FACTORS CONTRIBUTED TO JOB SATISFACTION AMONG NURSES WORKING AT TERTIARY HOSPITALS IN THE KLANG VALLEY: AN ADAPTATION OF THE HERTZBERG'S THEORY

AISYAHTON SUHAIMI^{1,2}, ZAMZALIZA ABDUL MULUD^{2*}, SITI KHUZAIMAH AHMAD SHARONI² AND WAN HARTINI WAN ZAINODIN³

¹Kuala Lumpur General Hospital, 50586 Jalan Pahang, Kuala Lumpur, Malaysia. ²Centre for Nursing Studies, Faculty of Health Sciences, Universiti Teknologi MARA Selangor, Puncak Alam Campus, 42300 Bandar Puncak Alam, Selangor. ³Faculty Communication and Media Studies, Universiti Teknologi MARA, 40450 Shah Alam, Selangor, Malaysia.

*Corresponding author: zamzaliza@uitm.edu.my

Submitted final draft: 7 January 2023 Accepted: 7 March 2023 http://doi.org/10.46754/jssm.2023.06.012

Abstract: Job satisfaction is linked to job performance in the workplace, and in the nursing context, it is critical in influencing productivity and patient care quality. The study adapts Hertzberg's Theory to determine factors contributing to job satisfaction among nurses working at tertiary hospitals in Klang Valley. A cross-sectional study was conducted, and it involved 403 nurses who work in two public hospitals in Klang Valley. Samples were selected using simple random sampling, and data was collected using a self-administered questionnaire of 2 parts. Part A contained sociodemographic characteristics, and Part B measured job satisfaction. Descriptive analysis, correlation analysis, t-test, ANOVA, and multiple linear regression (MLR) were used. Results of bivariate analyses indicate significant differences in job satisfaction levels concerning age, marital status, year of work experience, and income levels (p<0.05). When analysed using multiple linear regression, only work experience significantly predicted job satisfaction (p<0.05). This research expands on empirical findings on nurses' job satisfaction. In addition, this study is expected to benefit health institutions by providing information to assist policymakers in increasing the participation of nurses in the local workforce.

Keywords: Job Satisfaction, tertiary care centres, work performance.

Introduction

The shortage of nurses impacts not only the quality of care provided by nurses but also has an impact on their overall satisfaction with their jobs. Various aspects of job satisfaction among nurses have been extensively researched, including work conditions, remuneration development, packages, professional relationship with co-workers, and elements of supervision (Atefi et al., 2016). Prior research has discovered a link between high levels of job satisfaction and nurses' productivity and retention rates, which may help to alleviate the nursing shortfall (Tang & Ghani, 2012).

Literature Review

Job satisfaction is an attitudinal variable that reflects how much people enjoy (satisfaction) or detest (dissatisfaction) their occupations. The unhappiness of employees who believe that their needs are not being met will leave their jobs in frustration. Being dissatisfied with one's employment will lead to thoughts of resigning, which will lead to job searching, end in the intention to quit, and ultimately induce turnover. In nursing, it is one of the constructs frequently used to characterise the working conditions of nursing workers, mainly because of the significant relationships it has with other factors. Previous research has discovered that employees who are more content with their occupations, supervisors, and co-workers are more inclined to identify with their businesses and are less likely to seek employment elsewhere. Job satisfaction is critical in nursing because it influences nurses' productivity and patient care quality. Letvak and Buck (2008) discovered that the following factors were associated with decreased nurses' work productivity: age, the total number of years worked as a registered nurse, quality of care provided, job stress, having suffered a job

injury, and having a health problem, all of which are related to job satisfaction. Furthermore, they discovered that the inability to deliver high-quality care and job satisfaction were connected with a lack of desire to continue nursing.

In a study undertaken by Newman and colleagues (2002), in the recruitment and retention of nurses, it was discovered that patients, job characteristics, and the team, or 'people I work with', were the three most essential factors in determining job satisfaction for nurses. On the other hand, Utriainen and Kyngas (2008) found that job satisfaction differs depending on the type of nursing work performed by the participants, the place of employment, the specialist area, and the nursing function. Meanwhile, Wilson et al. (2008) discovered that job satisfaction varies depending on the generation of nurses in the workforce (Baby Boomers, Generation X and Generation Y). In numerous studies, job satisfaction is the most critical predictor of nurse retention. According to Kavanough et al. (2006), professional experience is one of the demographic variables most substantially associated with job satisfaction.

Furthermore, an increase in organisational support will result in greater job satisfaction. More significant support for employees may enable them to perform direct work more effectively, increasing employee satisfaction and retention. Wilson et al. (2008) proposed that participation in decision-making, organisational support for professional and educational opportunities, and the ability to self-schedule are all possible strategies that may increase overall job satisfaction for registered nurses. Their study proposed that participation in decisionmaking, organisational support for professional and educational opportunities, and the ability to self-schedule are all possible strategies that may increase overall job satisfaction. It has been recognised as a critical element of nurse turnover or intention to leave (Zangaro & Soeken, 2007; Lu et al., 2015).

