

The Relationship between Nurses' Job Satisfaction and Nurses' Performance in the Public Health Care Sector in Yemen

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Abstract

Nurses play a prominent role in improving the quality of health services provided to patients and contributes to improving the performance of the health system. Thus, it becomes vital for health care institutions to pay attention to the level of satisfaction of nurses as a determinant of the level of performance of nurses working in it. Based on that, this study aims to determine the level of job satisfaction and performance among 220 nurses working in 13 public hospitals in the governorates of Aden and Abyan, Yemen. Moreover, examining the correlational relationship between nurses' job satisfaction and nurses' performance will be investigated. In addition to the correlational relationship, the effect of nurses' job satisfaction with its dimensions on their performance will be examined. To fulfill the study objectives, the researcher used a quantitative method in which a self-administered questionnaire was distributed and then analyzed using Pearson correlation and multiple regression in IBM SPSS Statistics ® (SPSS). The findings of the study show that the level of overall nurses' job satisfaction is low, and nurses' performance is poor. The result also reveals that overall nurses' job satisfaction positively correlated to nurses' performance. Moreover, the results also showed that Pay and Benefits are the most influential factors among other job satisfaction dimensions affecting nurses' performance.

Keywords: Nurses' job satisfaction; nurses' performance; public health; Yemen.

1. Introduction

Development of any organization is dependent on human resource, which is one of the indispensable assets through which other sources are usable and gain best returns. Since human resources are one of three principles of health system inputs including; physical capital and consumables, much focus is paid to human resources management by many health care systems worldwide (WHO, 2000). In addition, healthcare staff is considered one of the fundamental pillars of any healthcare system (WHO, 2010), therefore, considerable attention ought to take shape of practices by health organizations. Within health care systems, the quality of services delivered to patients in hospitals and the level of improvement of health sector performance is constantly related to nurses' performance (Tsfaye et., al 2015). Moreover, the satisfaction of employees such as nursing staff, enhance the efficiency of hospitals (Skitsou et al., 2015). Furthermore, nurses are worldwide known as the substantial element in the healthcare system (Alameddine et al., 2006), and the largest group of health-care professionals (Al-Ahmadi, 2009; Zarea et al., 2009). Additionally, as stated in Hughes (2006), nurses provide up to 80% of the health services provided in most health systems around the world. Thus, the quality of healthcare services depends heavily on their performance (Canadian Nursing Advisory Committee, 2002; Hassmiller & Cozine, 2006; Khalifa, 2018; Mohamed et al., 2018, 2019).

When viewing the healthcare system status in Yemen which has been described as one of the world's worst health care systems (Bloomberg Healthiest Country Index, 2019), it is noticed that there is a deterioration of the health care performance resulted from a combination of factors, including poor performance of nurses (Ministry of Public health & Population, Yemen (2013), World Bank, 2006, World Health Organization, 2006). This conclusion is supported by Thabet et al., 2008), who stated that there is a noteworthy inferior performance of nurses in the Republic of Yemen. Whereas World Health Organization (WHO, 2006) indicated that the most pressing problems facing the development of healthcare system performance in the Republic of Yemen are the absence of nurses' performance management and the lack of knowledge regarding the factors affecting the health workforce' performance such as nurses' satisfaction in the health sector. This is in a line with the International Labor Organization (2009) that states that there is a lack of satisfaction among Yemeni nurses regarding labor laws and regulations, including the nature of work, incentives, promotion and salaries resulting in weakness in their performance. Based on what is mentioned

above, it is obvious that nurses' job satisfaction has an active role in nurses' performance which contributed to the poor performance of the healthcare system in Yemen. In most contemporary organizations, adopting technology is not only uses ICT to fill up some forms and records but rather it is also a tool that performs the process of identification, accumulation, analysis, measurement, preparation, interpretation and communication of the information used by management to plan (A. Ameen & Ahmad, 2011, 2013b, 2014; Khalifa and Abou-Shouk, 2014; Khalifa and Hewedi, 2016; Khalifa and Fawzy, 2017; Khalifa and Mewad, 2017). It is used in evaluating and controlling within an organization and to assure appropriate use and accountability for their resources (A. Ameen & Ahmad, 2011, 2012, 2013a). This justifies the urgent need to study the relationship between nurses' job satisfaction and nurses' performance in Yemen.

When the researcher viewed the related literature to the previously mentioned relationship between nurses' satisfaction and nurses' performance, it was discovered that there are a number of studies conducted worldwide such as Begley et al., 1993; Top & Gider, 2013; Mosadeghrad & Ferdosi, 2013; Cherian et al., 2018; Alvinus et al., 2017; Qureshi et al., 2017; Yousef, 2017; Ch. Platis, 2015; Hadizadeh, et al., 2014; Khan et al., 2012; Nabirye et al., 2011. Similarly, there are studies conducted in Asia and Africa: (Hadizadeh, 2014; Khan, 2012; Fu et al., 2014) in Pakistan, Uganda, China, and Iran. Furthermore, the relationship is investigated in the health sector in the Arab world by Al-Ahmadi (2009). To the researcher's knowledge, there is a dearth of studies investigating the relationship between nurses' satisfaction and nurses' performance in the public hospitals in Aden and Abyan, Yemen.

Therefore, this study seeks to achieve a set of objectives: assessing the level of nurses' job satisfaction and nurses' performance in public hospitals in Aden and Abyan, Yemen, explore the relationship between nurses' job satisfaction and nurses' performance, as well as to verify the effect of nurses' job satisfaction with its dimensions (pay, promotion, benefits, operating procedures, supervision, contingent rewards, co-workers, nature of work, and communication) on nurses' performance in the sample of the study.

The importance of this study could be spotted through the significance of its investigated variables, which address a real problem that affects the level of nurses' performance, which plays a central role in ensuring outstanding care to attain targeted patient outcomes and improving the performance of health care system. Moreover, the topic of the study is sacred since it is connected to patients' life. Therefore, there is a vital need to study these variables to shed light on the situation in the health care organizations in the Republic of Yemen in government hospitals in both Aden and Abyan governorates. Moreover, data gained will enable the researcher to find irrefutable evidence that explains the impact of nurses' job satisfaction on nurses' performance through the model adopted. Additionally, this evidence will assist health policymakers in implementing strategies aimed at empowering nurses' job satisfaction and performance in return.

