

SATISFACTION PARADIGMS OF NURSES IN HEALTH CARE CENTRES IN MADURAI DISTRICT OF TAMILNADU STATE IN INDIA

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ABSTRACT

Satisfaction of hospital nurse is a matter of major concern because of the effects it can have on patient safety and quality of care. Patient satisfaction largely depends on the nurses who deliver service to patients. Thus, only satisfied nurses can possibly satisfy patients' need. In this research, a sample of 310 nurses working in various hospitals in Madurai city of Tamilnadu, in India were chosen and their satisfaction level on their job as well as their opinion on the various antecedents of job satisfaction were studied. In order to do so, a measurement tool was constructed with the help of earlier research in the field, theory and the various variables pertaining to the satisfaction of nurses were identified for the study. The measurement tool was checked for its reliability and it was found that the tool's reliability was good. Also the measurement tool was checked for its validity. After the analysis it was found that the nurses' satisfaction on the various factors of job satisfaction is on the middling side. The impact of various factors such as work environment, sustainability, organizational competitiveness, work equity and security on the overall job satisfaction of the nurses were analyzed using linear regression model and it was found that only the first three factors have significant impact and the next two factors do not have any significant impact.

Keywords: Nurse Satisfaction, Organizational Competitiveness, Security, Sustainability, Work Environment, Work Equity,

I. INTRODUCTION

Satisfaction of hospital nurse is of vital importance because of the effects it can have on patient safety and quality of care. Nursing-sensitive outcomes are one of the indicators of quality of care and may be defined as “variable patient

or family caregiver state, condition or perception responsive to nursing intervention” [1]. In a report published by Press Ganey [2], it is stated that in health care, as in other service industries, customer satisfaction largely depends on the employees who deliver service to patients. It is also emphasized that successful organizations understand the importance of front-line workers in their effort to satisfy the needs of customers. The patients’ health care experience depends on the actions of every physician, nurse, technician or other staff member who cares for the patient either directly or indirectly. Similar opinion is presented by Dennis and Regrut [3]. One of the antecedents of nurse satisfaction is the good relationship they have with the physicians [4].

Therefore, patients’ can be satisfied only if carefully selected employees are given the training, environment, technology, motivation, power to deliver excellent service and thereby ensuring employee satisfaction [5]. These satisfied employees in turn reflect the hospital's commitment to excellence when they care for patients [6]. As a result, the patients’ needs are met and the patient refers others to the facility or uses the services of that organization again in the future. This customer loyalty leads to revenue growth and profitability [7]. When the patient is satisfied, not only will revenue and profitability grow, but also the employees will feel a sense of accomplishment and be more satisfied with their jobs. So, when the hospital gets high patient satisfaction, employees will feel more job gratification and thus, satisfaction. The positive financial outcome for the organization comes from the careful construction of all of the links in this “profit chain”[3].

According to McIntyre.M [8], nurses, who are satisfied with their work and the organization of their work schedules, have higher levels of job satisfaction and patients in their care tend to be more satisfied [9]. The importance of satisfaction of nurses in a hospital is emphasized by Helen and David [10].

The importance of employee satisfaction is emphasized in various studies done by [11], [12], [13], [14], [15],[16], [17]. All the researchers have clearly stated the influence of the satisfaction of medical personnel such as nurses and other workers on the satisfaction of the patients. It can be gathered that only if these employees are satisfied and happy about their job, then they can serve the patients properly. If they are not satisfied, then this will be shown in the quality of the work and reflect on the patients too.

II. A BRIEF REVIEW AND RESEARCH APPROACH

Upenieks [18] proposes that mainly job contentment, autonomy, shared governance, increasing individual authority and accountability improve job satisfaction of nurses. Chaboyer, et al., [19] investigated the connection between three predictor variables which were the perceived collaboration with medical staff, autonomy, and independent action on the outcome which was the value, hospital nurses placed on their work. In another research, [21] tested a structural measurement model incorporating four core predictors of turnover (turnover intent, job satisfaction, work environment and demographic characteristics).

In a study by Aronson et al [22], the authors report on the factor structure of an employee satisfaction questionnaire designed for use with psychiatric hospital employees. The survey included questions related to workloads, quality of care, supervision and teamwork. The factor perception of respect and integrity reflected in the actions and attitudes of management captures the extent to which management respected workers who operated with honesty and integrity, promoted efficiency, and had open lines of communication with employees.