The literature demonstrates that nurse retention is connected to job satisfaction. Nurses with low job satisfaction have a 65 per cent

reduced probability of intending to stay in their current employment compared to nurses with high job satisfaction (Lu et al., 2015). An indepth understanding of elements contributing to job satisfaction can be used to design successful measures to increase nurses' job happiness and the quality of patient services (Zarea et al., 2009; Bagheri et al., 2019). Zangaro and Soeken (2007), in a review of 31 research composed of a total of 14 567 nurses, showed work satisfaction to be positively associated with nurse-physician collaboration and professional autonomy. Other studies indicated that job satisfaction is also affected by perceived low levels of job security, schedule inflexibility, low salary, inadequate staffing, heavy workloads, lack of clinical autonomy and poor support from supervisors (Mirzabeigi et al., 2009; Zarea et al., 2009; Al-Hussami, 2018).

Numerous studies have found that collaborative relationships among nurses, collaboration with physicians in patient care decision-making, and teamwork are all critical factors in determining the level of job satisfaction experienced by nurses (Gardulf et al., 2008; Wyatt & Harrison, 2010). Several factors were identified as associated with job dissatisfaction among nurses in a study that compared job satisfaction among nurses in Belgium, England, Finland, Germany, Greece, Ireland, The Netherlands, Norway, Poland, Spain, Sweden, and Switzerland. These factors included a lack of educational and advancement opportunities, low salaries, and much work (Aiken et al., 2012). According to the findings derived from studies conducted in Malaysia, nurses reported low to moderate levels of job satisfaction in all components of job satisfaction, including not enough support provided by supervisors, relationships with co-workers, salary, nursing management policies, and low levels of clinical autonomy, among other things (Ahmad & Oranye, 2010; Masroor & Fakir, 2010). Little information is available about the factors contributing to low to moderate levels of job satisfaction (Masroor & Fakir, 2010).

Job satisfaction is a general expression of a good attitude that a person develops and

expresses towards the job and the environment in which they work. In other words, this positive attitude or motivation is formed internally by the employee; it demonstrates the level of enthusiasm that stems from specific values and beliefs that the employee develops from his world based on impressions of the workplace. Employees who are satisfied with their jobs are more motivated to perform better. When employees lack physical safety, job security, positive relationships with co-workers, recognition for outstanding performance, leadership support, and autonomy in their work environment, they become dissatisfied. Employees are stressed in such circumstances and are more prone to experience workplace-induced burnout and departing their positions (Hashim, 2015). This contributes to an increase in turnover rates. Several studies correlate job satisfaction and physical aspects of emotional and psychological illnesses such as anxiety, neurosis, sadness, and phobias (Jex & Gudanowski, 2010). Similarly, a gratifying job would increase workers' physiological, safety, and security demands, subsequently improving their work performance, reducing absences, and lowering the rate at which they quit their jobs.

Furthermore, unsatisfied employees will not hesitate to leave the company if they are not content with their jobs (Raziq & Maulabakhsh, 2015). Nursing administration must thoroughly understand nurses' job satisfaction to function effectively. Nurse leaders must understand what makes nurses tick and keep them motivated and satisfied. In such a case, they can adapt and make appropriate changes to facilitate nurse satisfaction. As a result, this indirectly improves patient satisfaction, which will improve the employee retention rate. Combining these two factors will eventually result in increased profits for the organisation. Executives in the nursing field have discovered that strategies that result in high job satisfaction are among the most effective in retaining nurses (Rai et al., 2021).

The relationship between high employee work satisfaction and high patient satisfaction may result from various factors. One possibility is that nurses increase their productivity when

content with their jobs. Another factor is that nurses who are satisfied with their jobs are less likely to leave their positions. Nurses will gain more experience in their work facility due to the lower turnover rate. As a result, the nurse will have less chance of working understaffed. This is critical because when nurses are understaffed, they cannot provide each patient with the required time and attention. Studies have repeatedly shown that understaffing has resulted in adverse patient outcomes (Berens, 2000; Morrissey, 2002).

The Two Factor Theory, often known as Herzberg's motivational hypothesis or the hygiene-motivator theory, is a variation of the Two Factor Theory. A psychologist from the United States named Herzberg (1923-2000) came up with the idea for this concept. Frederick Herzberg developed this idea, which linked intrinsic features to job satisfaction, whereas external parts of a job were linked to low job satisfaction (Raietal., 2021). The extrinsic factors influencing workplace performance include wages, job security, working environment, status, work procedures, supervisory quality, and interpersonal relationships between co-workers, managers, and subordinates. Achievement, recognition, responsibility, possibilities for professional advancement, the work itself, and the ability to improve are fundamental parts of job responsibilities and expectations.

According to Herzberg, hygiene factors are not motivators in the traditional sense. The motivational factors must result in high levels of satisfaction. The factors that influence how well a healthcare organisation is and motivate employees to achieve higher performance levels are called happiness factors. Only important intrinsic factors are found in aspects of motivation that workers find essential. In this case, the motivator's representation of psychological needs is viewed as a benefit. Job-related motivating factors are recognition, appreciation, challenging work, progress, and career advancement opportunities (Alshmemri et al., 2017). The characteristics of their current job influence employees' intrinsic motivation.