2. Literature Review

2.1 Job satisfaction

Job satisfaction has been thoroughly researched and studied in the literature. Moreover, it is the most widely researched in the topic of job attitude in Industrial/Organizational Psychology (Judge et al., 2000; Badran and Khalifa, 2016; Morsy, Ahmed and Ali, 2016; Qoura and Khalifa, 2016; Alkhatari et al., 2018). Locke (1976) portrays job satisfaction as the pleasurable enthusiastic state gained due to the evaluation of one's job or job understanding. Job satisfaction is also indicated by Hirschfeld (2000) as a full of feeling or enthusiastic response to the job, coming about because of the occupant's observation of real results as compared to the desired results. Furthermore, (Mowday & Steers, 2013) characterized job satisfaction as tenacious emotions towards discriminable parts of the job circumstance that are believed to be related with seen contrasts between what is expected and what is renowned about connection to the options accessible in given circumstance (Alkhatari et al., 2018; Nusari et al., 2018; Al-Ali et al., 2019; Alharthi et al., 2019; Sudigdo et al., 2019).

The salience of job satisfaction as an important research area in healthcare service is due to the magnitude of its effects. Feeble job satisfaction among nurses would result in an unfavorable effect such as; nurses' turnover and levels of nurses' absenteeism which could reduce the performance and efficiency of health services (Nadinloyi, 2013). Various global indicators will help in understanding the position of Yemen according to a set of measures that are recognized internationally (Al-Ali, Ameen, Issac, Nusari, & Ibrahim Alrajawi, 2018; Al-Obthani, Ameen, Nusari, & Alrajawy, 2018; Al-Shamsi, Ameen, Isaac, Al-Shibami, & Sayed Khalifa, 2018; Haddad, Ameen, & Mukred, 2018; Shamsi et al., 2018).

Furthermore, (Vermeir et al., 2017) indicated that nurses' shortage and turnover are observed worldwide. The shortages of workers are the sign of job dissatisfaction whereas Job satisfaction is a key determinant of nurses' retention (Zurn, et al., 2005). Moreover, nurses' job satisfaction raises patient satisfaction (Aiken et al., 1997) and reduces mortality (West et al., 2006). Satisfied nurses are more likely to provide better health care service than unhappy nurses (Molyneux, 2011). According to (Tengilimoglu et al., 1999) hospitals are a complex environment, low level of job satisfaction among their nurses has unwanted

influences on health care performance such as continuous decrease of care for patients and increased cost of healthcare.

On the other hand, the measurement of job satisfaction of the nurses through a multidimensional approach is the best path to examine the different dimensions of the function that represents satisfaction. The multidimensional approach provides a more comprehensive view through studying a number of dimensions through which the success or weakness in those dimensions represented for job satisfaction (Spector, 1997). Smith, Kendall, and Hulin (1969) claimed that job satisfaction has five dimensions; “the work, pay, promotions, supervision, and co-workers”. Similarly, Weiss et al., (1967) proposed the Minnesota Satisfaction Questionnaire that includes the following dimensions; “ability, utilization, achievement, activity, promotion, authority, company policies and practices, compensation, co-workers, creativity, independence, moral values, recognition, responsibility, security, social service, social status, supervision- human relations, supervision- technical diversity, and working conditions”.

In addition, Schriesheim and Tsue (1980) identified six dimensions of job satisfaction such as; “work, oversight, co-workers, pay, promotion opportunities and the job in general”. Moreover, Spector (1997) characterized nine dimensions of job satisfaction measurement (operating procedures, pay, promotion, supervision, benefits, contingent rewards, co-workers, nature of work, communication). These nine dimensions are adopted by the researcher in this study that is aligned with the study problem, significance and objectives. Dimensions of nurses’ job satisfaction as follow:

2.1.1 Pay

Pay is defined to describe the total cash (wage or salary) that you give to a worker due to work done. Since the industrial age, pay has been considered to be the most important factor of organizational rewards (Heneman & Judge, 2000). Moreover, pay satisfaction is the employee's positive or negative feeling toward his or her pay from his or her workplace (Miceli & Lane 1991; ML Williams, 2006). In most of the studies conducted on job satisfaction cash was one of the dimensions of job satisfaction (e.g. Wall et al., 1973; Hackman et al., 1975; Chacko, 1983; McFarlin et al., 1992; Witt et al., 1992; Jenkins, 1993; Judge, 1993; Tang et al., 1999; Rad, et al., 2009; Ibrahim et al., 2014; Rana et al., 2014). Supporting this idea, (Nabirye, 2011; Nguyen, 2017; Khera, 2017; Top, 2015; Alkassabi et al., 2018; Mari et al 2018) studies conducted on job satisfaction among nurses in Uganda, Vietnam, India, Turkey, Pakistan, and Saudi Arabia. All of these studies found that pay was a very important factor for job satisfaction among nurses.

2.1.2 Promotion opportunities

Promotion can be defined as the advancement of a worker to be in charge for another job position which is better than the previous job in terms of salary, prestige, job level, status, and has greater responsibilities and skills (Kosteas, 2011). The same sources also stated that promotion opportunities do play a big role in both employees' life and career and affect their job satisfaction. Moreover, employees are seeking promotion, and their expectation of promotion affects their job satisfaction, Robbins, (1998)(Al-Ali et al., 2018; Al-Mulla, Asma; Ameen, Ali; Isaac, Osama; Nusari, Mohammed; Hamoud Al-Shibami, 2019; Al-Shamsi et al., 2018; A. A. Ameen, Kamsuriah, & Ahmad, 2017; A. Ameen, Almulla, Maram, Al-Shibami, & Ghosh, 2018; Baharuden, Isaac, & Ameen, 2019; Marilyn, Ghosh, Isaac, Aravinth, & Ameen, 2019; Husin, Abou-Shouk and Khalifa, 2013; Badran and Khalifa, 2016; Morsy, Ahmed and Ali, 2016; Qoura and Khalifa, 2016). Furthermore, promotion opportunities are emotional and sensitive issues where fairness leads to higher employees’ job satisfaction and unfairness reduces employees’ job satisfaction (García-Izquierdo et al., 2012). It is also stated in the same source that there is a significant correlation between promotion and overall employees’ job satisfaction.

