amount of responsibility, their control over what goes on in their ward, and their opportunity to go for further training other than workshops.

### **Job involvement**

Nurse's level of job satisfaction to job involvement was measured in 3 dimensions: their participation in decision making at the hospital, their involvement in planning for work schedule, and their involvement in choosing work station.



### **Promotion chances**

Nurse's level of job satisfaction to promotion chances was measured in 2 dimensions: current procedures for promoting nurses and schemes of service for nurses.

### **Job stress**

Nurse's level of job satisfaction to job stress was measured by asking respondents " how would you rate your job relate stress levels" . This was rated on a 1- 5 point likert scale from (1 ) "*not stressed at all*" to (5) "*Very stressed*".

### **Age**

Age was calculated by subtracting the year a nurse was born from the current year.

### **Marital status**

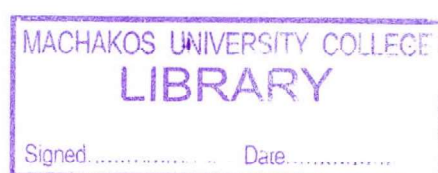
Marital status was assessed in 4 dimensions: 'married', "cohabiting", "single", or "divorced".

### **Years of service**

This was calculated by subtracting the year when the nurses started working from the current year.

### **Duty station**

Nurses were asked to state their current duty station. The key duty stations are: medical ward, labour ward, children's ward, surgical ward, out patient, gynae ward, T.B ward, and amenity.



## Level of professional education

Respondents were asked to state their highest professional qualification as per the following options: certificate, diploma, bachelor of nursing and masters' level/ PhD.

**Table 3.0: Codes for variables**

Variables included in the regression analysis were allocated dichotomous codes as shown in table 3.0 below.

	<b>Variables</b>	<b>Code</b>	<b>Definition</b>
1	Overall Job Satisfaction	1	Satisfied
		0	Dissatisfied
2	Pay	1	Satisfied
		0	Dissatisfied
3	Scheduling of work	1	Satisfied
		0	Dissatisfied
4	Social Support	1	Satisfied
		0	Dissatisfied
5	Coworkers and working environment	1	Satisfied
		0	Dissatisfied
6	Praise/Recognition	1	Satisfied
		0	Dissatisfied
7	Autonomy	1	Satisfied
		0	Dissatisfied
8	Job involvement	1	Satisfied
		0	Dissatisfied
9	Promotion Chances	1	Satisfied
		0	Dissatisfied
10	Job stress	1	Not Stressed
		0	Stressed
11	Age	1	35 <sup>+</sup> Years
		0	34 & below years
12	Marital status	1	Married or Cohabiting
		0	Otherwise
13	Years of service	1	10 <sup>+</sup> years
		0	Less than 10 years
14	Duty Station	1	Out patient department
		0	In patient department
15	Level of Professional education	1	Diploma/Bachelors/Masters /PHD
		0	Certificate

Source: (Mrayyan,2006)

## CHAPTER 4

### FINDINGS AND DISCUSSION

#### 4.0 Introduction

This study set out to establish the level of job satisfaction among nurses working at Embu Provincial Hospital, and to identify the social demographic and organization factors that affect job satisfaction. The study also aimed at identifying the demographic characteristics of dissatisfied nurses, and to finally discuss the implications of the research findings on the human resource management policies and strategies for retaining health workers. This chapter is therefore structured around the research questions.

#### 4.1 Description of the sample population

Data on demographic and work related characteristics were collected to establish the background of nurses working at the hospital. Descriptive statistics were used to describe the sample. Table 4.0 shows a summary of key characteristics of nurses working at the hospital at the time of the study.

As shown in table 4.0, 94.3% of the nurses were female with a mean age of 45 years.

Only 27 % of the nurses were below 35 years. The skewed distribution of the age could be as a result of freeze of employment of nurses in the 1990s that was effected as part of the Structural Adjustment Programs promoted by the world bank.

It was also noted that the younger nurses had left for greener pastures abroad or in the local private sector.

**Table 4. 0 : Demographic and work related characteristics of Nurses at Embu Provincial Hospital. (n= 105)**

<b>Variable</b>	<b>N</b>	<b>(%)</b>
<b>Marital Status</b>		
Married	88	(84)
Single/Never Married	12	(12.5)
Divorced	2	(1.9)
Widow/Widower	1	(1.0)
Missing Data	1	(1.0)
<b>Age (years)</b>		
< 25	2	(2.9)
26-30	9	(8.6)
31-35	16	(15.2)
36-40	14	(13.3)
41-45	16	(15.2)
46-50	33	(31.4)
51-55	15	(14.3)
<b>Education</b>		
Certificate	63	(60.0)
Diploma	36	(34.3)
Bachelor of Nursing	4	(3.8)
Masters	1	(3.8)
Missing Data	1	(1.0)
<b>Duration worked at Embu PGH (Years)</b>		
1-5	24	(23.3)
6-10	23	(22.3)
11-15	22	(21.4)
16-20	17	(16.5)
21-25	10	(9.7)
26-30	5	(4.9)
< 1 Year	2	(1.9)
Missing Data	2	(1.9)
<b>Current Work department</b>		
Medical ward	20	(19.2)
Labour Ward	15	(14.4)
Children's Ward	14	(13.5)
Surgical ward	11	(10.6)
Outpatient	17	(16.9)
gynecology ward	16	(15.4)
Amenity Ward	11	(10.6)
Missing data	1	(1.0)
<b>Current work shift</b>		
Day	45	(42.9)
Afternoon/evening	28	(26.7)
Night	26	(24.8)
Others	5	(4.8)
Missing data	1	(1.0)
<b>Sex</b>		
Male	6	( 5.7)
Female	99	(94.3)