Hence, it concerns job content, also intrinsic employment characteristics in some circles.

conclusion, low job satisfaction contributed to a high rate of nurse turnover (Khunou & Davhana-Maselesele, According to Khunou and Davhana-Maselesele (2016), similar to Asegid et al. (2014), job satisfaction is a significant predictor of nurses' desire to leave the job and turnover rate, and job satisfaction is an essential predictor of nurse turnover rate. Hertzberg's theory identified two factors related to motivation and hygiene, responsible for most of the variance in overall job satisfaction. Using this information can lay the groundwork for acquiring more current knowledge. Thus, this study aims to determine factors contributing to job satisfaction among nurses working at a tertiary hospital in Klang Valley by utilising Hertzberg's Theory. The research questions that guide this study were:

- 1. What are the levels of job satisfaction among nurses working in tertiary hospitals?
- 2. What factors contributed to job satisfaction among nurses working in tertiary hospitals?

Material and Method

Study Design

A quantitative cross-sectional study was conducted to collect information regarding job satisfaction among nurses.

Study Setting

We recruited nurses from two tertiary hospitals in Klang Valley for this study. A total of 1873 registered nurses are presently employed in Hospital A and 3599 registered nurses in Hospital B, respectively.

Samples (n)

This study used the Raosoft sample size calculator for quantitative design (Raosoft, 2004). It is justified because the total population is known, and the website provides an accurate

sampling outcome. The total sample size is 360 nurses from a total population of 5 472. The calculation was based on a margin error of 5%, a confidence level of 95%, and a response distribution of 50%. To avoid missing data where questionnaires were not adequately answered or in case of damaged copy, an additional 10% of the total samples were included in the total samples of 360, making the final samples in this study 396. However, at the end of the data collection period, the final samples were 403. The inclusion criteria for this study were registered nurses with working experience of more than 3 years. During the data collection process, Those on leave (study, maternity, and long sick leave) were excluded.

Sampling Technique

Because there are multiple locations of hospitals used in this study, the sampling approach is multi-stage and proportional stratified. The researcher separates the nursing population into subgroups based on their place of employment. This is done to guarantee that all the chosen samples fairly reflect each facility. For sample selections, a master list was generated by the Human Resource Department involved in this study and for all nurses currently working in the hospitals. For the second stage of sampling, simple random sampling was used. All nurses who fulfilled the inclusion criteria were included. To ensure confidentiality, a unique identification number was assigned to each record and then, using a random number generator, the name of the participants were selected, and they were invited to participate in this research.

Ethical Approval

Medical Research Ethics Committee (MREC) through National Medical Research Registry (NMRR-20-130-52821), granted this study's ethical approval. Permission to collect data was also obtained from the participating hospitals before the research was conducted.

Instruments

In this study, a self-administered questionnaire was distributed to the nurses. The questionnaire form was prepared in the English language. This questionnaire was divided into two sections (Part A and Part B). In Part A, the information included participants' sociodemographic characteristics like gender, age, working experience, marital status, and monthly income. In Part B, the questionnaire measured job satisfaction and was adopted from the study "Relationship between Nurses' Job Satisfaction and Quality of Care" (Aron, 2015). The questionnaire comprised 24 items. The items were designed using a fivepoint Likert scale. Respondents were asked to rate their degrees of agreement with the items by assigning scores from 1 to 5, with 1 indicating "strong disagreement" and 5 indicating "strong agreement". This questionnaire measured the unitary construct of job satisfaction with no sub-domain. The higher scores indicate a higher level of satisfaction.

Reliability and Validity

In this research, Cronbach's Alpha value was 0.97, indicating high internal consistency. The content validity index was 0.90, indicating an adequate level of inter-rater proportion agreement. This shows that the data gathered from the questionnaire were appropriate, as the content validity index exceeded 0.83 (Polit *et al.*, 2007).

Results

Data Analysis

Statistical Package for Social Science (SPSS) version 20 software was used to analyse the data. This study used validity and reliability analyses, descriptive and bivariate analyses, and multiple linear regression (MLR) analyses. In bivariate analysis, a normality test was conducted beforehand to determine the use of the parametric or non-parametric test. Since the results showed that the data were distributed normally, parametric tests such as t-test and

Table 1: Demographic characteristics of the participants

Category Frequency

Variable	Category	Frequency	Percentages (%)
Gender	Female	382	94.8
	Male	21	5.2
Age	Less than 30 years old	168	41.6
	30 - 35 years old	123	30.5
	36 – 40 years old	85	21.3
	41 – 45 years old	17	4.2
	More than 45 years old	10	2.4
Experience	Less than 5 years	102	25.4
	5-10 years	177	43.9
	11 – 15 years	80	19.9
	16 – 20 years	34	8.4
	More than 20 years	10	2.4
Marital Status	Single	112	27.8
	Married	287	71.2
	Divorce	4	0.4
Income	RM2,001 – RM3,000	101	25.1
	RM3,001 – RM4,000	202	50.1
	RM4,001 - RM5,000	80	19.9
	Above RM5,001	20	5.0

ANOVA were used in this study. Meanwhile, Tolerance and VIF were normal, indicating no multicollinearity.

