

Self-Concept and its Relationship with Retention Index among Nurses Working in a Tertiary Care Hospital in South India: A Descriptive Cross Sectional Co-Relational Study

Dr. Janarthanan. B¹, Santhiya. A²

Faculty¹, B.Sc Nursing IV year², College of Nursing, Jawaharlal Institute of Postgraduate Medical Education & Research (JIPMER), Puducherry, India
College of Nursing, Jawaharlal Institute of Postgraduate Medical Education & Research (JIPMER), Dhanvantari Nagar, Gorimedu, Puducherry, India.

Correspondence Author: Dr. Janarthanan. B

Background: It has been widely believed that positive self-concept among nursing officers leads to higher retention rates. However, it is noticed that nurses with good self-concept are more likely to choose challenging job options, resulting in frequent turn over in health care settings. **Aim:** This study aimed at examining the relationship between self-concept and retention index among nurses working in a tertiary care hospital in south India. **Materials and Methods:** The study followed a descriptive cross sectional co-relational research design. Random sampling technique was used to recruit 179 study participants and data was collected using the tools; Nurse's self-concept Questionnaire (NSCQ) & Nurses Retention Index (NRI) scale. Both male and female nurses having not less than one year of service and giving direct patient care were included and those who were on leave and had changes of work place during the past 6 months were excluded. **Results:** The study findings showed that all the nurses (100%) were having the higher level of self-concept (100%). Similarly, retention index is also higher among the majority of nurses 176(98.3%). Besides, Co-relation between nurses self-concept and retention index shows the positive co-relation ($r=0.970$) and it is highly significant ($p<0.001$). **Conclusion:** Self-concept among nurses is a very important entity to assess during their professional career, as disturbances in self-concept may create an adverse effect on their retention index in the working area, thereby compromising the quality of patient care. Hence, due importance should be given to take measures to improve the self-concept of nurses, through which their retention in the hospitals can be assured.

Key words: Self-concept, Retention Index & Nurses.

Background

Nursing as a profession aims to promote wellness, prevents illness by raising public health awareness, provides care for the ill, the disabled, and the terminally ill. Nurses play a pivotal role in global health care by rendering services which are patient friendly and scientifically proven⁽¹⁾. In order to execute this, nurses need to have good self-concept and retain themselves in the job without frequent turnover. Unfortunately, due to poor self-concept and declining job retention, there is a global nursing shortage that is endangering the caliber of our health care delivery and has emerged as the most pressing issue relating to the health workforce of this decade. Effective retention strategies strengthen the nursing profession, improve quality outcomes, and increase patient satisfaction with care ⁽²⁾, while ineffective retention in profession has a number of negative effect on organizations, patients, and society⁽³⁾. Strong self-concept allows nurses to deliver high-quality care and represent the nursing profession in the community ^(4,5). It may also increase retention rates in the healthcare workplace⁽⁶⁾. Numerous studies have shown that poor self-concept among nurses results in lower retention index and poor patient care ⁽⁷⁾. Nurses frequently experience burnout as a result of increased retention index among them. Hence this study is undertaken to examine the relationship of self-concept and retention index among nurses.

Materials and Methods

This cross-sectional descriptive co-relational study was conducted at a tertiary care teaching hospital in South India from June 2023 to August 2023. The list of nursing officers was obtained from the department of nursing services, after getting approval from the Institute Ethics Committee (Ref: JIP/IEC-OS/196/2023, dated 09/08/2023). Among the 1860 nursing officers, 568 nursing officers of both gender and who met the inclusion criteria of having one year of experience and giving direct patient care were enlisted. Then by using simple random technique, from the 568 nursing officers, the estimated sample size of 179 study participants were recruited and data regarding self-concept and retention index were collected using permitted English version of Nurses Self-Concept Questionnaire (NSCQ)⁽⁸⁾ and Nurses Retention Index Scale (NRI) ⁽⁹⁾ respectively.

