

Patient Navigation Care On Anxiety And Satisfaction Among Admitted Neurology Patients

Manswita Bhoop, Dr. Suchana Roy Bhowmik, Dr. Shweta Pandey

M.Sc. Nursing, College Of Nursing, King George's Medical University, Lucknow, India,
Assistant Professor, College Of Nursing, King George's Medical University, Lucknow, India,
Additional Professor, Department Of Neurology, King George's Medical University, Lucknow, India,

Abstract:

Background: Worldwide neurological disorders became disease burden globally. Patients with neurological disorders have anxiety due to the complexity of treatment and fragmented care. Patient navigation care offers a structured approach with individualized care which facilitates timely, effective, and holistic care.

Material and methods: This quasi experimental post test study was carried out in Neurology department of a tertiary care hospital. 68 subjects were selected by non probability purposive sampling who met the inclusion criteria. Routine hospital care was provided to the control group (34 subjects) and patient navigation care was provided to the study group (34 subjects) for 3 days by the researcher which included routine care, education and psychological support. On 4th day, post test data were collected using demographic and clinical profile, Hamilton anxiety rating scale (standardized) and Patient satisfaction questionnaire (standardized). Data were analyzed using descriptive and inferential statistics.

Result: The result shows statistically significant difference in anxiety among study group (3.03 ± 2.11) and in control group (12.35 ± 5.67) with p value < 0.05 . There was also statistically significant difference in satisfaction among study group (87.47 ± 4.27) and in control group (59.88 ± 8.52) with p value < 0.05 . It also showed that there was significant negative correlation found between anxiety and satisfaction (p value < 0.05).

Conclusion: The implementation of navigation care is beneficial for the admitted patients with neurological disorders in the form of reducing anxiety and increasing patient satisfaction level. The study recommends formulation of guidelines, standard policies and protocols on providing navigation care to the patients in the hospital.

Keyword: Anxiety, Neurology, Nursing Care, Patient Navigation, Patient Satisfaction

Date of Submission: 08-09-2025

Date of Acceptance: 18-09-2025

I. Introduction

Neurological conditions constitute a substantial and growing global health burden, contributing significantly to disease and mortality worldwide. Conditions like stroke, migraines, Alzheimer's, epilepsy, and multiple sclerosis necessitate intricate treatment plans and comprehensive support.^{1,2} Navigating complex healthcare systems presents significant challenges for patients and caregivers, leading to fragmented care, emotional, physical, social, and financial stress.³ Patient navigation systems have emerged as a recommended strategy to address these issues by guiding patients through treatment options, appointments, and support services, thereby improving access to integrated, high-quality care.^{4,5} These programs assist in overcoming barriers such as financial concerns, communication gaps, and lack of coordination, while also offering emotional support.^{6,7} Studies suggest patient navigation can expedite diagnostic processes, reduce anxiety, and improve satisfaction.⁸ Keeping view the study was carried out with the purpose to assess the effectiveness of patient navigation care on patient satisfaction and anxiety among the patients suffering from neurological diseases.

II. Material And Methods

This quasi experimental post test study was carried out in the Neurology department of a tertiary care hospital in Lucknow from December 2024 to February 2025. 68 subjects aged ≥ 18 years were enrolled for this study who met the inclusion criteria by non probability purposive sampling. The sample size was estimated using a formula for comparing two means at 95% confidence level and critical value for 80% power. The sample size obtained for this study was 34 patients for each group.⁹

Inclusion Criteria: The inclusion criteria of the study were subjects of age group 18-70 years who agreed to participate in the study, conscious, hemodynamically stable, able to communicate, and who were present with their attendants during the hospitalization.

Exclusion Criteria: The study excluded the subjects who had altered GCS score (GCS<13), having psychiatric illness and destitute patients.

Procedure methodology: Firstly ethical approval from Institutional Ethics Committee was obtained to conduct the study (ethical number- 2989/Ethics/2025 dated 13/02/2025). Thereafter administrative permission was obtained from the department of Neurology of the tertiary care hospital. Subjects were selected by purposive sampling technique according to the inclusion criteria and divided into study and control group with 34 subjects in each group. Then written consent were obtained from the subjects. Routine hospital care was provided to the control group for 3 days and patient navigation care was provided to the study group for 3 days by the researcher. The researcher remained with the patient in the morning shift and provided individual navigation care for 3 days. The navigation care included routine care, patient education and providing psychological support. Routine care included basic nursing care, assisting in activities of daily living, giving medications and providing care as per patient's needs. Patient education included orientation of the hospital, ward, staff, diet, exercise, care to be provided, rain baseras, different government schemes related to health and discharge plan and other facilities to be provided to the patient during hospitalization. Psychological support included listening to the patients, clarifying doubts, being with patient to identify any health issues, to help in treating the health issues and maintaining good communication with the patient for better care. On the 4th day of care, post test data were collected using the tools i.e, demographic and clinical profile, Hamilton anxiety rating scale (standardized tool) and Patient satisfaction with nursing care quality questionnaire (standardized tool).