Results

The descriptive analysis was computed to determine the sociodemographic characteristics of the participants. It was based on frequency and percentage and the finding of demographic data for the entire sample (n=403) and is presented in Table 1. The majority of participants were female (94.8%), aged less than 30 years old (41.6%), having 5-10 years (43.9%) of clinical experience, married (71.2%) with income range between RM3001 – 4000 (50.1%).

Job Satisfaction among Nurses

I feel part of the team I work with.

I like the type of work I do.

There were 24 items identified as contributing to job satisfaction among nurses in tertiary hospitals in the Klang Valley. Approximately 70.0% to 77.0% of the respondents agreed they were satisfied with their job. Meanwhile, 60.0% to 69.5% believed that they had job satisfaction. Unfortunately, most respondents did not agree with the item that "the hospital offers me a good benefits package" because it shows only 35.7% of them agreed with the item.

Demographic Differences in Relation to Job Satisfaction

The results were based on univariate analysis, with follow-up univariate comparisons. The mean for each variable and sociodemographic sub-group were subjected to univariate analysis of variance (ANOVA). Independent samples t-test was used as well. The sociodemographic interests were gender, age, working experience, marital status, and monthly income.

In this study, an independent sample t-test investigation was performed to determine any relationship between job satisfaction among females and males. The results showed no significant difference in levels of job satisfaction in males and females (p=0.093). Meanwhile, a significant difference in job satisfaction was found between single and married participants (p=0.002). Thus, marital status does influence job satisfaction.

The differences in levels of job satisfaction with the age, marital status, and income levels group are shown in Table 4. The univariate ANOVA found a significant difference in job satisfaction in the age group. Based on the mean score, at the age of "more than 45 years old", they tend to be more satisfied with their job than

Item Disagree (%)Moderate (%)Agree (%) Overall, I am very satisfied with 25 6.2 120 29.8 258 64.0 my work. I feel valued at this hospital. 24 6.0 157 39.0 222 55.0 I am proud to work for this 15 3.7 95 23.6 293 72.7 hospital. I have the autonomy to make the 28 7.0 154 38.2 221 54.8 decisions I need to accomplish my tasks. My physical working conditions 26 6.5 129 32.0 248 61.5 are good. My good work is recognised 23 5.7 126 31.3 254 63.0 appropriately. I believe my job is secure 36 8.9 113 28 254 63.0

3.5

2.0

86

93

21.3

23.1

303

302

75.2

74.9

Table 2: Job satisfaction among nurses

14

8

I like the people I work with.	13	3.2	101	25.1	289	71.7
I feel I can trust what the management staff tells me.	30	7.5	149	37.0	224	55.5
I am provided with adequate training to accomplish my task.	9	2.2	118	29.3	276	68.5
I am fairly compensated for my work.	20	5.0	124	30.8	259	64.3
My performance is affected by my job satisfaction.	16	3.9	95	23.6	292	72.5
The hospital offers me a good benefits package.	81	20.1	178	44.2	144	35.7
I am provided with adequate equipment to accomplish my task.	53	13.1	165	40.9	185	45.9
I feel that my supervisor gives me adequate support.	31	7.7	140	34.7	232	57.6
My manager/supervisor treats me with respect.	20	4.9	128	31.8	255	63.3
I am given timely feedback on my performance.	21	5.2	133	33.0	249	61.8
I would recommend employment at this hospital to my friend.	41	10.2	148	36.7	214	53.1
Quality is a top priority at this hospital.	16	3.9	107	26.6	280	69.5
The quality of care at this hospital is outstanding.	26	6.5	129	32.0	248	61.6
I believe the quality of care we provide is affected by employee job satisfaction.	11	2.7	95	23.6	297	73.7
Patient Safety is a top priority at this hospital.	6	1.4	84	20.8	313	77.7

Table 3: Summary of *t*-test results of gender and marital status with job satisfaction

Variables	N	Mean	Std. Deviation	t-statistics	<i>p</i> -value	
Gender						
Female	382	3.68	0.50	1.685	.093	
Male	21	3.48	0.59			
Marital status						
Single	112	3.54	0.49	-3.187	.002*	
Married	287	3.71	0.50			

^{*} significant at *p*-value < 0.05

	nd income with job satisfaction

	Variables	n	Mean	SD	F - value	p-value
Age Group	Less than 30 years old	168	3.58	0.57	5.294	0.01*
	30 - 35 years old	123	3.64	0.44		
	36 - 40 years old	85	3.80	0.46		
	41 – 45 years old	17	3.78	0.37		
	More than 45 years old	10	4.13	0.31		
Working	Less than 5 years	102	3.57	0.55	4.552	0.03*
Experience	5-10 years	177	3.63	0.5		
	10 – 15 years	80	3.80	0.44		
	15-20 years	34	3.78	0.51		
	More than 20 years	10	4.05	0.29		
Income	RM 2,001 - RM 3,000	101	3.55	0.55	6.274	0.01*
	RM 3,001 - RM 4,000	202	3.64	0.49		
	RM 4,001 - RM 5,000	80	3.81	0.5		
	More than RM 5,001	20	3.96	0.25		

^{*} significant at *p*-value < 0.05

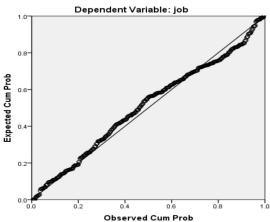
young ones (p=0.01). A significant difference in job satisfaction also was found in the working experience. In other words, nurses with more work experience are more satisfied with their job than new ones (p=0.03). We also found a significant difference in levels of job satisfaction with income levels (p=0.01). Those with higher incomes reported higher job satisfaction levels than participants with lower income levels.