Results

Table 1 indicates that most of the nurses were in the age group of 31-40 (88.8%), out of which, 66 were male nurses (36.9%) and the rest were female nurses (63.1%). Majority of the them are married 173(96.6%) and from Kerala 90 (50.3%) speaking Malayalam 89(49.7%). The finding shows that 161 (89.9%) of them were B.Sc Nursing qualified 85(47.5%), 164(91.6%) of them had 6 to 10 years of experience, 97 (54.2%) were having 31 to 40 hours of working per week. Among the study participants, 91 (50.8%) had reported that there was absence of break, 159 (88.8%) told that there was presence of social and collegial support, 129 (72.1%) had more than 6 hours of sleep, 170 (95.0%) were living

with their family and 158 (88.3%) expressed about absence of illness. Distribution of study participants based on their self-concept denotes the presence of highest level of self-concept (100%) in all 179 nurses. With regard to 6 dimensions of Nurses self-concept, higher level of self-concept is seen in dimensions of care (40.31 ± 4.04) and communication (40.13 ± 4.48). It was also inferred that , high level of retention index is seen among majority of nurses 176(98.3%). Co-relation between Nurses self-concept and Nurses retention index shows a positive co-relation ($r=0.970$) with a high statistical significance ($p<0.001$). When background variables of the Nurses were associated with the level of retention index, statistically significant association was found in variables like gender & living arrangement ($p<0.05$), marital status, social and collegial support ($p<0.01$) and domicile ($p<0.001$).

Table 1: Description of Socio Demographic Variables (N=179)

Socio-demographic variables	Frequency (N)	Percentage(%)
<u>Age in years</u>		
21-30	10	5.6
31-40	159	88.8
41-50	10	5.6
<u>Gender</u>		
Male	66	36.9
Female	113	63.1
<u>Educational status</u>		
B.sc. Nursing	161	89.9
Diploma in Nursing	1	.6
GNM	1	.6
M.sc. Nursing	15	8.4
RGNM	1	.6
<u>Marital status</u>		
Married	173	96.6
Unmarried	6	3.4
<u>Working area/department</u>		
Ward	85	47.5
ICU	58	32.4
OT	33	18.4
OPD	3	1.7
<u>No of experience</u>		
1 to 5 years	5	2.8
6 to 10 years	164	91.6

11 to 15 years	10	5.6
<u>Working hours/week</u>		
21 to 30 hours	5	2.8
31 to 40 hours	97	54.2
41 to 50 hours	75	41.9
51 to 60 hours	2	1.1
<u>Time for break</u>		
Present	88	49.2
Absent	91	50.8
<u>Social and collegial support</u>		
Present	20	11.2
Absent	159	88.8
<u>Sleeping hours</u>		
Less than 6 hours	50	27.9
More than 6 hours	129	72.1
<u>Living arrangement</u>		
Lives alone	9	5.0
Lives with family	170	95.0
<u>Presence of illness</u>		
Present	21	11.7
Absent	158	88.3
<u>Mother tongue</u>		
Tamil	68	38.0
Malayalam	89	49.7
Hindi	8	4.5
Telugu	7	3.9
Others	7	3.9
<u>Domicile</u>		
Andhra Pradesh	3	1.7
Chennai	9	5.0
Coimbatore	5	2.8
Cumbum	1	0.6
Delhi	5	2.8

Dharmapuri	1	0.6
Gujarat	1	0.6
Kanchipuram	1	0.6
Karnataka	3	1.7
Kerala	90	50.3
Lakshadweep	2	1.1
Mysore	1	0.6
Nagercoil	1	0.6
Puducherry	37	20.7
Rajasthan	1	0.6
Salem	1	0.6
Tamilnadu	9	5.0
Telengana	4	2.2
Thanjavur	2	1.1
Tirupattur	1	0.6
Tuticorin	1	0.6
<u>Income</u>		
50001 to 60000	9	5.0
60001 to 70000	5	2.8
70001 to 80000	32	17.9
80001 to 90000	90	50.3
90001 to 100000	40	22.3
100001 to 110000	3	1.7

Table 2: Distribution of Study Participants Based on their Self-Concept

Level of Nurses self concept	Frequency	Percentage	Mean&S.D.
High	179	100	235.82±24.578
Low	0	0	

Table 3: Mean and Standard Deviation for the Dimensions of Nurses Self-Concept Questionnaire

