Investigation of nurse navigation programme comparison Of category wise frequency and percentage distribution of subjects according to daily mean post-operative pain scores from pod 0-5 between control versus experimental groups

Puja Saha[1], Dr. Sudha Singh Mohey [2]
Department Of School Of Nursing,
[1,2]Shri Venkateshwara University, Gajraula (Uttar Pradesh)

ABSTRACT
Aspects of postpartum patient care include surveillance, preventing problems related to operational condition or other preexisting multiple conditions, and providing targeted postpartum therapy for the surgery illness and its sequelae. The aim of the study is to investigate the nurse navigation programme comparison of category wise frequency and percentage distribution of subjects according to daily mean pain scores from pod 0-5 between control versus experimental groups. The test group comprised 135 individuals, while the control group had 135 participants. The pain score was categorised on a scale from 1 to 10. The patients' pain severity decreased from post-operative day (POD 0, POD 1 and POD 5) according to the results. As a result, it proved that the test group—which received the nursing care Navigational Programme—showed good management of pain than the group receiving no intervention. A nurse navigator provides patient support from the moment of diagnosis through end-of-life treatment, if required. Throughout the course of treatment, nurse navigators aid their patients.
Keywords: Nurse navigation programme, Pain score, post-operative day, Nurse navigator

1.   INTRODUCTION

The term "perioperative period" may encompass the preoperative, intraoperative, and postoperative phases of surgery; which are situated "around" the time of the surgery (Nourse, 2021). Positive postoperative outcomes are the result of the health team's collaborative endeavors (Pallas et al., 2022). Nursing has become fundamentally concerned with the guidance of patients who are undergoing abdominal surgery in their early out-of-bed activities (Daly and Pauly, 2022). The healthcare and nursing landscape is undergoing a significant and accelerating transformation, frequently known as an evolution of convergence or an accelerating evolution (Wang, 2021). Nurses are faced with the essential and challenging task of educating patients about surgery and the best possible postoperative outcomes prior to surgery (Bryne et al., 2022).

Nurse navigation is a relatively recent development in health care, in which nurses provide guidance and education to patients to improve their health outcomes. This approach applies in various settings (Sharma et al., 2022). A nurse navigator serves as a liaison between the patient and the clinical care staff (Bahnasawy et al., 2021). They assist the patient in making informed decisions by providing them with access to resources and information that will guide them

through the treatment process. The objective of the study is to investigate the nurse navigation programme comparison of category wise frequency and percentage distribution of patients according to daily mean pain scores.

1.   MATERIAL AND METHOD

The Nurse Navigate Course was given to the participant group using a reference leaflet & video-assisted coaching, and its correlation with their postoperative outcome parameters was evaluated. The experimental study's findings were used to calculate the final investigation's sample size. 270 participants from AGMC & GBP hospital and IGM Hospital; two approved tertiary care facilities in Tripura, participated in the conclusion of research. Two sets of volunteers were created: an untreated group (n = 135) as an experimental group (n = 135).

Scale of Evaluation: This section addressed the patient's reaction to discomfort during the postoperative period. The Numeric Pain Rating Scale was a standardised instrument that was employed to evaluate the intensity of pain experienced by patients on each postoperative day (POD) from 1 to 5. The pain score was classified as follows, with a range of 1 to 10, and the severity of the pain was assessed:

Score 0 - No Pain"

"Score 1 to 3 - Mild Pain (Well controlled Pain)" "Score 4 to 6 - Moderate Pain (Controlled Pain)" "Score 7 to 10 - Severe Pain (Poorly Controlled Pain)"

Inferential and descriptive statistical methods were used in the collected data analysis, and they were as follows: The mean and standard error of the daily pain ratings from POD 0 to 5 in the experimental and control groups. The percentage and frequency distributions of participants in each category based on their daily maximum pain ratings (from POD 0–5) in comparison to the control and experimental groups.