Source: (Survey data)



The fact that on average most of the nurses will be retiring in the next 10 years should worry the nursing services administrators as this will lead to severe shortage of nurses in the near future. The current mandatory retirement age for civil servants is 55 years, however someone can opt to retire earlier after reaching 50 years. This situation will change only if the government increases the current rate of recruitment of 600 nurses per year as per the medium term economic framework being implemented by the Ministry of Health (MOH, 2007). There are 5000 public health facilities and the current recruitment rate will not have a significant change in staffing levels at a particular facility

Eighty four percent of all the nurses at the hospital were married and the rest were either single, divorced or widowed. Most of the married nurses are settled with their families in Embu and they reported that they were unlikely to move out of the area unless on transfer. Nurses' advanced age and marital status were other factors that discouraged them from leaving the civil service to go to insecure jobs in the private sector or abroad.

Of all the nurses at the hospital, close to two thirds (60%) had a certificate level of professional nursing, 34.3% had diploma while 3.8% had graduate level qualification. The low levels of professional qualification is a reflection of the human resources policies of the 1980s and 1990s that encouraged short professional training programs in order to fill the acute nursing staff shortages that were experienced then. Certificate level nursing training program is 2 years long. Until recently, there have been limited opportunities for university level training in nursing. Further, the civil service has been unable to attract and retain graduate nurses due to better remuneration in the private sector.

Nurses were evenly spread in various units, but when collapsed into inpatient and outpatient departments, only 17% were allocated duties in the out-patient department. This distribution of the workforce is related to the core function of the hospital which is to provide specialized care for severely sick patient referred from rural health facilities. Severely sick patients are likely to require inpatient care. Outpatient services are limited to review of referrals and emergencies.

About 75% of the nurses work on the day shifts that run from 7.30 am to 6.30 pm. This distribution is related to the huge workload during the day when most of clinical and nursing duties are done.

The rest of the findings and discussions are presented according to the research questions.

#### **4.2 Overall job satisfaction of nurses at Embu Provincial Hospital**

Overall level of job satisfaction among nurses in Embu PGH was low with only 45% having reported that they were satisfied with their work. This finding is consistent with the study by Mrayyan (2006) in Jordan which showed that most of the nurses were dissatisfied with their jobs. Similar findings have been reported in China (Hu and Liu, 2004) and Korea (Lee *et al*, 2004).

This indicates that nurses in many developing and middle level countries are dissatisfied with their jobs and this is a worrying trend because it is associated with high turnover of nursing staff. Dissatisfaction with current nursing jobs is one of the factors contributing to migration of nurses to developed countries (Davlo *et al.*, 2003). Job

satisfaction is therefore critical to retaining and attracting a well qualified nursing workforce.

### **4.3 Demographic and organizational factors affecting job satisfaction**

To answer the question on demographic and organization factors affecting job satisfaction, univariate and multivariate statistical analysis methods were used as follows:

Respondents were asked to rate their level of satisfaction as regards key organization factors on a likert scale of 1 – 5. Higher value indicated higher level of satisfaction. Respondents who indicated they were moderately or very satisfied were collapsed and categorized as “satisfied”. All others were categorized as “dissatisfied”.

Secondly, univariate analysis was done , cross tabulating overall satisfaction with demographic and organization factors. Chi-square test of association was used to identify which independent variables were statistically associated with job satisfaction. All independent variables that were found to be statistically associated with overall job satisfaction were included in a linear regression model to identify predictors of job satisfaction



### 4.3.1 Level of satisfaction with selected organization factors

Table 4.1 shows level of satisfaction as regards various organizational factors known to affect job satisfaction. A large proportion of nurses were reportedly dissatisfied with salary (85.7%), the working environment which includes the availability of equipment and supplies (76.2%), promotion chances consisting of scheme of service and procedures for promotion of nurses (87.7%) and job involvement which covers issues like participation in decision-making as well as involvement in choosing work stations and planning for work schedules (72.4%).

**Table 4.1 : Level of satisfaction with organizational factors**

Variable	Satisfied	
	Yes N (%)	No N (%)
Salary	15 (14.3)	90 (85.7)
Scheduling of work	63 (60.0)	42 (40.0)
Social support	69 (65.7)	36 (34.3)
Working environment	25 (23.8)	80 (76.2)
Praise and recognition	61 (58.1)	44 (41.9)
Autonomy	52 (49.5)	53 (50.5)
Promotion chances	13 (12.4)	92 (87.7)
Job involvement	29 (27.6)	76 (72.4)
Job stress level	80 (76.2)	25 (23.8)

Source (Survey data)

The nurses were however, satisfied with the job stress level (76.2%), scheduling of work (60%), social support which included support from workmates, superiors and family (65.7%), as well as praise and recognition (58%). 50% of the nurses were satisfied with the level of autonomy in the workplace .



Each of the organization factors is discussed below comparing the findings with those of the research done by Mrayyan (2006) in Jordan. Comparison is also made with findings from other related studies.