As explained above, promotion opportunities affect employee’s job satisfaction in many ways, so an organization’s policy and procedures for promotion must stipulate how selection should be conducted in order to enhance employee’s job satisfaction. Supporting this idea, (Djukic, 2014), who confirmed that promotion plays a major role in promoting job satisfaction for nurses. Additionally, opportunities for promotion were identified as significant to job satisfaction for health care professionals (Acker, 2004; Deloach & Monroe, 2004; Egan & Kadushin, 2004; Kadushin & Kulys, 1995; Tasneem et al., 2018; Alkassabi et al., 2018). Supported by McNeese-Smith (2001) who stated that promotion opportunities enhance the level of job satisfaction among nurses.

2.1.3 Supervision

Supervision is the act of monitoring and directing the employees or delegated activities, and the ability of supervisors to assist the supervisees and establishing a good relationship with them. Supervision is one of the dimensions of employees’ job satisfaction, where many researchers indicated that there is a positive relationship between supervision and employees’ job satisfaction (Spector, 1985; Islam et al., 2013; McClean, 2013; Tak et al., 2015; Vann, 2017) (Alkhatari *et al.*, 2018).

The understanding of the relationship between supervision and employees job satisfaction is very important. Part of the interest in supervision is due to the effect of supervision on employees' overall job satisfaction. Moreover, employees satisfied with supervision are less likely to leave the organization (Williams, 2002). Moreover, supervisor-subordinate relationship plays a big role in mitigating conflict and increasing organizational commitment (Tepper, 2000) as qualified supervisors should allow their employees to participate in decision-making, and they should be available to guide their employees, solve their problems, communicate with them, and take personal interest in the affairs of their employees which could increase employee's job satisfaction (Kondalkar 2008).

In the healthcare settings, a number of studies have been conducted by researchers worldwide on the relationship between supervision and nurses' job satisfaction, including (Ackerman & Bezuidenhout, 2007) Which was conducted on the staff dissatisfaction at a surgical complex in South Africa, this study confirmed that the poor relationship between supervisors and nurses contributes to the low level of job satisfaction and thus reflect their loyalty, and sense of belonging. Moreover, (Zangaro, 2007) explained that collaboration between supervisors and nurses, and the availability of positive leadership is an important factor for improving nurses' job satisfaction.

2.1.4 Benefits

Throughout literature, there have been a variety of studies in the scope of the definition of benefits, however, the broad definition is that it is as a set of factors that stimulate the mental powers in the individual that influence his conduct (Al-Salmi, 1984). Benefits incorporate incentives and bonuses from the employer, which when applied supplements the money remuneration that workers get, it includes wellbeing, wage assurance, investment funds, and retirement programs security for workers and their families, a particular set of organizational practices approaches, and policies, as well as a philosophy that effectively underpins workers to make progress at both the workplace and home (World at Work 2008).

According to (Boone ,1992; Bratton, 2007) benefits refers to all types of rewards received by workers for their effort, in addition to the guaranteed basic remuneration, including parks, services and cash rewards, medical aid schemes, life and disability insurance, pension schemes, bonuses, housing benefits, paid leave and travel allowances.

Many researchers have demonstrated correlations between benefits and employees' job satisfaction such as (Sukriket, 2018) who stated that benefits impact job satisfaction and in turn it affects employees' turnover. (Singhet, 2018) elaborated that benefits increase employees job satisfaction, and, (Rad, 2009), in his study entitled 'Factors Affecting Employees' Job Satisfaction in Public Hospitals' reported that there was a significant and positive relationship between benefits and overall employees' job satisfaction among public hospital health staff's.

2.1.5 Contingent Rewards

It is a motivation-based framework that is utilized to compensate those who meet their objectives (Armstrong, 2009). Rewards encourage feedback so as the work is done well. Moreover, the contingent reward system urges workers to adequately put the effort into the job and meet their objectives in a professional and timely manner. Whereas annual performance appraisal conducted yearly, the contingent reward system involves frequently and continually assess employee's development and performance, as well as provides rewards of interest to the employees that provide effective motivation. Koehn, (2015) contended that there are positive correlations between contingent rewards and employees job satisfaction. Moreover, (Rad, 2009) showed that there was a significant association between contingent rewards and public hospital health staff's satisfaction, and their overall job satisfaction.

2.1.6 Operating Procedures

Operating procedures provide information on how employees do their jobs (Mohamud *et al.*, 2017; Agwa, Aziz and Khalifa, 2018a, 2018b). This information incorporates each one of those principles: controls, methods, and prerequisites of the activity that must be performed before and during the activity (Khalifa and Abou-Shouk, 2014; Abd-Elaziz *et al.*, 2015; Abou-Shouk and Khalifa, 2017). It additionally incorporates the nature of work and the organization's values that the employees must be bound to while carrying out the activity, which in turn lead to positive psychological states. In the study (Judge, 2000) states that positive psychological could encounter the importance of work, sentiments of obligation and learning about products of work, which prompt job satisfaction.

Moreover, (Lumley, 2011) alleged that there is a positive relationship between operating procedures and employees' job satisfaction. Within health care sector, (Top, 2015, in their study entitled "Examining Transformational Leadership, Job Satisfaction, Organizational Commitment and Organizational Trust in Turkish Hospitals: Public Servants versus Private Sector Employees" reported that there was a significant association between operating procedures and public hospital health staff's satisfaction and their overall job satisfaction.