Lopez and Snyder (Eds.). [23] have given some examples on factors of measurement of work life satisfaction of nurses which include hope, optimism, problem-solving appraisal, creativity, wisdom-related performance, courage, self-esteem, emotional intelligence, sense of humour, moral judgment maturity, quality of life, and empathy. Mäkinen et al [24] examined the relationship between methods of organizing nursing and employee satisfaction. Job satisfaction was assessed by three facet scales: supervisory satisfaction, co-worker satisfaction, and satisfaction with personal growth.

In a research done by Erickson et al., [25] the authors described the development and psychometric evaluation of the Professional Practice Environment (PPE) Scale. The result was a multidimensional measure of eight components of professional clinical practice in a large acute care hospital in the US. The eight components were: handling disagreement/conflict, internal work motivation, control over practice, leadership and autonomy in clinical practice, staff relations with physicians, teamwork, cultural sensitivity and communication about patients.

Payne [26] had done a research on occupational stressors and coping as determinants of burnout in female hospice nurses. Using regression analyses, factors that contributed to emotional exhaustion, depersonalization and lower levels of personal accomplishment were identified. In a study done by Denton et al [27], multiple regression analyses indicated that heavy workload, organizational change, concerns with budget cutbacks, fear of job loss, and lack of peer and organizational support lead to increased job stress with decreased levels of job satisfaction.

In the study on job satisfaction of nurses by Rukholm [28], nurses identify that professional development opportunities are highly valued and contribute higher job satisfaction. Many nurses, however, identify several challenges. Often there are not enough offerings, or the ones available do not meet their needs. In addition, workload is frequently high. Professional development may be viewed in terms of lifelong learning, a means to competence, and/or as a path to increase employment capacity. The author reviews the literature related to professional development and links this opportunity to nurses' job satisfaction.

Reineck and Furino [29] in a research on nursing career fulfillment had data taken from a survey of registered nurses from Texas. In the study it was found that nurses love the intrinsic rewards of nursing. However, many areas of dissatisfaction exist: nurses felt that in terms of financial compensation, recruitment was valued over retention, and there was minimal differentiation for expertise. Stressors named by nurses included: paperwork, patient complexity, turnover, and overtime. In a research conducted by the Jackson Nurse Professionals Survey [30] on nurse satisfaction, the factors found to correlate most highly to job satisfaction are 1. My performance is evaluated in a manner that makes me feel positive, 2. I have the opportunity to do what I do best every day, 3. Conflicts are

managed in a way that result in positive solutions, 4. My opinion seem to matter to my manager, 5. I trust the hospital's management and leadership, 6. My manager listens to the employees in our department, 7. Communication between administration and employees has improved, 8. My manager recognizes employee contributions, 9. I trust my immediate manager, 10. The hospital has developed work/life policies. Swarnalatha & Prasanna [31] have also given a few antecedents for the above.

The choice and rationale behind the selection of the various items included in the instrument is considered from the above review. With the help of the earlier research in the field, the various variables pertaining to the satisfaction of nurses were identified and considered for the study. The measurement instrument was designed by using the various dimensions and scales from previous related research, and medical employees' / nurses' satisfaction surveys. However the questions were modified and some questions were added and some deleted taking into consideration the contextual requirements of the survey area and to fulfill the objectives of this research.

The above input was used to develop a questionnaire to be administered to the nurses.

III. OBJECTIVES OF THE STUDY

Since the nurse satisfaction has a huge impact on the patient satisfaction and subsequently the viability of a hospital itself, it was decided to have the study on satisfaction of health care support staff in health care centres as the main objective of the study. The study area is restricted to the hospitals in Madurai district of Tamilnadu.

a. IMPORTANCE OF OBJECTIVES

As hospitals evolve toward a consumer-driven care model and vie for patients and employees in an increasingly competitive market, the need to satisfy both parties becomes crucial to successful operations. Press Ganey's 2005 [32] Health Care Satisfaction Report states that, increases in employee (nurse) satisfaction are associated with increases in patient satisfaction. The report's data was gathered from hundred health care organizations which shows a direct and strong relationship between the two. Hence the study of nurse satisfaction becomes important if the delivery of health care is to be efficient in any health care organization and subsequently in the society/nation as a whole.