### **Social support**

Close to two-thirds of nurses were satisfied with social support and this finding is consistent with findings by Mrayyan (2006). Issues related to social support and its association with satisfaction have been found in other studies notably Raeda (2004), Campbell (2004), Khowaja (2004) and Kovner (2006). Campbell (2004) argues that *“work environments in which supervisors and subordinates consult together concerning job tasks and decisions and in which individuals are involved with peers in decision-making and task definition are positively related to job satisfaction.”* Further, transformational, supportive and visionary leaders with participative leadership style are reported to influence nurses' satisfaction (Majid, 2005).

### **Job Related Stress**

Job related stress contribute to organization inefficiency, high staff turnover, absenteeism because of sickness, decreased quality and quantity of care, increased cost of health care and decreased job satisfaction (Raeda, 2004).

Job related stress is defined as work situation perceived by the worker as threatening because of the mismatch between the situation's demands and the individuals coping abilities (Failla, 1999).

Therefore, given the importance of having a stress free workplace, it was gratifying to note that 76.2% of the respondents reported that they were satisfied with the current level of job related stress. This finding is contrary to findings by Raeda (2004) who reported that up to 60% of nurses working in some public health facilities in the U.S were stressed. Mrayyan also found that at least 40% of the nurses in her study were stressed at the workplace.

The disparity in the findings could be related to differences in tools used to measure job related stress, definition of what entails stress, work culture, and levels of social economic development. The differences could also be related to coping mechanism and satisfactory levels of social support from health managers and family available to nurses working in Embu Provincial Hospital. 65.7% of the respondents reported that they were satisfied with the social support accorded to them by supervisors, colleagues and family. It's now well established that social support promote well being and coping abilities of workers (Lee et al, 2004). Social support networks should therefore be enhanced to maintain the current level of satisfaction with work related stress.

### **Praise and recognition**

61% of nurses reported that they were satisfied with aspects of praise and recognition from their superiors at the institution. Studies by Khowaja (2005) indicate that *"recognition is a vital part of job satisfaction for nurses and ...recognition of good performance is an important aspect that raises job satisfaction."* (p.35). Curtis (2007) says that findings from a study of nurses in Ireland showed that interaction (under which recognition could fall), made the greatest contribution to nurses' current level of job

satisfaction. Mrayyan (2005) suggests that *more encouragement and feedback have to be given for nurses to promote their satisfaction.*

### **Salary**

85.7% of the nurses were dissatisfied with their pay . They also identified pay as the most important issue affecting their job satisfaction. Complaints about salary is an almost universal problem as reported in several studies . (Mrayyan, 2006, Curtis, 2007, Liu and Hu, 2007, Lee, 2004). Mrayyan (2006) in her study in Jordan noted that salaries offered to nurses working in the public sector were not meeting their basic needs considering the current cost of living. In a study done by Liu and Hu (2007) in China, it was noted that over 60% of the nurses were dissatisfied with their pay and was also the least satisfying aspect of their work . Similarly a study done in Ireland which is a developed country pay was ranked the most dissatisfying aspect among nurses working in the public health sector ( Bare,2000). It has been established that insufficient salaries can lead to nurses' dissatisfaction and turnover (Fletcher 2001, Greipp 2003).

### **Working environment**

71% of the respondents reported that they were dissatisfied with their working environment that include issues such as availability of basic equipment and supplies. This is contrary to what was reported by Mrayyan ( 2006) in her study in Jordan. Jordan being an oil rich gulf state has been able to sufficiently equip public health facilities . Availability of equipment enable nurses to effectively execute their duties while at the same time minimizes the risk of exposure to diseases such as HIV and other blood borne pathogens.



The government of Kenya has been trying to equip hospitals and ensure that essential supplies are available to enable nurses perform their duties efficiently, effectively and in a safer environment. The government should therefore continue with this agenda and ensure that public health facilities have at least the basic working tools that enable nurses to provide acceptable quality of health care.

### **Workload**

Nurses in Embu Provincial hospital were satisfied with their workload contrary to what was expected considering the increasing patient load in most public health facilities. This finding is also contrary to what Mrayyan (2006) found in Jordan.

The differences can be explained by the perception of the level of fairness in the distribution of the existing workload (distributive justice) among nurses rather than the actual workload. As noted by Kovner” *If everyone is working hard, that might not affect satisfaction. However, if some people have higher workloads and fewer days off, the lack of justice could lead to dissatisfaction.*” (Kovner, 2006:77).

Another reason to explain the disparity between Mrayyan (2006) study and the Embu study is probably the level of resilience among nurses in Kenya. Most of them may have been accustomed to working in difficult circumstances unlike their counterpart in Jordan.

Other studies done in Turkey and Pakistan found workload to be a cause of dissatisfaction among nurses (Zeytinoglu, 2007, Khowaja, 2005).



## **Chances for promotion**

As shown in table 4.1, 87.7% of the respondents reported that they were dissatisfied with opportunities for promotion. They also mentioned opportunities for promotion as the 3<sup>rd</sup> most important issues affecting job satisfaction among the nurses at Embu Provincial hospital. The finding was contrary to what was noted by Mrayyan (2006) but similarly to a study in China (Lu and Hiu, 2004).

Nurses complained that the process of promoting nurses was riddled with corruption and nepotism. They also observed that politically well connected people got promotion at the expense of more deserving and qualified staff. These practices were noted to demoralize the nursing staff and could partly explain the differences in the findings between the Embu and Jordanian studies.