Sociodemographic Predictor of Job Satisfaction among Nurses Working in Tertiary Hospitals

Multiple linear regression analysis was computed to determine the predictor of job satisfaction. Multiple linear regression attempts to model the link between explanatory and response variables (Cohen *et al.*, 2014). Multiple linear regression was appropriate because the study analysed the association between numerous predictor variables and a dependent variable (Chen *et al.*, 2014). This study also seeks to determine the factors that contribute

to job satisfaction. Several variables have been identified as independent variables: age, gender, marital status, working experience, and income. Thus, multiple linear regression analysis was carried out to achieve this objective. It is important to check the assumptions of normality for the dependent variable before carrying out multiple linear regressions. Normality assumes a normal distribution of variables (Kim, 2013). Thus, for this study, the distribution of job satisfaction was examined. The P-P plot of residuals and normality test were used to check this assumption.

Figure 1 shows the P-P plot of job satisfaction among nurses. The standard residual between (-3.725 to 2.934) in the range +_ 3.3 indicates that the data are consistent with the outlier and suitable for multiple linear regression. Graphically, the plot suggests that the data are normally distributed since the points lie straight. Therefore, the data can be considered normally distributed. Five predictor factors were included



Normal P-P Plot of Regression Standardized Residual

Figure 1: P-P plot of job satisfaction among nurses

in the regression model at p <0.05. Finally, only one predictor was found: the work experience (year) variable, which was a factor for job satisfaction (p<0.05). The model was able to predict the factor of job satisfaction significantly. The predictor variable from ANOVA and t-test was entered into multiple linear regression, and only work experience was found to be the final predictor of job satisfaction. Overall model was significant [F(1,397)=22.125, p<0.05]. Explained variance model was R² which is 0.053 (experience model) and indicated that this variable could explain five per cent of the variation in job satisfaction.

Discussion

Most respondents are nurses from Hospital Kuala Lumpur, and almost 75.0% are under 35 years old. In this study, the scale score means of females was higher than that of males. Moreover, most of them are married and have a working experience of 5 to 10 years. Then, looking at their income, most earn around RM3,001 to RM4,000. The result shows that the average mean score is 3.66 (SD = 0.760). The level of respondents' job satisfaction is average or medium. A previous study done at the Emergency Department in Iran showed that the mean score for job satisfaction was moderate (Javanmardnejad *et al.*, 2021). It was consistent

with the findings of other previous studies (Al Maqbali & Mohammed, 2015).

The findings demonstrated a substantial difference in job satisfaction between married and single nurses using a t-test for two independent samples. Married nurses had higher job satisfaction than unmarried nurses. This was especially important concerning intrinsic, extrinsic, and general satisfaction. As a result of these findings, we concluded that marital status was an important factor that affected job satisfaction (Tarcan et al., 2017). A few studies showed no significant results between the nurses' marital status and job satisfaction level. This is supported by other studies that showed marital status does not affect job satisfaction levels (Palazoğlu & Koç, 2019; Zhou et al., 2018; Pinar et al., 2017; Park et al., 2015).

According to this finding, ageing is expected to increase the satisfaction felt by nurses in their profession. However, some young nurses do not have high levels of job satisfaction as their expectations are not those of the nursing profession. One-way ANOVA found a significant difference between age category and job satisfaction. At more than 45 years old, they tend to be more satisfied with their job than young ages. This might be explained by the fact that when the nurses grew old and gained more years of experience, they advanced in their

careers and had higher job status than those young nurses (Morsy & Sabra, 2015).

However, it contradicts Tengah and Otieno (2019) in their study findings that younger nurses were reported to be highly satisfied compared to the older ones. Similarly, Ruzafa et al. (2008) reported no relationship between nurse age and job satisfaction. There is also a link between work experience and job satisfaction. Nurses with more work experience are more satisfied with their job than new nurses. In agreement with these study findings, McNeese Smith et al. (2000) highlighted that mature nurses have greater job satisfaction, productivity and organisational commitment. Regarding work experience, nurses with more experience are more satisfied and have less burnout. Meanwhile, Price and Mueller (2011) found that less experienced nurses tend to be younger. In contrast, scholars who argued for a negative relationship suggested that greater working experience can increase boredom and lower job satisfaction (Clark et al., 1996). Other studies showed that younger nurses felt satisfied with their job because they were enthusiastic and eager to explore and learn (Cherian et al., 2018).