IV. HYPOTHESES FOR THE STUDY

For this analysis the null hypotheses proposed are:

H_0 : Overall satisfaction of nurses is not affected by work environment

Overall satisfaction of nurses is not affected by sustainability

Overall satisfaction of nurses is not affected by organizational competitiveness

Overall satisfaction of nurses is not affected by work equity

Overall satisfaction of nurses is not affected by security

H_1 : Not so

Various researchers in their design have used linear regression model to test hypothesis for establishing a proposed relationship [33], [34], [35]. The above proposed hypotheses are analyzed using linear regression model to find out whether there is any significant relationship between the overall satisfaction of nurses and the various antecedents.

a. OPERATIONALISATION OF THE OBJECTIVE

The opinion of the nurses on the various factors were collected through a number of individual items in those factors. A five point Lickert scale was used to measure these opinions from the nurses. The Lickert scale was designed to know whether the nurses agreed or disagreed with individual statements or items that described the factors. The Lickert scale used is given below.

Strongly Agree_ _Agree_ _Neither agree Nor disagree_ _Disagree_ _Strongly disagree

The opinion of the nurses for individual items was coded as follows:

5 – Strongly agree; 4 – Agree; 3 – Neither agree nor disagree; 2 – Disagree; 1 – Strongly disagree

b. SAMPLING AND COLLECTION OF DATA

The present study is mainly based on primary data. Data was collected from only those nurses who were registered with The Tamil Nadu Nurses and Midwives Council of Madurai district of Tamilnadu state and who were employed in hospitals in Madurai District. Simple random sampling was used to choose the 310 nurses from the total of 7540 registered nurses. The sample size was calculated based on confidence interval of 5% with 95% confidence level.

c. VALIDITY OF THE MEASUREMENT TOOL AND THE RESEARCH

Content validity in this study was ensured through evaluation of the measurement tool by a panel of experts for the complete coverage of all the relevant and necessary details pertaining to the objective of the study and also to ensure that the instrument measured what it was intended to measure. Initially, the panel of experts consisted of three academicians. Then after initial modifications, it was again reviewed by four practicing nurses. The panel was requested to update terms, to clarify confusing items, and to comment on the apparent validity of the items. After examination, many items were removed such as issues on waste management and some were changed. Construct validity in this study was ensured through incorporating the factors which were derived from the factor analysis of the items in the questionnaire [36]. A minimum eigen value of 1.0 and the orthogonal rotation (varimax) procedure was used using the IBM SPSS 22.0 package. This procedure was also carried out to determine if a simple method of summing up all the items to result in a total satisfaction score would be possible.

d. RELIABILITY OF THE MEASUREMENT TOOL AND THE RESEARCH

Since the true instrument is not available, reliability is estimated from high correlation among the variables comprising the scale (Cronbach's alpha); from the correlation of two equivalent forms of the scale (split halves

reliability); or from the extent to which an item, scale, or instrument will yield the same score when administered in different times, locations, or populations, when the two administrations do not differ in relevant variables. Cronbach's alpha is the most common form of reliability coefficient. In order to ensure the reliability of the measurement tool constructed, the data thus collected was subjected to multiple reliability measures and the results are presented in Table 1.

Table 1: Reliability of the study

Sample size	Cronbach's α	Guttman method	Parallel method	Split half method
310	0.926	0.935	0.908	0.815

Most of the factors have shown a Cronbach's alpha value of 0.5 and above, which is still in the acceptable range. Moreover the overall Cronbach's alpha reliability measure for all the 5 factors is $\alpha = 0.926$. This shows the internal consistency of the respondents in answering the questions, thereby proving its reliability.

V. FACTOR STRUCTURE FOR THE SATISFACTION OF NURSES

In the present study, factor analysis on the opinion of the nurses is employed to reduce a set of 53 interdependent items in the questionnaire to a smaller set of more meaningful 25 items, with more nearly corrected five factors. All the 25 items are finalized through the content and face validity subject to principal component analysis with varimax rotation. The factor matrix identified 5 factors which have eigen values greater than 1.0 and total explained variance of 69.102% keeping a minimum factor loading value of 0.6. The Keyser-Meyer-Olkin measure of sampling adequacy is 0.858 and the Bartlett's test of sphericity with chi-square value of 7104.201 and d.f 903. This ensures that the samples considered ($n = 310$) for this analysis is adequate and the results of the factor analysis are significant. The five identified factors were given names, which fit all the items in the respective factors. Previous research and literature were also used to aid the naming of factors.