According to the current scheme of service nurses with certificate level of education can accelerate their promotion by upgrading through further training to diploma level. However, there are limited opportunities for training at the Kenya Medical Training College and study leave is not always guaranteed.

## **Autonomy**

Autonomy is another important factor in increasing job satisfaction. About 50% of the nurses were dissatisfied with the levels of control and decision-making at Embu PGH. Curtis (2007) in a study done in Ireland found that nurses in that country ranked autonomy as second after pay as the most important factor that affects job satisfaction. Mrayyan (2006) found an association between autonomy and overall job satisfaction. Further, Khowaja *et al* (2005) found 'rigid attitude of nursing management' to be one of

the main dissatisfying factors in nursing management. Autonomy leads to creativity in solving everyday challenges and hence contributes to job satisfaction.

#### **4.3.2 Association between overall job satisfaction and independent variables (demographic and organizational factors)**

Univariate analysis was done to identify the strength of association between overall job satisfaction and independent variables (demographic and organizational factors).

Chi square test of association was used to analyze the relationship between dependent variable ( overall job satisfaction) and independent variables ( demographic and organizational factors). A chi square with p value of equal to or less than 0.05 was considered to be statistically significant (Mrayyan,2006). Tables 4.2 and 4.3 show results of the univariate analysis.

**Table 4.2: Demographic factors versus overall job satisfaction (n=105)**

Variables	Satisfied		Chi-square P.value
	Yes N (%)	No N (%)	
<b>Age Group</b>			
40 and below years	16 (34)	21 (43.1)	.344
41 and above	31 (66.0)	33 (56.9)	
<b>Marital Status</b>			
Married/cohabiting	7 (43.8)	49 (55.7)	.966
Otherwise	9 (56.3)	39 (44.3)	
<b>Highest nursing qualification</b>			
Certificate	29 (46.0)	34 (54.0)	.647
Diploma/masters/PhD	17 (41.5)	24 (58.5)	
<b>Duration worked at Embu PGH</b>			
Less than 10 years	17 (36.2)	30 (63.8)	.114
10+ years	26 (48.1)	28 (51.9)	
<b>Duty Station</b>			
In-patient	41 (45.6)	49 (54.4)	.850
Out-patient	6 (42.9)	8 (57.1)	
<b>Gender</b>			
Male	3 (50.0)	3 (50.0)	.790
Female	44(44.4)	55 (55.6)	

Source (Survey data)

**Table 4.3: Organizational factors versus overall job satisfaction (n=105)**

Variables	Satisfied		Chi-square P.Value
	Yes (%)	No (%)	
Salary	15 (14.3)	63 (60.0)	.200
Scheduling of work	63 (60)	42 (40)	.749
Satisfaction with social support	69 (65.7)	36 (34.3)	.011*
Satisfaction with working environment	34 (32.4)	71 (67.6)	.045*
Satisfaction with praise and recognition	61 (58.1)	44 (41.9)	.142
Satisfaction with autonomy	34 (32.4)	71 (67.6)	.045*
Satisfaction with promotion chances	13 (12.4)	92 (87.6)	.482
Satisfaction with job involvement	29 (27.6)	76 (72.4)	.375
Satisfaction with job stress level	80 (76.2)	25 (23.8)	.709

\*Chi-square p.value significant at 0.05%

Source ( Survey data)

The results indicate that there is statistically significant association between overall job satisfaction with social support (  $p=0.11$ ), work environment (  $p=0.045$ ) and autonomy ( $p=0.045$ ). Other variables do not show as strong correlations with overall job satisfaction indicating that organizational factors are the most important factors in determining job satisfaction in our environment.

### 4.3.3 Regression of organizational factors on overall job satisfaction

Independent variables that were statistically associated with overall job satisfaction were subjected to linear regression. Overall nurses' job satisfaction was regressed on organizational factors to identify if they could predict job satisfaction. The results of the regression analysis are summarized in table 4.4 .

**Table 4.4 Results of multiple regression analysis**

	B	Sig.	Exp(B)	95% C.I for EXP (B)	
				Lower	Upper
Work environment	.698	.013*	2.010	0.872	3.993
Social support	.844	.028*	2.326	1.078	3.559
Autonomy	.017	.348	5.854	2..511	16.723
Praise & Recognition	.370	.039*	.932	0.554	0.989
Constant	1.504	.008	.222	.286	3.032

\*p<0.05

Source: (Survey data)

The above results indicate that, job satisfaction was significantly associated with work environment ( $p=0.013$ ), Social support ( $p=0.028$ ) , praise and recognition ( $p=0.039$ ). We can therefore conclude that these organization related factors predict job satisfaction among nurses at Embu Provincial Hospital.

In contrast, Mrayyan found that personal correlates such as age, length of service and level of education were the best predictors of job satisfaction in Jordan. The older nurses ( more than 35 years), who had worked more that 10 years and had at least a a graduate level nursing qualification were reported to be more satisfied . According to the Jordanian nursing scheme of service, all the three factors influence salary scale which is based on years of service and academic qualification. An older nurse with



graduate level qualification is expected to be at a high salary scale and thus more satisfied with their jobs. Unfortunately in Kenya, promotions and administration of scheme of service faces many bureaucratic and administrative problems leading to delays in effecting promotions. As mentioned earlier, 88% of the nurses were dissatisfied with their promotion opportunities. It is also significant to note that 86% of the nurses were dissatisfied with their salaries and further reported that the problem of inadequate compensation was the most important issue affecting their satisfaction.