2.1.7 Nature of work

The nature of work can be characterized as the sort of work which an employee does. Moreover, it refers to the daily and non-daily tasks carried out as a part of the job scope, where the nature of work is an important integral part of the dimensions of job satisfaction. According to Khalid, 2011; Nor Laila, 2012; Klaus, 2014, nature of work positively affect employees' job satisfaction. This result is supported by (Sedem, 2012) who stated that nature of work which includes job challenges, feedback, autonomy, and skill variety is the key factor to understand the employees' job satisfaction. Moreover, (Eby, 1999) reported that task variety could lead to increased employees job satisfaction. Similarly, (Top, 2015) indicated that nurses' attitude towards the work assigned to them significantly predict their overall job satisfaction. Furthermore, according to (Zangaro, 2007) improvement of the nurses' work environment is the most significant factor to promote nurses' job satisfaction.

2.1.8 Co-workers relationships

Co-workers relationships include many aspects, for example, collaboration, solidarity, trust, and information sharing (Buljubasic 2008). According to (Robbins, 1993) work satisfies a person's social factor requirements. In this way, having respectful and steady co-workers could lead to increased employees' job satisfaction. Moreover, Ghazzawi, (2008) claimed that workplace peers, the group to which they belong all can possibly impact employees' job satisfaction. This notion is supported by Mowday, (1993) who claimed that job satisfaction is linked to employees' chances for collaboration with others at work. Nguyen (2017 who conducted a study entitled 'Factors Associated with Job Satisfaction among District Hospital Health Workers in Northern Vietnam: a Cross-Sectional Study' found that co-workers have a profound impact on hospital health staff's job satisfaction. In addition to that, Rad (2009), indicated that co-workers' relationship is one of the key predictors of nurses' job satisfaction.

2.1.9 Co- Communication

Communication between supervisors or the managerial level with employees consistently enables managers to know whether their staff is satisfied and happy with their employment or not. Additionally, employees are dissatisfied when information does not reach them effectively (Shen et al., 2017). Supervisors and directors must make their employees a part of essential dialogs where they can impart their thoughts and insights, which will diminish strife and stress in work environments, elevate employees' successful relationship with employers and increase employees' job satisfaction (Munir, 2016). Nikolić, (2013); Bulutlar, (2015) claimed that there is a positive relationship between communication and employees' job satisfaction. Similarly, Brohi et al. (2018); Vermeir et al. (2018) indicated that there is a significant positive relationship between communication and nurses' job satisfaction in public hospitals.

Table 1 Description of the factors affecting employees' job satisfaction in the public hospital

<i>Job satisfaction dimensions</i>	<i>Description of dimension</i>
Pay	Satisfaction with pay and pay rises
Promotion	Satisfaction with promotion opportunities
Supervision	Satisfaction with the person's supervisor and manager
Fringe benefits	Satisfaction with fringe benefits
Contingent rewards	Satisfaction with rewards given for good performance
Working conditions	Satisfaction with working rules and procedures, and work environment.
Co-workers	Satisfaction with co-workers
Nature of work	Satisfaction with the type of work done
Communication	Satisfaction with communication within the organization

Source: (Rad, A. M. M., & De Moraes, A., 2009).

2.2 Nurses' performance

Nurses' performance plays a central role in ensuring outstanding care to attain targeted patient outcomes and improving the performance of the health care system. Evaluating nurse's performance is crucial to career development and meeting the needs of the patients, where it is also considered a tool to evaluate how much effort is being put forth by nurses to take care of the patients, therefore, evaluating nurses' performance ought to be a priority in health care management (Meretoja, 2004). Nurses' performance is defined as actions and activities taken by them to meet the responsibilities that enable them fulfilling their duties according to the

standards set by the management, it is also an indication of their level of performance and the extent of their success in performing these duties (Awases, 2013), which is attributed to the fulfillment of organization's goals and demands (Sullivan, 2009). Moreover, Nurses' performance was defined by (AbuAlrub, 2004) as the nurses' ability to efficiently fulfill the duties of patient care, (Giro, 1993) defined it as the ability of nurses to perform nursing tasks.

It is obvious from the above definitions of how important nurses' performance is. According to The World Health Organization (WHO, 2006) performance is a mixture of available healthcare staff and specialists contribution towards meeting the patients' needs in perfect accord with international quality standards, where low health care workforce performance results in sub-par healthcare at best, by which the entire healthcare system suffers poor quality of patients care and performance. Since, nurses composite the highest portion of health care providers (Al-Ahmadi, 2009; Zarea et al., 2009), and their performance play a big role in the provision of hospital care (Wunderlich & Davis 1996), it can be concluded that nurses' performance is a prominent driver of health care system performance. Moreover, high nurses' performance leads to patients' safety, and low nurses' performance could result in patients' death. Then, improving nurses' performance is absolutely a must to gain improvement in healthcare system performance, (Tsfaye et al., 2015), enhance and handle patients' needs (Kahya & Oral 2018), reduce health care costs by reducing the length of staying in hospitals (Needleman et al., 2006). Similarly, (Ebriht et al., 2003) believes that Hospital systems' strengths, weaknesses and failure are dependent on nurses' performance which has the capability to provide legendary solutions to the dysfunctional systems. Thus, based on what was previously mentioned, health policy makers and hospital managers must take actions towards developing the quality of hospital services and increasing efficiency in them which will guarantee active involvement of nurses and raise their performance.

2.3 The relationship between nurses' job satisfaction and nurses' performance

The literature on the importance of job satisfaction in improving the performance of employees is evident and is based on the positive effects of job satisfaction on the commitment and appreciation of employees for their work and their loyalty to their workplace, and the quality of the services they provide, where the performance is inferior if they are dissatisfied. These studies are based on many theories which confirm that job satisfaction leads to better performance. One of the examples of these is the expectancy theory by Vroom (1964) which states that the performance of individuals is directly associated with the possible rewards that they will likely receive. Another study is Latham, (2012) which declared that Employees performance is a result of job satisfaction which results from meeting their needs. This idea is based on the notion that organizations that are able to create a positive environment and make their employees happy will have more productive employees. Regarding the relationship between job satisfaction of nurses and their performance, studies like; (Al-Ahmadi, 2009; Khan, 2012; Hadizadeh., 2014; Packard, 1987) discovered that there is a correlation relationship with a positive effect between job satisfaction of nurses and the performance of nurses. Moreover, Knoop (1995) found that job satisfaction leads to a number of consequences among nurses like; more productivity, high quality of care, and intent to remain in the organization. In addition to that, Nabirye et al., (2011) noted a correlation between the job satisfaction of nurses and their performance.