Table 2 represents item loadings in each factor along with their respective eigen values, percentage of variance explained, reliability scores, scale means and variance. From the table it is inferred that the factor work environment has loaded significantly with 26.417 % of the total variance, followed by sustainability (9.178%), organizational competitiveness (5.062%), work equity (4.878%), and security (4.205%).

Further, the factor analysis ensures convergent validity by bringing out 5 factors with high factor loading. Through varimax rotation, the discriminant validity is also proved between all the five factors.

Table 2: Factor structure for the satisfaction of nurses

Factor for job satisfaction	Eigen value (Variance %)	Scale			
		α	\bar{x}	σ	σ^2
Factor 1 – Work Environment	14.439 (26.417)	0.926	28.69	11.20	125.44
Factor 2 – Sustainability	5.016 (9.178)	0.582	3.37	1.61	2.59
Factor 3 - Organizational competitiveness	2.767 (5.062)	0.559	7.24	2.99	8.94
Factor 4 - Work Equity	2.665 (4.878)	0.455	4.71	1.91	3.64
Factor 5 - Security	2.298 (4.205)	0.706	4.19	2.16	4.66

Source: Primary data collected

VI. ANALYSIS AND OUTCOME OF THE RESEARCH

Various analyses were done on the data collected from the nurses. The outcome of the analyses is presented below.

a. Overall satisfaction of nurses on their job

The nurses were asked to rate their overall opinion on how satisfied they were with their job in the hospital. A seven point scale was used to rate their overall satisfaction and it was found that the average satisfaction score was 6.4.

b. The overall opinion of Nurses on various factors

This section of the analysis examines the overall opinion of nurses on the various factors of their job satisfaction taken up for the study.

While observing Table 2, for the factor work environment, the nurses in the sample feel that this factor is important by 35.86% (the mean value 28.69 divided by the maximum score for that factor which is 80), for a maximum score of 80 (the factor work environment has 16 items, each with a maximum score of 5 and thus the maximum score for that factor is 80), with a mean value of 28.69 and a standard deviation of 11.20. Similarly the nurses feel that the factor sustainability is important by 33.7% (for a maximum score of 10) with a mean value of 3.37 and a standard deviation of 1.61.

Further for the factor organizational competitiveness, the nurses' opinion is that, this factor is pertinent by 48.27% (for a maximum score of 15) with a mean value of 7.24 and a standard deviation of 2.99. Also the nurses' opinion on the factor work equity is that, this factor is important by 47.1% (for a maximum score of 10) with a mean value of 4.71 and a standard deviation of 1.91. Similarly, the nurses feel that the factor security is important by 41.9% with a mean of 4.19 and a standard deviation of 2.16. From these factors, computing the overall job satisfaction of the nurses by aggregating the scores of all the factors, it is 38.56% (48.2 for a maximum score of 125), which could be

considered a low. Further investigation revealed that nurses in many of the private hospitals feel that they are paid less to the amount of work they put in.

While observing the overall satisfaction scores (score – 6.4 in a seven point scale), it can be considered that the overall satisfaction is quite high. But while considering the individual components of satisfaction, a different picture emerges. This phenomenon is further confirmed in the subsequent analysis.

c. Distribution of nurses based on Experience and Salary

Table 3 gives the distribution of nurses based on their experience and salary. This table shows that the salary paid to the nurses in general does not all the time directly depend on the experience of the nurses because some nurses who have one year experience get a salary above Rs.4000 and some nurses who have nearly ten years experience get a salary of Rs.1000 to 2000. The salary may depend on the profile of the hospitals in which the nurses are working. It is observed from this table that the nurses are usually paid between Rs.1000 to Rs.3000 as salary and very few nurses draw a higher salary.

Table 3: Distribution of nurses based on Experience and Salary

Nurses Experience	Salary in Rupees					Total
	Less than 1000	1000 to 2000	2000 to 3000	3000 to 4000	above 4000	
Less than one year	22	34	6	0	2	64
One year to less than two years	10	80	20	2	0	112
Two years to less than five years	6	30	38	24	4	102
Five years to less than ten years	0	2	6	6	8	22
Ten years or more	0	2	2	0	6	10
Total	38	148	72	32	20	310

Source: Primary Data Collected

d. Relationship between nurses' salary and their satisfaction

Table 4 gives the relationship between the nurses' salary and their satisfaction. In this table, a higher satisfaction score indicates higher satisfaction and lower score indicates lower satisfaction. It can be observed from Table 4 that the satisfaction of the nurses is not high even if their salary is high. This could be because the nurses feel that they are not satisfactorily compensated to the workload they have.