The contrast in the finding could also be explained by differences in the general working environment between hospitals in Jordan and Kenya. Given the level of economic development, largely supported by the huge oil revenues, public hospitals in Jordan are well funded and have essential equipments and supplies in contrast to the situation in Kenya. The Kenyan public health system has suffered many years of under funding resulting in chronic shortage of essential supplies, and lack of basic equipment to enable provision of quality health services. It is well established that availability of working tools including essential supplies affect nurses job satisfaction (McNeese-smith, 1999).

Another important difference between Kenya and Jordanian public health system is the availability of leadership and management skills training in Jordan, that are provided as part of the continuous professional program for nurses. It is a requirement for nurses managers to attend prescribed number of credits in leadership and management courses before being considered for promotion. Leadership and management courses ensures that managers have relevant skills to provide supportive work environment, and practices that enhance job satisfaction such as recognition and praise. Although

such courses are sometimes available for nurses in the Kenyan public health sector, they are not routinely provided and are not entrenched in continuous professional program. Moreover, continuous professional development programs are provided in adhoc manner.

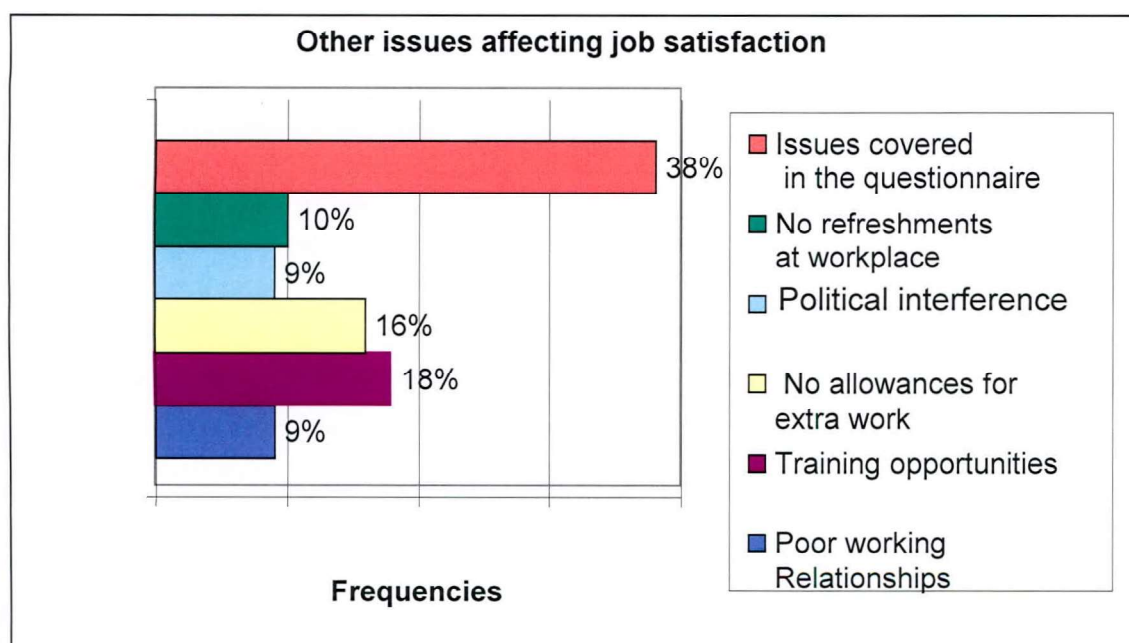
During the study, it was also noted that the public health sector has over the last 5 years received significant donor funding particularly for HIV. There was clear evidence of differences in the working environments in wards which were treating HIV / TB patients.. These wards were better equipped, well maintained and even had TV sets. A number of the nurse working in HIV wards had benefited from leadership and management programs which are usually part of the donor support packages to the health sector. Considering all these advantages it was not surprising to note that nurses working in HIV wards were more likely to report that they were satisfied with their jobs.

The regression analysis results showed that there was no significant association between job satisfaction and autonomy (  $p= 0.348$ ). This finding could be partly due to the fact that autonomy was measured subjectively, and individual perceptions regarding same level may have varied. It is also possible that autonomy is related to other factors measured such as job involvement, social support and was therefore a confounding factor.

### 4.3.4 Health workers perception of the most important factor affecting job satisfaction

Respondents were asked to mention other factors that affected their job satisfaction other than those covered by the questionnaire. They were further asked to identify one issue they thought was the most important factor affecting their job satisfaction. Fig 4.0 and 4.1 illustrates their responses. Responses that included factors covered in the questionnaire were classified as “issues covered in the questionnaire”.