Statistical analysis-

The data were then tabulated and analyzed using descriptive and inferential statistics. Data were analyzed using SPSS version 20. *t*-test was used to ascertain the significance of differences between mean values of two continuous variables and confirmed by non-parametric Wilcoxon test to compare the impact of navigation care on anxiety and patient satisfaction between study and control groups. The level $P < 0.05$ was taken into consideration as the significant value.

III. Result

In this study the demographic data shows that maximum participants were in the age group of 20- 40 years (41.1%), male (55.8%), graduate (33.8%), married (58.8%), living in rural area (52.9%), doing professional job (25%), earning in the range of 18,497-30,830 (23.5%) and were consuming tobacco/ pan masala (29.4%).

In this study the clinical data showed that the majority of the participants were having hypertension (33.8%), admitted through emergency department (58.8%), admitted for the first time in hospital (60.2%) and rated their health as poor (35.2%) before hospitalization.

Table 1- Comparison of effect of navigation care on anxiety between study and control groups

Parameter	Control group		Study group		Wilcoxon signed rank test	
	Mean	SD	Mean	SD	W statistic	p-value
Anxiety	12.35	5.67	3.03	2.11	1102.5	<0.05

Table number 1 shows that the mean score of anxiety among study group is 3.03 whereas it is 12.35 in the control group after navigation care which shows a statistically significant difference in anxiety levels between the study and control group with p - value<0.05.

Table 2- Comparison of effect of navigation care on satisfaction between study and control groups

Parameter	Control group		Study group		Wilcoxon signed rank test	
	Mean	SD	Mean	SD	W statistic	p-value
Satisfaction	59.88	8.52	87.47	4.27	0.5	<0.05

Table number 2 shows the average mean score of satisfaction among study group is 87.47 and 59.88 in the control group after navigation care which shows a statistically significant difference in the satisfaction levels between the study and control group with p - value<0.05.

Table 3- Correlation between anxiety and patient satisfaction after the navigation care

Variable 1	Variable 2	Spearman Correlation coefficient	Alpha value	p value
Anxiety	Satisfaction	-0.886	0.05	<0.05

Table number 3 shows that the Spearman correlation coefficient (rho) is -0.886, indicating a strong negative correlation between anxiety and satisfaction with p-value is <0.05, A negative correlation suggests that as anxiety levels decreased the satisfaction levels increased among the patients.

Overall association with demographic and clinical variables with anxiety and patient satisfaction

It was also found that there was a significant association of anxiety with occupation (p value=0.026) and with mode of admission of the patients (p value = 0.037). There was also a significant association between patient satisfaction and area of residence (p value=0.044) and monthly income (p value=0.007).

IV. Discussion

The findings of the study revealed, that, in study group there was decrease in anxiety and improvement in patient satisfaction after providing navigation care and there was strong negative correlation found between anxiety and patient satisfaction which indicated that as anxiety decreased satisfaction increased as compared to control group. Similar results were reported in previous studies where patient navigation interventions effectively reduced anxiety,¹⁰ psychological distress, and improvement in quality of life.¹¹ In terms of patient satisfaction the study reported that after receiving nurse navigation care there was improvement in psychological well-being and satisfaction.¹² The results of the study are similar to the majority of the studies in literature which showed that navigation care reduces the anxiety among the patients and increases the patient satisfaction.^{13,14}

V. Conclusion

This study highlights that the implementation of navigation care is beneficial for the admitted patients with neurological disorders in the form of reducing anxiety and increasing patient satisfaction level. The study recommends that by formulating guidelines, standard policies and protocols on providing navigation care to the patients in the hospital may improve patient quality care with holistic approach.

Acknowledgement

The authors are grateful to Lord Almighty for his abundant love, grace, compassion and immense showers of blessings. We express our deep and sincere gratitude to Dr. Rashmi P. John, Acting Principal, KGMU College of Nursing, for her tremendous support and help throughout this study. Authors express gratitude to the Head of the department of Neurology for their administrative permission to conduct this study.