Table 4: Distribution of nurses based on salary and their satisfaction

Satisfaction Score	Salary in Rupees				
	Less than 1000	1000 to 2000	2000 to 3000	3000 to 4000	above 4000
Above 112.5	0	0	0	0	0
87.5 – 112.5	0	8	0	0	0
62.5 – 87.5	8	14	18	8	2
37.5 – 62.5	20	88	38	12	18
Less than 37.5	10	38	16	12	0
Total	38	148	72	32	20

Source: Primary Data Collected

e. Relationship between nurses’ experience and their satisfaction

Table 5 gives the relationship between the nurses’ experience and their satisfaction. It can be observed from the table that none of the nurses have said that they have higher satisfaction, irrespective of the number of years of service. It can also be observed that the satisfaction of the nurses does not increase even if their experience increases.

Table 5: Distribution of nurses based on experience and their satisfaction

Satisfaction Score	Experience				
	Less than one year	One year to less than two years	Two years to less than five years	Five years to less than ten years	Ten years or more
Above 112.5	0	0	0	0	0
87.5 – 112.5	2	4	2	0	0
62.5 – 87.5	8	18	22	2	0
37.5 – 62.5	28	68	54	16	10
Less than 37.5	26	22	24	4	0
Total	64	112	102	22	10

Source: Primary Data Collected

f. Relationship between nurses’ experience, salary drawn and their satisfaction

A cross tabulation was done between the experience of the nurses, their salary and their satisfaction scores. The results of the cross tabulation also reinforces the phenomena observed in section 10.4 and 10.5 and it can be concluded that the satisfaction among the nurses is generally low irrespective of their experience or their salary.

g. Nurses recommending the hospital in which they work presently to a friend for the friend’s employment

The overall number of nurses who will not recommend the hospital to their friends for employment is 70, while those who will recommend are 184.

The nurses in the ‘Definitely not’ group (nurses who will definitely not recommend this hospital to a friend for his\her employment) have a mean of 22.50 ($\sigma = 6.08$) for the factor work environment. In this case, the weighted score for the factor work environment is calculated out to 1.41, which lies between 1 and 2 in the rating scale (five point). This shows that this factor is not significant in recommending that hospital to their friends. This is the same phenomenon observed in the factors sustainability and security, where there also the weighted scores lie between 1 and 2.

The weighted scores in the case of the factors organisational competitiveness and work equity are 2.76 and 2.27 respectively which lie between 2 and 3 in the scale. This too shows that these factors are not significant factors in recommending that hospital to their friends.

It can also be inferred from this analysis that, those nurses who will definitely not recommend the hospital to their friends for employment feel that the factor work environment is important by 28.13% in influencing their job satisfaction, the factor sustainability is important by 31.3%, the factor organization competitiveness is important by 55.27%, the factor work equity is important by 45.4% and the factor security is pertinent by 30% in influencing their job satisfaction.

Similarly for those nurses, who say that they will probably not recommend the hospital to their friends, have a mean value of 37.27($\sigma = 15.97$) for the factor 'work environment'. The weighted score for this factor is 2.33 and the nurses feel that this factor is important by 46.59%. While observing the analysis, it becomes clear that all the factors have the weighted score ranging from 2 to 3 on the rating scale.

This shows that this factor is not a significant one in recommending that hospital to their friends. Further for the factor sustainability, the opinion of the nurses is that, they feel that this factor is important by 40.9% with a mean value of 4.09 and a standard deviation of 2.25. Similarly the importance attached to various other factors by the nurses are 47.87% for organization competitiveness (mean = 7.18, $\sigma = 3.20$), 59.1% for work equity and 57.3% for security.

In the case where nurses would probably recommend the hospital which they are presently employed to their friends for employment, it is seen that the factors work environment and sustainability have their weighted scores falling between 1 and 2 and all the other factors have their weighted scores between 2 and 3. Further the importance attached to all the factors except security is around 40% and 45%.

The factor security in the opinion of nurses is important by 23.7%. In the case of the nurses who say that they definitely would recommend this hospital to their friends for employment, here too the weighted scores fall between 1 and 2 for the factors work environment and sustainability and the scores fall between 2 and 3 for the other factors. Similarly the percentage means are also ranging from 30 to 50%.