**Figure 4.0 Other issues affecting job satisfaction**



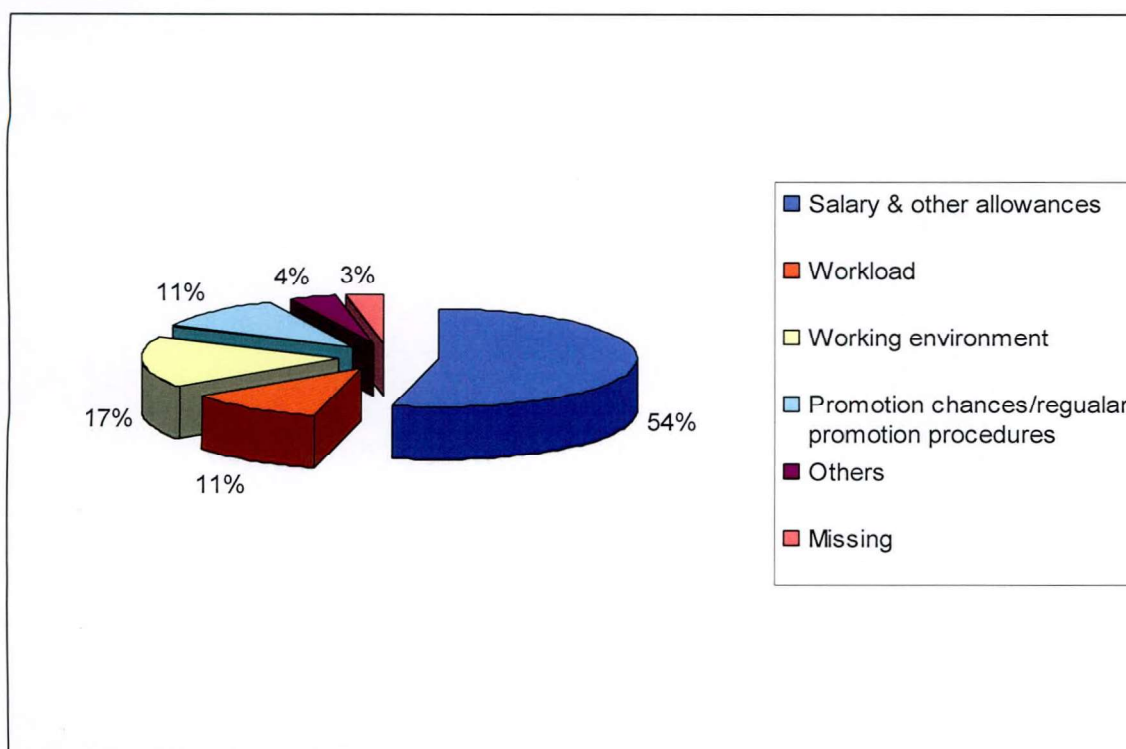
Source ( Survey data)

Other issues mentioned by the nurses to be affecting their level of job satisfaction include lack of training opportunities, lack of allowances for extra work such as overtime and night shift, lack of transport from work at night, lack of refreshment such as tea and snacks and political interference. The nurses complained that local politicians occasionally demand for favors and ignore administrative procedures in the hospital. For example, politicians demand patients they consider to be their supporters to have



their hospital bills waived even when they don't qualify according to the existing regulations. This has become more rampant in 2007 in an attempt to get political mileage in the forthcoming elections.

**Figure 4.1 Nurses perception of the most important factors affecting job satisfaction.**



Source: ( Survey data)

Nurses were asked to mention the most important factor affecting job satisfaction. As shown in fig 4.1. 54% mentioned salary as the most critical factor affecting their job satisfaction. This findings confirms that nurses are not happy about their current remuneration package. In fact 85.7% of them reported that they were not satisfied with their pay. This is a pointer that nurses consider their pay package as inadequate compensation for their work, and given an option they are likely to move from the civil service. About 50% of the nurses stated that they intend to leave the civil service in the near future.



## **Intention to leave**

The fact that about half of the nurses are considering leaving the civil service is a worrying fact considering the relative age of nurses, the freeze in new recruitment, staff shortage and the increase in population that create demand for medical services. Expression of intention to leave is the best predictor of actual departure (Hu and Liu, 2004). Other studies have demonstrated that intention to leave is related to overall satisfaction (Hu and Liu, 2004 and Mrayyan, 2005). Mrayyan (2005) asserts that job dissatisfaction is one predictor of burnout and turnover among nurses. Hu and Liu reported a significant association between job satisfaction and intention to leave the organization and profession (Hu and Liu, 2004). Strategies for retention of nurses need to be considered and this work is one way of contributing towards this end by identifying the factors that lead to dissatisfaction. Some of the factors can be addressed without extra cost to the exchequer.

## **4.4 Demographic characteristics of dissatisfied nurses**

The study also sought to establish the demographic characteristics of the nurses who reported that they were dissatisfied with their jobs. Of those dissatisfied, 94.8% were female nurses, 59% had certificate level nursing qualification, 85% were married and 56.9% were above 41 years old. The study didn't find any statistically significant differences between the demographic characteristics of dissatisfied nurses and those who were satisfied.

Despite the high level of dissatisfaction in the study group, most nurses have not left due to a number of reasons such as schooling of children, family ties ( 85% of them were married) and job insecurity in the private sector. During the study it was noted that most of the nurses have bought property in the area or originate from the districts served by the Embu PGH.

## CHAPTER 5

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### **5.0 Summary of key findings**

Findings from the study indicate that only 44.8% of the nurses were satisfied with their job. The nurses were satisfied with the organizational factors such as social support, praise/recognition, autonomy, job related stress and scheduling of work. The respondents were dissatisfied with the following factors: pay, working environment, promotion chances and job involvement. Findings also indicate that nurses were dissatisfied with the training opportunities and promotions. In overall, nurses at Embu Provincial General Hospital consider pay as the single most important factor affecting their job satisfaction

When the organizational and demographic factors were regressed on overall job satisfaction, results showed that predictors of job satisfaction among nurses at Embu Provincial Hospital are work environment ( $p=0.013$ ), Social support ( $p=0.028$ ) ; and praise and recognition ( $p=0.039$ ).