Then, the One-way ANOVA found a significant association between current incomes towards job satisfaction. Thus, nurses with higher incomes are more satisfied with their job than those with lower incomes, whilst those with lower incomes tend to leave their jobs. Personal monthly income acquires a directly proportional relationship with job satisfaction. The higher the personal monthly net income of employees, the higher the satisfaction (Andrioti et al., 2017), consistent with previous studies by Asegid et al. (2014). According to Morsy and Sabra (2015), nurses' ages range from 25-30 years, single and their experiences in nursing and department are less than five years. The majority of them were dissatisfied with their income. Satisfaction with income played a significant role in job satisfaction (Lu et al., 2016).

However, some scholars argue that the quality of the hospital creates high-pressure

working environments, increases job demands, and negatively affects employees' being (Landsbergis et al., 1999; Parker, 2003; Vidal, 2007). Thus, the impact on nurses' job satisfaction remains a research question, and the empirical evidence is mixed and debatable. Recognition must also be given to nurses and other healthcare workers to boost resilience, stave off burnout, and acknowledge and value nurses' contributions to care (Kelly & Lefton, 2017). Organisations should focus on how to improve nurse retention. They often overlooked something as simple as recognition for high-performing nurses. It was seen as a factor influencing turnover that would be traded against other considerations, such as job satisfaction or feeling valued. It is vital that the supervisor takes a leadership role, exhibits role model behaviour, shows a strong commitment to quality care, creates a supportive environment, and manages change strategically. The delivery of quality services depends on being motivated, qualified, satisfied, and committed. Nurses prefer leaders who are more considerate and supportive (Rad & Yarmohammadian, 2006). It is also important to gain more knowledge about nurses' job satisfaction.

According the evidence, job to satisfaction can be improved through enhanced remuneration, good management, a supportive environment, and revitalising the organisational structure. The ability to make hospital employees happier is a crucial retention strategy in the industry. Furthermore, according to the findings of this study, job satisfaction is influenced by both motivational and hygiene factors, and nurses must be satisfied with both types of factors to be satisfied with their jobs overall. The nurse administration can benefit from proper planning in terms of policy, career path, and extended and expanded roles. In addition, continuous service evaluation and monitoring of work satisfaction help identify any aspects of the services that need improvement. Increasing nurses' involvement, collaborating, and taking a team approach are critical to enabling the process, providing direction, and implementing various initiatives

to increase nurses' job satisfaction. Improving motivation and hygiene factors will provide healthcare professionals with more significant work or job satisfaction, positively impacting the individual, the organisation, and the overall quality of healthcare services.

Conclusion

With the assistance of Herzberg's Theory, the researchers investigated the level of job satisfaction among nurses in a tertiary hospital. The study's findings revealed that nurses in this study reported medium or average levels of iob satisfaction and motivation factor, with higher levels of job satisfaction associated with higher levels of professional development. According to the findings of this study, patient safety is the highest priority. Herzberg's theory proved helpful in exploring job satisfaction in this setting with new factors. The quality of the hospital, recognition, and supervisors are the most critical factors in determining job satisfaction. The findings of this study will help nurses, medical doctors and hospital administrators become more concerned about nurses, particularly those who work in tertiary hospitals throughout the Klang Valley. This will ensure that nurses are happy in their jobs. They must also develop comprehensive guidelines for working practices, more effective clinical systems, and a more holistic learning culture. Hence, the management team has to do the level best in their power to meet these requirements. The findings may also aid in developing policies and guidelines that could increase nurse job satisfaction.

Consequently, there is a higher level of patient satisfaction in providing nursing services. When this is accomplished, it will unavoidably result in an elevated nursing career that is more professional and an increase in the overall quality of the organisation. The sampling technique used in this study was responsible for some of the study's limitations. The small number of male participants may have impacted the findings because males may have different needs than females, which

could have influenced the results. The scope of this study was limited to two tertiary hospitals; future research could expand to other states to understand job satisfaction better. Although this study has shortcomings, the findings provide valuable insight into the phenomenon under investigation.

Acknowledgements

We would like to express our gratitude to all individuals directly or indirectly involved and who contributed to all stages of this study. This research is part of a dissertation submitted as partial fulfilment to meet the requirements for the PhD in UiTM.

References

Ahmad, N., & Oranye, N. O. (2010). Empowerment, job satisfaction and organisational commitment: A comparative analysis of nurses working in Malaysia and England. *Journal of Nursing Management*, 18(5), 582-591.

Aiken, L. H., Sermeus, W., Van den Heede, K., Sloane, D. M., Busse, R., McKee, M., & Kutney-Lee, A. (2012). Patient safety, satisfaction, and quality of hospital care: Cross-sectional surveys of nurses and patients in 12 countries in Europe and the United States. *BMJ*, 344.

Al-Hussami, M., Hammad, S., & Alsoleihat, F. (2018). The influence of leadership behavior, organisational commitment, organisational support, subjective career success on organisational readiness for change in healthcare organisations. *Leadership in Health Services*.

Alshmemri, M., Shahwan-Akl, L., & Maude, P. (2017). Herzberg's two-factor theory. *Life Science Journal*, *14*(5), 12-16.

Al Maqbali, M. A. (2015). Job satisfaction of nurses in a regional hospital in Oman: A cross-sectional survey. *Journal of Nursing Research*, 23(3), 206-216.