While observing the weighted scores as well as the percentage means, it can be seen that, for the various categories of nurses who will recommend the hospital or not recommend the hospital to friends for employment, there is no significant difference in the importance they attach to any of the factors. Thus it can be inferred that these factors do not influence the nurses recommending or not recommending the hospital to their friends for employment.

h. Nurses' opinion on various factors in relation to their salary

The opinion of nurses on various factors with respect to their salary was observed and it can be seen that a large number of nurses draw their salary between Rs.1000 to 2000. About 104 nurses are paid Rs.2000 to 4000 and only 20 nurses are paid above Rs.4000 as salary. The nurses in the category who draw a salary of less than Rs.1000, have a mean score of 28.47($\sigma = 10.58$) for the factor work environment. The weighted score for this factor is 1.78 which lies between 1 and 2 in the rating scale and also the percentage mean for this factor is 35.49%. This shows that this factor is not important in relation to their salary.

While looking into the other factors also in the same category of nurses, it can be seen that the weighted score is between 1 and 2 for all the factors except organisational competitiveness and work equity and the percentage mean ranges from 34% to 46% for all the factors except work equity which has a weighted score of 2.79 and a percentage mean of 55.8%. Thus it can be concluded that the nurses who receive a salary of Rs.1000 or less do not consider these factors important. Work equity has a higher score because these nurses may feel that issues regarding committing mistakes and doing a reasonable amount of work are important for their satisfaction.

While observing all the categories of nurses, almost all the groups of nurses have similar opinion on the various factors deciding their satisfaction. Thus it can be concluded that the salary of the nurses has no great impact on their opinion on the importance of the various factors relating to satisfaction.

i. Nurses' opinion on various factors in relation to their experience

The opinion of the nurses on the various factors of job satisfaction based on the experience of the nurses was analyzed. This analysis shows that a vast majority of the nurses in the sample (278) have an experience less than five years. Only 32 nurses in the sample have experience greater than five years and in that 10 of them have an experience of more than 10 years.

In this area too, almost the same phenomenon which was seen in the previous two sections (section 10.7 and 10.8) is observed. Here, for the factor work environment on job satisfaction, all the groups of nurses except those who have 2 to 5 years of experience have a percentage mean distributed between 27% to 37%, which means that all these categories of nurses attach only that much importance to this factor in their job satisfaction. Only those nurses who have their experience from 2 to 5 years attach an importance of 11.21% to the factor work environment for their job satisfaction. All these categories of nurses have a weighted score less than two for this factor. This shows that this factor is not significant in influencing their job satisfaction.

Further, for the factor sustainability, only those nurses who have their experience in the two to five years range say that this factor is important by 89.7% in deciding upon the job satisfaction. All the other categories of nurses i.e. who have experience less than two years or greater than five years opine that this factor is pertinent by 26% to 37%. While looking into the weighted scores, except for those nurses who have experience of 2 to 5 years, all the other categories of nurses have the weighted score less than 2 while those with 2 to 5 years of experience have the score 4.49. Thus it can be inferred that, the factor sustainability is important in deciding the nurses' job satisfaction only for those who have 2 to 5 years of experience, while this factor is not so important to others.

While observing the factor competitive environment, it can be seen that irrespective of the experience, this factor is almost equally important to all the categories of nurses based on experience. The percentage mean for this factor for all the nurses is ranging close to 50 to 60% and also the weighted scores are ranging from 2.4 to 3. Thus it can be observed that this factor is almost 50 to 60% important in deciding all the nurses' job satisfaction.

Also when observing the factor work equity, it can be seen that the percentage mean is 46.9% for nurses who have experience of less than one year, 49.3% for nurses who have experience of one to two years, 40% for nurses who have experience of five to ten years and 46% for those nurses who have experience greater than 10 years. Only for those nurses who have the experience of two to five years, the mean percentage is 89.7% which means that these nurses have more importance to work equity in their job satisfaction.

Finally for the factor security, the opinion of the nurses who have an experience less than a year is that this factor is important by 30.9% for their job satisfaction. For those nurses who have experience of five to ten years also have almost the same percentage mean of 27.3%. For the nurses whose experience is one to two years, the percentage mean is 45% which means that these nurses have the opinion that the factor security is important to an extent of 45% in their job satisfaction. Also the nurses with 10 or more years of experience have a percentage mean of 52% and the nurses whose experience are two to five years have the opinion that this factor is important by 89.7%. In this case too, only those nurses who have the experience of two to five years feel that this factor is important.