#### **5.1 Conclusions**

In this study, determinants of job satisfaction were social support, working environment and praise and recognition. The findings also show that organizational factors are the most important factors in determining job satisfaction in our environment when compared with personal correlates.

Job dissatisfaction, combined with intention to leave and an ageing nursing workforce, will negatively affect the operations of the health system in the near future. This issue is critical considering the increasing disease burden and the importance of human resource in the health sector.

The finding that over 90% of nurses were dissatisfied with their pay, and 44.8% have expressed intention to leave in the near future, gives credence to the on-going reforms aimed at improving remuneration of health workers without reference to the existing civil service remuneration structures.

The study further supports the importance of ongoing efforts to improve the working environment by ensuring availability of essential supplies and equipment.

The findings of this study have implications for nursing practice, policy and research.

## **5.2 Recommendations**

### **5.2.1 Policy and practice**

#### ***Salary and allowances***

There is need to explore new ways to compensate nurses for working long hours, weekends and night shifts. One option of addressing this without other professions or civil servants, complaining is to introduce new allowances eg extraneous allowances. Extranous allowances have been successfully introduced in the judiciary to address the shortage of lawyers in the public sector. Introduction of new allowances will contribute towards job satisfaction while costing the government less in the long run in terms of pension costs when the nurses retire.



### ***Create enabling environment***

Organizational factors such as praise and recognition in addition to providing essential tools are known to affect job satisfaction . This factors can partly be enhanced by training managers on leadership and management skills.

Recognizing the importance of social support in the workplace, nursing managers must explore strategies that enhance job satisfaction such as supportive supervision. Supportive supervision promotes peer to peer learning and encourages a nurturing environment in the workplace

### ***Streamline procedures for promotion***

Current problems hindering implementation of scheme of service and promotions should be investigated and appropriate actions taken. Recognizing that some nurses have failed to be promoted unfairly, it would be prudent to consider mass promotions to correct the current problems of stagnation in one job group beyond the stipulated three years. Some nurses reported that they had stagnated in one job group from more than 10 years.

### ***Training***

The ministry of Health should increase nurses opportunities for personal development through training. This can be done through aggressively marketing distance learning programmes that are being offered by Kenya Medical Training College (KMTTC) and local universities. Training will accelerate promotions particularly for nurses with certificate level qualification.

### ***Equipment***

The government should continue investing in equipment and supplies in order to provide health workers with working tools and create an enabling environment. This will enhance job satisfaction and improve quality of care.

### ***Recruitment***

Noting that the nursing population at Embu PGH is aging with a mean age of 45 years, the government needs to urgently scale up the recruitment of additional health workers.

#### **5.2.2 Areas for further research**

- Given the level of job satisfaction, it will be important to study the impact of the low overall job satisfaction among nurses on quality of care and clinical outcomes.
- Explore reasons why almost half of the nurses intend to leave the civil service with a view to designing staff retention strategy.
- Conduct a qualitative study to identify problems with the current system of promotion and training of nurses. There were many complaints about these two issues.

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## Appendix 1: Mueller McCloskey Job satisfaction survey

### Part 1: Demographic questionnaire

Please respond to the following questions by placing a check ( ✓ ) after the appropriate response. If you do not find the exact answer for your case choose the response closest to your case.

1	How old are you?	<ol style="list-style-type: none"> <li>1. less than 25 yrs</li> <li>2. 26-30 years</li> <li>3. 31- 35 years</li> <li>4. 36-40 years</li> <li>5. 41-45 years</li> <li>6. 46-50 years</li> <li>7. 51-55 years</li> </ol>
2	What is your current status?	<ol style="list-style-type: none"> <li>1. Married</li> <li>2. Cohabiting</li> <li>3. Single/never married</li> <li>4. Divorced</li> </ol>
3	What is your highest qualification in nursing?	<ol style="list-style-type: none"> <li>1. Certificate ( enrolled)</li> <li>2. Diploma (registered)</li> <li>3. Bachelor of nursing</li> <li>4. Masters</li> </ol>
4	Which is your current shift?	<ol style="list-style-type: none"> <li>1. Day</li> <li>2. Afternoon/evening</li> <li>3. Nights</li> <li>4. Others</li> </ol>
5	Which year were you employed?	
6	How long have you worked at Embu provincial general hospital?	<ol style="list-style-type: none"> <li>1. 1-5 years</li> <li>2. 6-10 years</li> <li>3. 11-15 years</li> <li>4. 16-20 years</li> <li>5. 21-25 years</li> <li>6. 26-30 year</li> </ol>
7	Which department are you currently working?	<ol style="list-style-type: none"> <li>1. Medical ward</li> <li>2. Labour ward</li> <li>3. children's ward</li> <li>4. Surgical ward</li> <li>5. Outpatient</li> <li>6. gynae ward</li> <li>7. TB ward</li> <li>8. Amenity</li> </ol>
8	Do you intend to leave the civil service in the future	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. NO</li> </ol>

## Part 2: Factors affecting job satisfaction

Please indicate your level of satisfaction with the following elements in your job as follows:

- 1 = Very dissatisfied**
- 2 = Moderately dissatisfied**
- 3 = Neither satisfied nor dissatisfied (neutral)**
- 4 = Moderately satisfied**
- 5 = Very satisfied**

Variable of job satisfaction	Level of satisfaction				
<b>(1) Pay</b>					
<i>How well are you satisfied with ?</i>					
<ul style="list-style-type: none"> <li>• Gross salary?</li> <li>• Annual Leave period?</li> <li>• Allowances eg housing, risk allowances?</li> </ul>	1	2	3	4	5
	1	2	3	4	5
	1	2	3	4	5
<b>(2) Scheduling of work</b>					
<i>How well are you satisfied with:</i>					
<ul style="list-style-type: none"> <li>• Number of weekends offs?</li> <li>• Flexibility in scheduling your weekends off?</li> <li>• Opportunity to work 8-5 schedule?</li> <li>• Compensation for your working weekends?</li> <li>• Total number of hours you work per month?</li> </ul>	1	2	3	4	5
	1	2	3	4	5
	1	2	3	4	5
	1	2	3	4	5
	1	2	3	4	5
<b>(3) Social support</b>					
<i>How well are you satisfied with:</i>					
<ul style="list-style-type: none"> <li>• Opportunity for part time?</li> <li>• Maternity leave time (60 days)?</li> <li>• Child care facilities?</li> </ul>	1	2	3	4	5
	1	2	3	4	5
	1	2	3	4	5
<b>(4) Coworkers and working environment</b>					
<i>How well are you satisfied with :</i>					
<ul style="list-style-type: none"> <li>• The doctors you work with?</li> <li>• Nursing colleagues?</li> <li>• Availability of equipments for nursing care</li> <li>• Availability of supplies for nursing care</li> </ul>	1	2	3	4	5
	1	2	3	4	5
	1	2	3	4	5
	1	2	3	4	5
<b>(6) Praise/recognition</b>					
<i>How well are you satisfied with:</i>					
<ul style="list-style-type: none"> <li>• Immediate supervisor?</li> <li>• Recognition of your work from peers?</li> <li>• Recognition of your work from superiors?</li> <li>• Amount of encouragement and positive feedback?</li> </ul>	1	2	3	4	5
	1	2	3	4	5
	1	2	3	4	5
	1	2	3	4	5

<b>(7) Autonomy</b> <i>How well are you satisfied with the:</i> <ul style="list-style-type: none"> <li>Your control over work?</li> <li>Your amount of responsibility?</li> <li>Control over what goes on in your ward?</li> <li>Opportunities to go for further training other than workshops</li> </ul>					
	1	2	3	4	5
	1	2	3	4	5
	1	2	3	4	5
	1	2	3	4	5
<b>(8) Job involvement</b> <i>How well are you satisfied with the:</i> <ul style="list-style-type: none"> <li>Your participation in decision making at Embu PGH?</li> <li>Your involvement in planning for work schedule,</li> <li>Your involvement in choosing work station</li> </ul>					
	1	2	3	4	5
	1	2	3	4	5
	1	2	3	4	5
<b>(10) Promotion chances</b> <i>How well are you satisfied with the:</i> <ul style="list-style-type: none"> <li>Current procedures for promoting nurses</li> <li>Scheme of services for nurses</li> </ul>					
	1	2	3	4	5
	1	2	3	4	5
<b>(11) Job stress</b> <i>In a scale if 1-5 how would you rate your current level of job related stress?</i>  1= <b>Not</b> stressed at all  2 = <b>Mildly</b> stressed 3 = <b>Not</b> sure 4 = <b>Moderately</b> stressed 5 = <b>Very</b> stressed	1	2	3	4	5
<b>( 12) How would you rate your overall level of job satisfaction</b>  1= Very <b>dissatisfied</b>  2 = Moderately <b>dissatisfied</b> 3 = Neither <b>satisfied</b> nor <b>dissatisfied</b> (neutral) 4 = Moderately <b>satisfied</b> 5 = Very <b>satisfied</b>	1	2	3	4	5
<b>(13) Other than the factors outlined above what other issues affect your job satisfaction?</b> <i>(List them and explain where possible)</i>					
<b>(14) Of all the factors listed above, in your opinion which is the most important factor affecting your job satisfaction?</b>					

## Appendix 2: Sample size determination

William Cochran's method (Cochran, 1997)

Sample size for proportion, n is given by:

$$n = \frac{n_0}{1 + n_0 / N}$$

- N = Total Number of eligible nurses = 400
- $n_0$  = Initial Sample Size
- n = True sample size



$$n_0 = \frac{z_{1-\alpha}^2 \hat{p}(1-\hat{p})}{d^2}$$

Where:

- $\hat{p}$  = 50% (Assumed proportion of nurses who are satisfied with their jobs)
- d = Margin of error = 0.06 (6%)
- Power of study =  $1 - \beta$  = 80%
- $\alpha$  = 0.5 (5%)

$$z_{1-\alpha}^2 (1.96)^2 = 3.84$$

$$n_0 = \frac{3.84 \times (0.5 \times 0.5)}{0.06^2} = \frac{0.96}{0.0036} = 196$$

$$n = \frac{196}{1 + 196/500} = \frac{196}{1.392} = 110 \text{ nurses}$$

**Study sample size is therefore 110**