Dimensions	Mean and Standard Deviation
Nurses general self-concept	38.66±5.07
Care	40.31 ±4.049
Staff relations	39.61 ±4.27
Communication	40.13±4.48
Knowledge	38.74±5.48
Leadership	38.63±5.22

Table 4: Distribution of Study Participants Based on their Retention Index

Level of retention index	Frequency	Percentage	Mean and Standard Deviation
High	176	98.3	36.93 ± 6.111
Low	3	1.7	

Table 5: Co-Relation Between Nurses Sel-Concept and Nurses Retention Index (N=179)

Variables	Nurses		
Nurses self-concept Nurses retention index	Mean and Standard deviation	r value	p value
	235.82±24.578	0.970	0.000***
	36.93±6.111		
***Co-relation is highly significant at p< 0.001 level			

Discussion

Most of the nurses working in the hospital experiences decreased retention index and poor self-concept globally. This could be because of increased work pressure, low salary, and decreased collegial support. Hence this study was undertaken to find out the relationship between self-concept and retention index of nurses working in a tertiary care hospital, by adopting a descriptive cross-sectional co-relational approach.

The background variables showed that the educational qualification of the majority of the nurses is B.Sc. Nursing (47.5%), and most of them were in the age group between 31-40 years. In regard to the gender, many were female nurses (63.1%) and 96.6% of them were married. The findings of the research conducted in

Singapore supports the present study showing that, most of the nurses working in the hospital were below 40 years of age and many of them had bachelor degree in nursing⁽¹⁰⁾. However, few findings of the present study were contradicted by the results of an Ethiopian study⁽¹¹⁾ which revealed that many of them were male nurses and most of the nurses were unmarried. Interestingly all the study participants were found to have higher level of self-concept (100%) and majority of (98.3%) them had higher retention index. This could be because of the fact that the present study being conducted in a Government setting, where nurses would have had good self-concept due to job security and this would have made them to get retained in their jobs. These findings were in concordance with two studies conducted by Motazenalfaraj et.al and Goliroshal et.al where highest level of self concept among nurses is reported^{(12),(13)}. Surprisingly, another study conducted by Lakshman S had contradictory findings to the present study, where it was found that majority of the nurses had intention to leave their job.⁽¹⁴⁾

Pearson co-relation test was used to find out the correlation between nurses self-concept and nurses retention index and a positive co-relation ($r=0.970$) with a high statistical significance ($p<0.001$) could be inferred from the findings. This was supported by the findings of two difference studies conducted in Australian by Cowin⁽¹⁵⁾ and in Taiwan by Lin et al⁽¹⁶⁾ where positive co-relation is found between nurses self-concept and retention index.

Chi-square test was used to find out the association of background variables with Nurses retention index. Association of background variables with Nurses retention index shows that gender, living arrangement, marital status, collegial support and domicile were statistically associated with the level of Nurses retention index. Study done by Kim, Y.-J., Lee et.al supports the current study by showing the presence of association between background variables (gender and marital status) with nurses retention index.⁽¹⁷⁾ On the other hand the present study findings were not supported by a study done by Coomber B & Louise Barriball K, which revealed that background variables like educational status and salary had association with the level of Nurses retention index⁽¹⁸⁾

Conclusion

From the findings of the present study, it can be inferred that self-concept and retention index of nurses are closely related to each other and the impact created on one would certainly affect the other. Hence it is recommended that health care policy makers shall focus on strengthening the nursing workforce by imparting strategies to improve their self-concept and retention index. Continuing nursing education programs would help organizations to establish a regular routine of conducting on-going assessments of evaluating the nurses' self-concept and retention index, thereby creating remedial measures to address the deficits.

Financial Support and Sponsorship: Nil

Conflicts of Interest: There are no conflicts of interest.

Acknowledgement

The authors warmly recognizes the unwavering support and contribution of the Chief Nursing Officer (CNO) and the nursing officers towards the conduct of the study.

Ethical Approval

Ethical approval for the study was provided by the Institute Ethical Committee (IEC) for nursing studies (Ref: JIP/IEC-OS/196/2023, dated 09/08/2023).

Author Contribution

Dr. Janarthanan B was involved in designing the study, supervised the research work, prepared the manuscript and carefully reviewed it. Ms. Santhiya. A was involved in collecting data, analyzing it and preparing the initial draft of this manuscript.