Conflict Of Interest

The authors of this research declare no conflicts of interest.

References

- [1]. World Health Organization. Global Burden Of Neurological Disorders. 2022.
- [2]. GBD 2021 Neurological Disorders Collaborators. Global, Regional, And National Burden Of Neurological Disorders And Their Attributable Risk Factors, 1990–2021: A Systematic Analysis For The Global Burden Of Disease Study 2021. *Lancet Neurol*. 2024 Mar;23(3):298-341.
- [3]. Committee On Family Caregiving For Older Adults; Board On Health Care Services; Health And Medicine Division; National Academies Of Sciences, Engineering, And Medicine; Schulz R, Eden J, Editors. *Families Caring For An Aging America*. Washington (DC): National Academies Press (US); 2016 Nov 8. 3, Family Caregiving Roles And Impacts. Available From: <https://www.ncbi.nlm.nih.gov/books/NBK396398/>
- [4]. Bluebrix. Simplifying Value-Based Care Journey With Patient Navigation Solutions - Bluebrix [Internet]. Bluebrix. 2025.
- [5]. Teggart K, Neil-Sztramko SE, Et Al. Effectiveness Of System Navigation Programs Linking Primary Care With Community-Based Health And Social Services: A Systematic Review. *BMC Health Services Research*. 2023 May 8;23(1):450–0.
- [6]. Mcbrien KA, Ivers N Et Al. Patient Navigators For People With Chronic Disease: A Systematic Review. *Plos One*. 2018 Feb 20;13(2):E0191980. Doi: 10.1371/Journal.Pone.0191980. PMID: 29462179; PMCID: PMC5819768.
- [7]. Freund KM, Battaglia TA Et Al. Patient Navigation Research Program Group. National Cancer Institute Patient Navigation Research Program: Methods, Protocol, And Measures. *Cancer*. 2008 Dec 15;113(12):3391-9. Doi: 10.1002/Cncr.23960. PMID: 18951521; PMCID: PMC2698219.
- [8]. Alasad JA, Ahmad MM. Patients' Satisfaction With Nursing Care In Jordan. *International Journal Of Health Care Quality Assurance*. 2003 Nov;16(6):279–85.
- [9]. Fakhr-Movahedi A, Soleimani M, Et Al. Effect Of Patient-Focused Clinical Pathway On Anxiety, Depression And Satisfaction Of Patients With Coronary Artery Disease: A Quasi-Experimental Study. *Iran Red Crescent Med J*. 2015 Sep 1;17(9):E29933. Doi: 10.5812/Ircmj.29933. PMID: 26473080; PMCID: PMC4601243.
- [10]. Natale-Pereira A, Enard KR, Nevarez L, Jones LA. The Role Of Patient Navigators In Eliminating Health Disparities. *Cancer*. 2011 Aug;117(15 Suppl):3543-52. Doi: 10.1002/Cncr.26264. PMID: 21780089; PMCID: PMC4121958.

- [11]. Chillakunnel Hussain S, Pai MS, Fernandes DJ, Et Al. A Randomized Controlled Trial To Evaluate The Impact Of A Nurse Navigator Programme On Outcomes Of People With Breast Cancer: Study Protocol. *J Adv Nurs*. 2017 Apr;73(4):977-988. Doi: 10.1111/Jan.13203. Epub 2016 Dec 1. PMID: 27862173.
- [12]. Geevarghese, Feba & Chhugani, Manju & Joseph, Dr. (2021). A Study To Assess The Effectiveness Of Nurse Navigation Programme For Patients Undergoing Open Abdominal Surgery In Tertiary Care Hospitals Of Delhi – A Pilot Study. *Journal Of Emerging Technologies And Innovative Research*. 2020; 7(4): 782 – 786.. 10.1729/Journal.23379.
- [13]. Hong, Yeon & Park, Jeong Yun & Kim, So Hee & Kim, Sun & Kim, Yeon. (2016). Effects Of A Navigation Program For Patients With Newly Diagnosed Gastric Cancer: A Randomized Controlled Trial. *Asian Oncology Nursing*. 16. 132. 10.5388/Aon.2016.16.3.132.
- [14]. Sjarifudhin M, Maria Rosa E. Effectiveness Of Patient Centered Care To Reduce Anxiety Level And Improve Satisfaction In Patients Undergoing Cataract Surgery. *Jurnal Medicoeticolegal Dan Manajemen Rumah Sakit*. 2018;7(3).