To give more details about the relationship between dimensions of nurses' job satisfaction and nurses' performance, the light will be shed on these relations through previous studies. Where in the health care sector suboptimal health care performance is compensated through the use of payment (Eijkenaar et al., 2013). Moreover, pay and benefits influence nurses' performance, (Cowen & Moorhead, 2011) which contribute to improving patients' outcomes, (Bodrock & Mion 2008). In addition, (Asiri et al., 2016) claimed that contingent rewards are one of the key factors used by health care policymakers to raise nurses' performance. Furthermore, In the health care settings, the promotion was found positively correlated with nurses' performance, (Hayajneh, 2000; Awases, 2006; Al-Ahmadi, 2009). Additionally, (Nabirye et al., 2011) Pointed out that there is a significant impact on Operating procedures on nurses' performance. Whilst, Abualrub (2004) revealed that nurses' performance is highly affected by social support from co-workers. (Ackerman & Bezuidenhout, 2007) a study conducted on the staff dissatisfaction at the surgical complex in South Africa confirmed that the poor relationship between supervisors and nurses contributes to the low level of job satisfaction and thus reflect their loyalty, belonging, and the level of nurses' performance. Moreover, (Zangaro,2007) explained that collaboration between supervisors and nurses and the availability of positive leadership is an important factor for improving nurses' job satisfaction and nurses' performance. Furthermore, Nature of work is found to be an effective element to nurses' performance in health sectors (Graham, 2011). Communication is also revealed to be influential to employees' performance once it is interacting with job satisfaction. More precisely, delivering clear, accurate and consistent nursing services is achievable when combination is well utilized (Verderber, 1998).

3. Hypotheses of the study

Based on the results of previous studies on the relationship between nurses' job satisfaction and nurses' performance, the researcher can formulate the following hypotheses:

H1 There is a positive correlational relationship between nurses' job satisfaction with its dimensions (pay, promotion, benefits, operating procedures, supervision, contingent rewards, co-workers, nature of work, and communication) and nurses' performance in public hospitals in Aden and Abyan, Yemen.

H2 There is a significant positive effect of nurses' job satisfaction with its dimensions (pay, promotion, benefits, operating procedures, supervision, contingent rewards, co-workers, nature of work, and communication) on nurses' performance in public hospitals in Aden and Abyan, Yemen.

From the second general hypothesis, the following sub-hypotheses were derived;

- H1 There is a significant positive effect of pay as one of the nurses' job satisfaction dimensions on nurses' performance in public hospitals in Aden and Abyan, Yemen.
- H2 There is a significant positive effect of benefits as one of nurses' job satisfaction dimensions on nurses' performance in public hospitals in Aden and Abyan, Yemen.
- H3 There is a significant positive effect of operating procedures as one of nurses' job satisfaction dimensions on nurses' performance in public hospitals in Aden and Abyan, Yemen
- H4 There is a significant positive effect of supervision as one of nurses' job satisfaction dimensions on nurses' performance in public hospitals in Aden and Abyan, Yemen
- H5 There is a significant positive effect of contingent rewards as one of nurses' job satisfaction dimensions on nurses' performance in public hospitals in Aden and Abyan, Yemen

- H6 There is a significant positive effect of co-workers as one of nurses' job satisfaction dimensions on nurses' performance in public hospitals in Aden and Abyan, Yemen
- H7 There is a significant positive effect of nature of work as one of nurses' job satisfaction dimensions on nurses' performance in public hospitals in Aden and Abyan, Yemen
- H8 There is a significant positive effect of promotion as one of nurses' job satisfaction dimensions on nurses' performance in public hospitals in Aden and Abyan, Yemen
- H9 There is a significant positive effect of communication as one of nurses' job satisfaction dimensions on nurses' performance in public hospitals in Aden and Abyan, Yemen

4. Research method

4.1 Research design

To achieve the desired results of this study, the quantitative approach was used. Allison, (2002) noted that the quantitative method is the best way to avoid human error in science. In addition, (Karami et al., 2006) stated that research and contextual questions should dictate the choice of the appropriate method. Furthermore, they suggested that the quantitative approach was more widely accepted in establishing reliability and validity. Moreover, according to McBurney (1994), the quantitative method is a suitable method for the generalization of the sample.

4.2 Proposed research framework

Based on the study problem and objectives and expectancy theory that developed by Vroom (1964), The model of this study was designed that contains the independent variable, nurses' job satisfaction with its dimensions and the dependent variable, nurses' performance, to verify the nature of the assumed relationship between these variables in terms of correlation and direct impact. The theoretical model can be illustrated in the following figure:

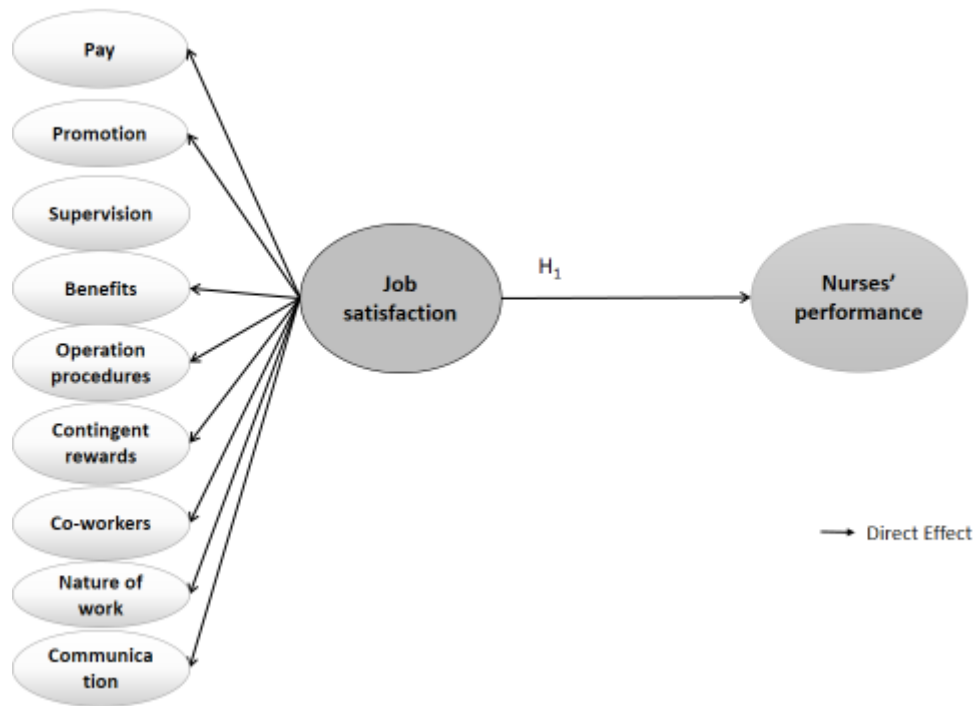


Figure1: a Proposed Research framework

4.3 Data collection

The study was conducted in 13 public hospitals in Aden and Abyan governorates, Yemen. The total number of nurses in the study population was 1300, and the sample size required for this study was 297 nurses, which were determined on the basis of the table prepared by Krejcie & Morgan (1970) to determine the sample size required. Based on the study (Dommeyer et al., 2004). Variables were measured using a Likert Scale which recommended in the previous studies (Isaac, Aldholay, Abdullah, & Ramayah, 2019; Isaac, Abdullah, Ramayah, & Mutahar, 2017; Isaac, Abdullah, Ramayah, Mutahar, & Alrajawy, 2017). The response rate for a paper-based survey is 0.75. Therefore, the researcher distributed 396 questionnaires in order to obtain an acceptable response rate and avoid retrieved questionnaires which contain errors and cannot be used. The usable, retrieved questionnaires are 277 which are in the percentage of (71) of the total distributed forms. The number of lost and non-validated inquiries was 57 (14%) of the total distributed questionnaires. Thus, 220 questionnaires were collected, which was analyzed to reach the objectives of this study. The researcher used the Stratified Random Sample method. This method was used to determine the required number of respondents from each hospital. The number of respondents was as follows: Gen-Aden Hospital 51, Edu-Al-Jamhoriah Hospital 68, May-22 Hospital 45, Educ-Al-Wahdah Hospital 56, Psychiatric Hospital 49, Zengobar Hospital 13, Laodar Hospital 20, Al-Wadea Hospital 15, 37 Arrazi Hospital, Modiah Hospital 15, Rasd Hospital 10, Ahwar Hospital 10, and Al-Mahfad Hospital.

5. Variables Measurements

5.1 Nurses' performance

Nurses' performance was measured as a single factor using a six-dimensional scale of nurse performance which developed by Schwirian (1978). The measure contains 52 items in which respondents rate their own performance using a Likert-type scale with 5 responses (1 = strongly disagree, 2 = disagree, 3 = nature, 4 = agree, and 5 = strongly agree). In this study, self-assessment was used in which nurses evaluate their performance. According to (Campbell & Mackay 2001), to deem nurses' practices within their own contexts, and support them to preserve and upgrade their practice, to help in providing a direction to generate an occupational profile of sophisticated nurses' competence, to render a profession and education blueprint instrument, self-assessment must be used. Moreover, helping nurses in continually improving their performance which will allow them to spotting their own areas of strengths and shortcomings, self-assessment would definitely be the choice (Kilpi, 2004). Furthermore, it has been applied in the previous studies (Yusiu et al., 2011; Fujino et al., 2014; Jahromi et al., 2015; Top et al., 2013; Failla, & Duffy, 1999; McCloskey & McCain, 1988; Myric & Awrey, 1988; Battersby & Hemmings, 1991; Gardner, 1992; Witt, 1992; Bartlett et al. 2000; AbuAlRub, 2004), and were used in other studies, especially in the Arabic region such as (Al-Makhaita, 2014) in the KSA and (Mrayyan, 2008) in Jordan. This is further supported by (Szara, 2017) who stated that

“The Optimum Instrument for the Evaluation of Performance of Nurses is the Six Dimension Scale of Nursing Performance”. Moreover, the Cronbachs’ alpha score of this questionnaire was 0.90 which means it is highly reliable in this study sample.

5.2 Job satisfaction

Job satisfaction was measured using a job satisfaction survey (JSS) (Spector, 1997). This instrument utilized nine dimensions that included the following dimensions (operating procedures, pay, promotion, supervision, benefits, contingent rewards, co-workers, nature of work, Communication) in which respondents rate their level of satisfaction using a Likert-type scale with 5 responses (1 = strongly disagree, 2 = disagree, 3 = nature, 4 = agree, and 5 = strongly agree). Moreover, job satisfaction survey was used by many researchers in their study of job satisfaction and its relationship with nurses’ performance (Nabirye, et al., 2011; Rad, et al., 2009), and has been applied in the Arabic region to measure nurses’ job satisfaction and has been tested for validity and reliability (Al-Ahmadi, 2009. In addition, the Cronbach’s’ alpha score of job satisfaction survey was 0.91 which means it is highly reliable in this study sample.

6. Data analysis and results

Frequencies, the mean and standard deviation in the SPSS program were used to describe the data gained. Moreover, Pearson’s correlation and multiple regressions were inferentially analyzing the results.