The reason for the nurses to give an opinion that almost all of the factors equally influence their job satisfaction may be that there is some other factor which really influences their job satisfaction beyond these factors which needs to be identified.

VII. RELATIONSHIP BETWEEN OVERALL SATISFACTION OF NURSES AND THE VARIOUS ANTECEDENTS

To find out whether the overall satisfaction among the nurses is influenced separately by the various factors such as organizational competitiveness, sustainability, work equity, work environment, and security, linear regression model is used. For this, the impact of the independent variables on the dependent variable was found by entering the independent variables into a regression model individually and separately. Finally the individual output from the regressions is compiled into a single table (Table 6).

Table 6: Linear Regression for overall satisfaction of nurses

Variables	Reg coeff	T	R ²	Change statistics		Significance	H ₀
				R ²	F		
Work environment	0.278	53.155	0.086	0.089	30.097	0.000	Reject
Sustainability	0.141	56.991	0.017	0.020	6.284	0.013	Reject
Organizational Competitiveness	0.173	46.000	0.027	0.030	9.544	0.002	Reject
Work equity	-	49.262	0.007	0.011	3.315	0.070	Accept
Security	-	59.482	0.006	0.009	2.878	0.091	Accept

Source: Primary data collected

While observing Table 6 it is evident that the independent variable work environment has a significant impact on overall satisfaction of nurses ($F = 30.097$; $p < 0.01$). Similarly other independent variables namely sustainability ($F = 6.284$; $p < 0.05$), and organizational competitiveness ($F = 9.544$; $p < 0.01$) also prove to have a significant impact on the overall satisfaction of nurses. The variables work equity and security do not have any impact on the overall satisfaction of nurses. The linear regression equations for the factors which have a significant impact on the overall satisfaction of nurses are discussed below. The regression equation is of the form $y = a + b_n x_n$

a. Overall satisfaction of nurses and work environment

$y = 7.124 + 0.278 x_1$. The regression equation signifies that as the work environment in which the nurses are working improves, their overall satisfaction increases. This is a common phenomenon which can be observed with any organization [37].

b. Overall satisfaction of nurses and sustainability

$y = 6.705 + 0.141 x_2$. While observing the regression equation it can be seen that, as the sustainability of the hospital increases, the overall satisfaction of nurses increases. This may be because the nurses may feel that if they are able to better serve through the hospitals they work in, then they are satisfied.

c. Overall satisfaction of nurses and organizational competitiveness

$y = 6.062 + 0.173 x_3$. The regression equation reveals that as the organizational competitiveness of the hospitals increases the overall satisfaction of nurses' increases. It can be seen from the literature that the organizational competitiveness is a direct antecedents to employee satisfaction.

The reason for the factor work equity not having any impact on the overall satisfaction of nurses is may be because that the organizational structure among the many hospitals in the city is quite flat and almost all of the nurses work under the direct instructions of the doctors in the hospitals. This probably ensures equity among the nurses in an inherent manner and this may be the reason why work equity does not have a significant impact on the nurses' satisfaction. Similarly, the reason for the factor security not having any impact on the overall satisfaction of nurses is may be because the job security of the nurses working in the private hospitals is virtually absent and may be they have internalized this fact and do not expect any job security. Also there is a lot of floating among the nurses from one hospital to the other. This may add to the fact they do not expect any job security.

VIII. SUMMARY AND CONCLUSION

The job satisfaction of the nurses is on the middling side and most of them feel that providing good quality care is a priority. The satisfaction of the nurses based on their salary and the experience was studied. It was observed that the satisfaction of the nurses is not high even if their salary is high. With respect to their experience, none of the nurses have said that they have higher satisfaction, irrespective of the number of years of service. It was also observed that the satisfaction of the nurses does not increase even if their experience increases.

The antecedents of overall nurse job satisfaction such as work environment, sustainability, organizational competitiveness had a significant impact on the dependent variable considered and the factors such as work equity and security had no impact on the overall job satisfaction of the nurses. Hence it can be concluded that if the opinion of nurses on variables work environment, sustainability, organizational competitiveness increases then their overall job satisfaction increases.

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