References:

1. Cowin, L.S., Jacobsson, D.K., 2003. Addressing Australia's nursing shortage: is the gap widening between workforce recommendations and the workplace? *Collegian* 10 (4), 20–24.
2. Washeya, F. N. (2018). Factors influencing retention of professional nurses in a public health care facility in Windhoek, Namibia [Ph.D. Thesis]. Stellenbosch: Stellenbosch University. scholar.sun.ac.za.
3. Squires, A., Jylhä, V., Jun, J., Ensio, A., & Kinnunen, J. (2017). A scoping review of nursing workforce planning and forecasting research. *Journal of Nursing Management*, 25(8), 587–596.
4. Bornholt, L.J., Piccolo, A., 2005. Individuality, belonging, and children's self concepts: a motivational spiral model of self evaluation, performance and participation in physical activities. *Appl. Psychol.: Int. Rev.* 54 (4), 515–536.
5. Johnson, M.; Cowin, L.S.; Wilson, I.; Young, H. Professional identity and nursing: Contemporary theoretical developments and future research challenges. *Int. Nurs. Rev.* 2012, 59, 562–569.
6. Cowin, L.S. The effects of nurses' Job satisfaction on retention: An Australian perspective. *J. Nurs. Adm.* 2002, 32, 283–291.
7. Muindi FK. The relationship between participation in decision making and Job satisfaction among academic staff in the school of business, university of Nairobi. *J Hum Resour Manag Res* 2011;2011:1-34.
8. Cowin, L. (2001). Measuring nurses' self-concept. *Western Journal of Nursing Research*, 23(3):313-25.

9. Cowin, L.S. &Hengstberger-Sims, C. (2006). New Graduate Nurse Self-Concept and Retention Issues. *International Journal of Nursing Studies*.43(1):59-70.23(3),313-325.
10. Goh, Y.-S., & Lopez, V. (2016). Job satisfaction, work environment and intention to leave among migrant nurses working in a publicly funded tertiary hospital. *Journal of Nursing Management*, 24(7), 893-901.
11. Gebregziabher D, Berhanie E, Berihu H, Belstie A, Teklay G. The relationship between Job satisfaction and turnover intention among nurses in Axum comprehensive and specialized hospital Tigray, Ethiopia. *BMC Nurs*. 2020 Aug 18;19:79. doi: 10.1186/s12912-020-00468-0. PMID: 32831645; PMCID: PMC7437041.
12. Montazeralfaraj, Razieh & Ahmadi, Elham & Dehghani Tafti, Arefeh& Barati, Omid & Bahrami, Mohammad. (2018). Measuring the nurses' professional self-concept and its co-relation with working stress in Iranian educational Hospitals. *Bali Medical Journal*. 7. 521.
13. Goliroshan S, Nobahar M, Raeisdana N, Ebadinejad Z, Aziznejadroshan P. The protective role of professional self-concept and job embeddedness on nurses' burnout: structural equation modeling. *BMC Nurs*. 2021 Oct 19;20(1):203.
14. Lakshman, S. (2016). Nurse Turnover in India: Factors Impacting Nurses' Decisions to Leave Employment. *South Asian Journal of Human Resources Management*, 3(2), 109-128.
15. Cowin, L. S., &Hengstberger-Sims, C. (2006). New graduate nurse self-concept and retention: A longitudinal survey. *International Journal of Nursing Studies*, 43(1), 59-70.
16. Lin CF, Huang CI, Yang CM, Lu MS. The Relationship Between Work Environment Satisfaction and Retention Intention Among Nursing Administrators in Taiwan. *J Nurs Res*. 2019 Oct;27(5):e43. PMID: 31524854; PMCID: PMC6752697
17. Kim, Y.-J., Lee, S.-Y., & Cho, J.-H. (2020). A Study on the Job Retention Intention of Nurses Based on Social Support in the COVID-19 Situation. *Sustainability*, 12(18), 7276. Coomber, B., & Louise Barriball, K. (2007). Impact of Job satisfaction components on intent to leave and turnover for hospital-based nurses: A review of the research literature. *International Journal of Nursing Studies*, 44(2), 297-314.