6.1 Descriptive statistics

6.1.1 Demographic information

The returned questionnaire in this study was 220. Sample personal and professional characteristics of this study respondent are presented in table 2 below. The males were (99) with the percentage of (45) while the majority of them were females (121) with the percentage of (55). The education level results are presented as follows; diploma was (99) with the highest percentage (45) and Ph.D. holders (2) with the lowest percentage (1). Nursing courses (88) with percentage (40), bachelor degree (20) with percentage (9), master degree (11) with percentage (5). The majority of respondents aged (30 -39) while the minority aged 50 and above. Majority of respondents (80) had (6 – 10) years of experience with percentage of (36), (32 percent) (70 respondents) had (1 - 5), (16 percent) (35 respondents) had (11- 15), (12 per- -cent) (26 respondents) had (16 – 20), the minority (4 percent) (9 respondents) had experience of more than 20 years.

Table 2: Sample personal and professional characteristics

<i>Demographic Information</i>	<i>Frequency</i>	<i>Percent</i>
Gender		
Male	99	45
Female	121	55
Educational Level		
Nursing courses	88	40
Diploma	99	45
Bachelors	20	9
Master level	11	5
PhD.	2	1
Age (Years)		
Less than 30	66	30
30 – 39	99	45
40 – 49	33	15
50 or more	22	10
		10
Years of experience		

1 – 5	70	32
6 – 10	80	36
11 – 15	35	16
16 – 20	26	12
More than 20	9	4

6.1.2 Descriptive statistics of Job satisfaction and nurses' performance

To describe the variables of the study, the researcher used methods of descriptive statistics, through which the results referred to in the table were obtained:

Table 3: Descriptive statistics of Job satisfaction and nurses' performance

	<i>Variables</i>	<i>Mean</i>	<i>Std deviation</i>
Overall satisfaction		2.35	0.89
Facet satisfaction	Pay	2.06	.85
	Promotion	2.15	.92
	Supervision	2.30	.86
	Fringe benefits	2.31	.80
	Contingent rewards	2.12	.90
	Working conditions	2.67	1.01
	Co-workers	2.96	.90
	Nature of work	2.11	.85
	Communication	2.25	.89
Overall performance		2.59	.88

Table 3 shows descriptive statistics of nurses' satisfaction using single and total measures. Average scores were obtained for each item as well as an overall measure was obtained by calculating the total average for all items. Overall nurses' job satisfaction was (2.35), which corresponds to low satisfaction on the five-point scale used in this study.

Based on the divisions identified by the researchers that suggest that; 1-1.80 reflected by "very low", 1.81-2.60 reflected by "low", 2.61-3.40 reflected by "moderate", 3.41-4.20 reflected by "high", and 4.21-5 reflected by "very high". Thus, nurses' satisfaction can be judged by the arithmetic averages achieved by their dimensions (pay, promotion, benefits, operating procedures, supervision, contingent rewards, co-workers, nature of work, and communication) as shown in the table above as low. As indicated by the results shown above that the performance of nurses achieved an average of 2.57 which corresponds to low performance on the five-point scale used in this study.

6.2 Inferential statistics

6.2.1 Correlation between nurses' job satisfaction and nurses' performance

To check how strong a relationship between two variables, the Pearson correlation (coefficient) must be done. This test is denoted by r . The strength of the relationship can be indicated through the value of r , which may range between (+1 & -1). In stating the relationship, zero value indicates that there is no relationship between variables, while a value greater than 0 tells a positive relationship between variables. If the relationship is described as positive this means if the value of one variable increases the value of the other value increases as well. On the other hand, if the value of the r is below (0.20), it implies that there is a negative relationship between the two variables. This negative relationship shows that the increase of one variable results in the

SUMBEN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
SUMCR	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
SUMWC	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
SUMCOWO	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
SUMNW	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
SUMCOM	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

6.2.2 Effect of nurses' job satisfaction on nurses' performance

Before testing the effect relationship, the conditions for the use of simple linear regression should be ascertained. The results showed that the value of M was 5.77 while the df value was 9 at a significant level of 0.001. The normal distribution of the data was tested by the Kurtosis and skewness test, whose values ranged between (2 – (-2)), which confirmed the normal distribution of the study data, and the mean and median values were very close to each other and positive as well, which is in a line with conditions of using simple linear regression stated by, Hire et al. (2010).

After ascertaining the conditions of the use of simple linear regression, the second general hypothesis of the study was tested to investigate the effect of nurses' job satisfaction on nurses' performance. The results of the analysis can be explained as follows:

Table 7 Model Summary

Model Summary										
Model	R	R Square	Adjusted R Square	Std. The error of the Estimate	Change Statistics					
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.655 ^a	.428	.404	.67834	.428	17.490	9	210	.000	

a. Predictors: (Constant), SUMCOM, SUMSUP, SUMWC, SUMCOWO, SUMPROM, SUMPAY, SUMBEN, SUMCR, SUMNW

b. Dependent Variable: SUMNP

In table 7 above, it is clear that Adjusted R Square was .404, which confirms that there is a significant positive effect of nurses' job satisfaction with its dimensions (pay, promotion, benefits, operating procedures, supervision, contingent rewards, co-workers, nature of work, and communication) on nurses' performance in public hospitals in Aden and Abyan, Yemen. This tells us that 40.4 % of the variance in the dependent variable, nurses' performance is explained by the independent variable, nurses' job satisfaction.

Looking at the ANOVA table stated below while testing Alpha = .05, it is revealed that there is a statistically significant result of the overall regression model with (F = 17.50, p < .001 R squared = .43).

Table 8 ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	72.431	9	8.048	17.490	.000 ^b
1	Residual	96.631	210	.460		
	Total	169.061	219			

a. Dependent Variable: SUMNP

b. Predictors: (Constant), SUMCOM, SUMSUP, SUMWC, SUMCOWO, SUMPROM, SUMPAY, SUMBEN, SUMCR, SUMNW

Table 9 Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.203	.179		6.735	.000
	SUMJS	.844	.073	.615	11.514	.000

a. Dependent Variable: SUMNP

As shown in Table 9 above for regression coefficients between the study variables, confirm that the value of the regression equation (B) was (.844), which is significant at the .000 level which is smaller than (.05) and t value (11.514) which falls in the rejection area out of the critical region between (1.96 - (- 1.96)) R. A. Fisher and F. Yates (1974). This implies the rejection of the null hypothesis and acceptance of the alternative hypothesis. Therefore, there is a significant positive effect of overall nurses' job satisfaction on nurses' performance in public hospitals in Aden and Abyan, Yemen. This indicates that a change of (1) in nurses' job satisfaction, results in 84% of the change in nurse performance.