Andrioti, D., Skitsou, A., Karlsson, L. E., Pandouris, C., Krassias, A., & Charalambous, G. (2017). Job satisfaction of nurses in various clinical practices. *International Journal of Caring Sciences*, 10(1), 76-87.

- Aron, S. (2015). Relationship between nurses' job satisfaction and quality of healthcare they deliver. Minnesota State University, Mankato.
- Asegid, A., Belachew, T., & Yimam, E. (2014). Factors influencing job satisfaction and anticipated turnover among nurses in Sidama zone public health facilities, South Ethiopia. *Nursing Research and Practice*, 2014.
- Atefi, N., Abdullah, K. L., & Wong, L. P. (2016). Job satisfaction of Malaysian registered nurses: A qualitative study. *Nursing in Critical Care*, 21(1), 8-17.
- Bagheri Hosseinabadi, M., Ebrahimi, M. H., Khanjani, N., Biganeh, J., Mohammadi, S., & Abdolahfard, M. (2019). The effects of amplitude and stability of circadian rhythm and occupational stress on burnout syndrome and job dissatisfaction among irregular shift working nurses. *Journal of Clinical Nursing*, 28(9-10), 1868-1878.
- Berens, M. J. (2000). Training often takes a back seat. *Chicago Tribune*, 7.
- Chen, Y., Li, Y., Wu, H., & Liang, L. (2014).
 Data envelopment analysis with missing data: A multiple linear regression analysis approach. *International Journal of Information Technology & Decision Making*, 13(01), 137-153.
- Cherian, S., Alkhatib, A. J., & Aggarwal, M. (2018). Relationship between organisational commitment and job satisfaction of nurses in Dubai Hospital. *Journal of Advances in Social Science and Humanities*, 4(1), 36373-36400.
- Clark, A. E. (1996). Job satisfaction in Britain. British Journal of Industrial Relations, 34, 189-217.

- Cohen, P., West, S. G., & Aiken, L. S. (2014). Applied multiple regression/correlation analysis for the behavioral sciences. Psychology Press.
- Gardulf, A., Orton, M. L., Eriksson, L. E., Undén, M., Arnetz, B., Kajermo, K. N., & Nordström, G. (2008). Factors of importance for work satisfaction among nurses in a university hospital in Sweden. Scandinavian Journal of Caring Sciences, 22(2), 151-160.
- Hashim, J. (2015). Information communication technology (ICT) adoption among SME owners in Malaysia. *International Journal of Business and Information*, 2(2).
- Javanmardnejad, S., Bandari, R., Heravi-Karimooi, M., Rejeh, N., Nia, H. S., & Montazeri, A. (2021). Happiness, quality of working life, and job satisfaction among nurses working in emergency departments in Iran. *Health and Quality of Life Outcomes*, 19(1), 1-8.
- Jex, R., & Gudanowski, T. (2010). Job satisfaction among nurses in general practice. *British Nursing Journal*, 23(4), 567-75.
- Kavanaugh, J., Duffy, J. A., & Lilly, J. (2006). The relationship between job satisfaction and demographic variables for healthcare professionals. *Management Research News*.
- Kelly, L. A., & Lefton, C. (2017). Effect of meaningful recognition on critical care nurses' compassion. Am J Crit Care, 26(6), 438-444.
- Khunou, S. H., & Davhana-Maselesele, M. (2016). Level of job satisfaction amongst nurses in the North-West Province, South Africa: Post occupational specific dispensation. *Curationis*, 39(1), 1-10.
- Kim, H. Y. (2013). Statistical notes for clinical researchers: assessing normal distribution (2) using skewness and kurtosis. *Restorative Dentistry & Endodontics*, 38(1), 52-54.
- Landsbergis, P. A., Cahill, J., & Schnall, P. (1999). The impact of lean production and

- related new systems of work organisation on worker health. *Journal of Occupational Health Psychology*, *4*, 108-30. DOI: 10. 1037/1076-8998.4.2.108.
- Letvak, S., & Buck, R. (2008). Factors influencing work productivity and intent to stay in nursing. *Nursing Economics*, 26(3), 159.
- Lok, P., & Crawford, J. (2001). Antecedents of organisational commitment and the mediating role of job satisfaction. *Journal of Managerial Psychology*.
- Lu, M., Ruan, H., Xing, W., & Hu, Y. (2015). Nurse burnout in China: A questionnaire survey on staffing, job satisfaction, and quality of care. *Journal of Nursing Management*, 23(4), 440-447.
- Lu, Y., Hu, X. M., Huang, X. L., Zhuang, X. D., Guo, P., Feng, L. F., ... & Hao, Y. T. (2016). Job satisfaction and associated factors among healthcare staff: A cross-sectional study in Guangdong Province, China. *BMJ Open*, *6*(7), e011388.
- Masroor, A. M., & Fakir, M. J. (2010). Level of job satisfaction and iIntent to leave among Malaysian nurses. *Business Intelligence Journals*, *3*, 123-137.
- McNeese Smith. (2000). *Outcomes Management for Nursing Practice*, 4(2), 97-104.
- Mirzabeigi, G. H., Salemi, S., Sanjari, M., Shirazi, F., Heidari, S., & Maleki, S. (2009). Job satisfaction among Iranian nurses. *Hayat*, *15*(1).
- Morrissey, J. (2002). Following nurses' orders. *Modern Healthcare*, *32*(34), 36-39.
- Morsy, S. M., & Sabra, H. E. (2015). Relation between quality of work-life and nurses job satisfaction at Assiut University Hospitals. *Al-Azhar Assiut Medical Journal*, *13*(1), 163-171.
- Newman, K., Maylor, U., & Chansarkar, B. (2002). "The nurse satisfaction, service quality and nurse retention chain": Implications for management of recruitment