Sub-hypotheses can also be tested for the effective relationship between nurses' job satisfaction dimensions and nurses' performance through the regression test Stepwise By which the following results were obtained.

Table 10 Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	1.996	.131		15.181	.000			
	SUMPAY	.564	.058	.552	9.778	.000	.552	.552	.552
2	(Constant)	1.576	.152		10.387	.000			
	SUMPAY	.391	.065	.383	5.989	.000	.552	.377	.322
	SUMBEN	.339	.069	.312	4.887	.000	.520	.315	.263

a. Dependent Variable: SUMNP

It is clear from the above (table 10) that pay has the highest effect among other job satisfaction dimensions on nurses' performance, where $B = .391$, $t = 5.989$, and the significant level at .000. Moreover, benefits have the second highest effect on nurses' performance with $B = .339$, $t = 4.887$ with a significant level at .000. On the other hand, it is revealed that there is no significant effect for other dimensions (promotion, operating procedures, supervision, contingency rewards, co-workers, nature of work, and communication) on nurses' performance. This result is in a line with what is stated in the study of Cowen, P.S. & Moorhead, (2011) which confirms that pay and benefits are the main effective nurses' job satisfaction dimensions that affecting nurses' performance.

7. Discussion

The researcher in this study target assessing the level of nurses' job satisfaction and nurses' performance in public hospitals in Aden and Abyan, Yemen. This study found that nurses' job satisfaction is disappointingly low, which is quite similar to what is stated in the International Labor Organization report (2009). Moreover, Nurses' performance was found to be poor in public hospitals in Yemen. This is in line with what is stated in (Thabet et al., 2008). Furthermore, this study aimed at exploring the correlational relationship between nurses' job satisfaction and nurses' performance, as well as to verify the effect of overall nurses' job satisfaction on nurses' performance. Moreover, the effect of nurses' job satisfaction dimensions on nurses' performance. This study uncovered that overall job satisfaction and performance of nurses working in public hospitals in Abyan and Aden, Yemen is positively correlated with ($r = .615$, $p = .000$). This finding is in line with (hidayat et al., 2017; Aron, 2015; Al-Banna et al., 2018; Nabirye et al., 2011). This current study also discovered that pay as one of the dimensions of nurses' job satisfaction has the highest correlation with the dependent variable, nurses' performance which is similar to the result achieved by (Judge et al., 2001). Furthermore, it is revealed that overall nurses' job satisfaction has a positive direct effect on nurses' performance in the study sample with (adjusted R square= .404) which is significant at the (.000) level. On the contrary, (Safarpour, H., Sabzevari, S., & Delpisheh, A. 2018) study stated that there is no effect on nurses' job satisfaction on nurses' performance. On the other hand, the result is supported by researches (Al-Ahmadi, 2009; Platis, 2015; Hadizadeh, 2014; Cherian et al., 2018; Alvinus et al., 2017; Qureshi et al., 2017; Nabirye, et al., 2011) who stated that there is a highly positive effect of nurses' job satisfaction on nurses' performance. In addition, study results disclosed that pay and benefits are the only two highly effective nurses' job satisfaction dimensions that affecting nurses' performance, which is in a line with what is stated in (Cowen, P.S. & Moorhead, 2011).

8. Implications

The result achieved in this study provides a number of implications for health sectors and policymakers shaping strategies for them. The implications will be a notable benefit to the body of knowledge in this field. These implications will be divided into theoretical implication and practical implication.

8.1 Theoretical implication

The current study results will contribute to the existing body of Vroom's expectancy theory in which it confirms that high job satisfaction leads to high performance. The theoretical implication covers the new contribution regarding this relationship in the health care sector, particularly in Yemen. The study also detailed that not only job satisfaction but also pay and benefits as two facets of job satisfaction are highly affecting the performance of nurses working in a rare context like public hospitals in Aden and Abyan in Yemen.

8.2 Practical Implication

Since nursing is indispensable in health care sectors where nurses provide more than 80% of health care services, findings related to factors affecting nurses' performance will be a guide for health policymakers and strategies reformers. This blueprint will assist them in forming plans based on irrefutable evidence to improve nurses' performance which will lead to national health improvement in a country like Yemen that suffers a poor health care system.

9. Limitation

The limitation of this study will serve as ideas for further studies conducted in the field of factors affecting nurses' performance. One of the limitations of this study is the context and sample of the study where it is conducted in two governorates only due to the Yemen war which resulted in instability in other governorates. Moreover, the study population and sample is limited to public hospitals only. One of the limitations of this study is that the data gathered was cross-sectional rather than longitudinal in nature. The longitudinal method might improve the understanding of the associations and the causality between variables (Osama Isaac, Abdullah, Ramayah, Mutahar, & Alrajawy, 2018; Osama Isaac, Abdullah, Ramayah, & Mutahar, 2018).

10. Recommendations

Based on the findings of this study, it is recommended that policymakers take actions towards nurses' pay and benefits to ensure the improvement of their performance and nation health performance. Moreover, researchers ought to cover more public hospitals in other governorates and extend population and sample in future studies. In addition, the study is recommending future studies investigating the relationship between nurses' job satisfaction and nurses' performance through a mediator such as a moral obligation.

11. Conclusion

This research was conducted to investigate the relationship between nurses' job satisfaction and nurses' performance in an attempt to improve the poor performance of nurses working in public hospitals in Aden and Abyan Governorates in Yemen which is one of the key reasons behind health care poor performance in general, as well as to verify the effect of job satisfaction with its dimensions. However, this study found that pay and benefits are the main factors that affect nurses' performance which must be taken into consideration while developing health care strategies in order to elevate the low nurses' performance which will lead to improvement of national health.

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