- and retention. Journal of Management in Medicine.
- Palazoğlu, C. A., & Koç, Z. (2019). Ethical sensitivity, burnout, and job satisfaction in emergency nurses. *Nursing Ethics*, 26(3), 809-822.
- Park, M. S., Jeoung, Y., & Lee, H. K. (2015). Relationships among communication competence, self-efficacy, and job satisfaction in Korean nurses working in the Emergency Medical Center setting. *Journal of Nursing Research*, 223, 101-108.
- Parker, S. K. (2003). Longitudinal effects of lean production on employee outcomes and the mediating role of work characteristics. *Journal of Applied Psychology*, 88, 620-34. DOI: 10.1037/0021-9010.88.4.620.
- Pinar, S. E., Ucuk, S., Aksoy, O. D., Yurtsal, Z. B., Cesur, B., & Yel, H. I. (2017). Job satisfaction and motivation levels of midwives/nurses working in family health centres: A survey from Turkey. *International Journal of Caring Science [Internet]*, 10(2), 802-12.
- Polit, D. F., Beck, C. T., & Owen, S. V. (2007). Is the CVI an acceptable indicator of content validity? Appraisal and recommendations. *Research in Nursing & Health*, 30(4), 459-67. https://doi.org/10.1002/nur.20199
- Price, J., & Mueller, C. (2011). *Professional* turnover. New York: SP Medical and Scientific Books.Qual.2004 Jul-Sep; 19(3):269-75
- Rad, A. M., & Yarmohammadian, M. H. (2006).

 A study of relationship between managers' leadership style and employees' job satisfaction. International Journal of Health Care Quality Assurance Incorporation Leadership Health Service, 19, xi-xxviii.
- Rai, R., Thekkekara, J. V., & Kanhare, R. (2021). Herzberg's Two Factor Theory: A study on nurses's motivation. *RGUHS Journal of Allied Health Sciences*, *I*(1).

Raosoft, I. (2004). Sample size calculator. *Available from: www raosoft com/samplesize*.

- Raziq, A., & Maulabakhsh, R. (2015). Impact of working environment on job satisfaction. *Procedia Economics and Finance*, 23, 717-725.
- Ruzafa, M., Madrigal, M., Velandrino, A., & López, L. (2008). Job satisfaction of Spanish nursing professionals working in English hospitals. *Gac Sanit.*, 22(5), 434-42.
- Tang, W. M., & Ghani, M. F. A. (2012). Job satisfaction among the nurse educators in the Klang Valley, Malaysia. *International Journal of Nursing Science*, *2*(4), 29-33.
- Tarcan, G. Y., Tarcan, M., & Top, M. (2017). An analysis of relationship between burnout and job satisfaction among emergency health professionals. *Total Quality Management* & Business Excellence, 28(11-12), 1339-1356.
- Tengah, S. A., & Otieno, O. J. (2019). Factors influencing job satisfaction among nurses in public health facilities in Mombasa, Kwale and Kilifi Counties, Kenya. *Advances in Social Sciences Research Journal*, 6(5).
- Utriainen, K., & Kyngäs, H. (2009). Hospital nurses' job satisfaction: A literature review. *Journal of Nursing Management*, 17(8), 1002-1010.

- Vidal, M. (2007). Lean production, worker employment, and job satisfaction: A qualitative analysis and critique. *Critical* Sociology, 33, 247-78.
- Wilson, B., Squires, M. A. E., Widger, K., Cranley, L., & Tourangeau, A. N. N. (2008). Job satisfaction among a multigenerational nursing workforce. *Journal of Nursing Management*, 16(6), 716-723.
- Wyatt, J., & Harrison, M. (2010). Certified pediatric nurses' perceptions of job satisfaction. *Pediatric Nursing*, *36*(4), 205.
- Zangaro, G. A., & Soeken, K. L. (2007). A meta-analysis of studies of nurses' job satisfaction. *Research in Nursing and Health*, 30(4), 445-458.
- Zarea, K., Negarandeh, R., Dehghan-Nayeri, N., & Rezaei-Adaryani, M. (2009). Nursing staff shortages and job satisfaction in Iran: Issues and challenges. *Nursing and Health Sciences*, 11(3), 326-331.
- Zhou, H., Han, X., Zhang, J., Sun, J., Hu, L., Hu, G., & Liu, Y. (2018). Job satisfaction and associated factors among medical staff in tertiary public hospitals: Results from a national cross-sectional survey in China. *International Journal of Environmental Research and Public Health*, 15(7), 1528.