2.   RESULT AND DISCUSSION

Table 1: Comparison of Category Wise Frequency and Percentage Distribution of Subjects According to Mean Pain Scores on POD 0 Between Control Versus Experimental Groups

Sl. No.
Pain Score

Sl. No.	Pain Score	Pain Category	Control Group (n1 = 135)		Experimental Group (n2 = 135)	
			Frequency	Percentage	Frequency	Percentage
1.	7- 10	Severe Pain (Poorly Controlled Pain)	135	100%	130	96.29%
2.	4 -6	Moderate Pain (Controlled Pain)	0	0%	05	3.70%

3.	1 – 3	"Mild Pain (Well Controlled Pain)"	0	0%	0	0%
4.	0	No Pain	0	0%	0	0%

The Table 1 & Figure 1 show that on POD 0, (100%) in the group who had open abdomen surgery experiencing significant discomfort. On the other hand, 5 patients (3.70%) experienced moderate pain (managed pain) and 130 participants (96.29%) in the control population indicated intense discomfort (weakly contained pain).
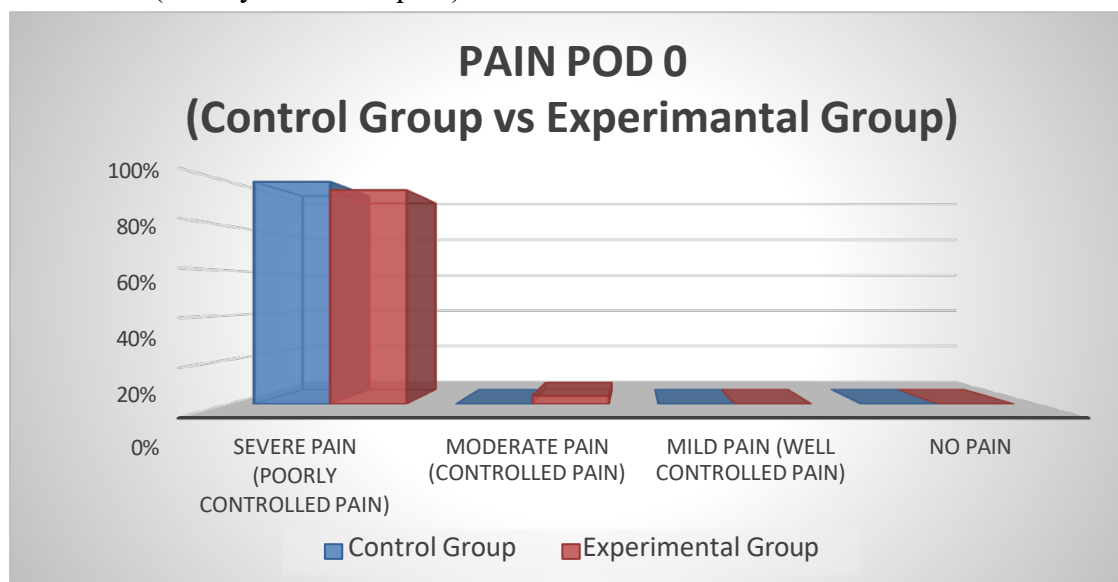

Figure 1: Bar Graph showing Comparison of Subject Distribution by Pain Category on POD 0

Table 2: Comparison of Category Wise Frequency and Percentage Distribution of Subjects According to Mean Pain Scores on POD 1 Between Control Versus Experimental Groups

Sl. No.	Pain Score	Pain Category	Control Group (n1 = 135)		Experimental Group (n2 = 135)	
			Frequency	**Percentage**	**Frequency**	**Percentage**
1.	7- 10	Severe Pain (Poorly Controlled Pain)	130	96.29%	74	54.81%
2.	4 -6	Moderate Pain (Controlled Pain)	05	3.70%	59	43.70%
3.	1 – 3	Mild Pain (Well Controlled Pain)	0	0%	02	1.48%
4.	0	No Pain	0	0%	0	0%

"Minimum score- 0 Maximum Score- 10"

On POD 1, 130 participants (96.29%) in the uncontrolled group experienced painful symptoms (poorly managed pain), and five patients (3.70%) expressed minimal discomfort (controlled pain), in Table 2 and Figure 2. In contrast, 59 of the participants (43.70%) experienced moderate soreness (managed pain), 02 participants (1.48%) expressed little discomfort (well control suffering), and 74 patients (54.81%) expressed intense discomfort (inadequately contained suffering).

As a result, on POD 1, it was found that the individuals in the test group—which received the nursing care Navigation Programme—showed less pain than the group receiving the control intervention.
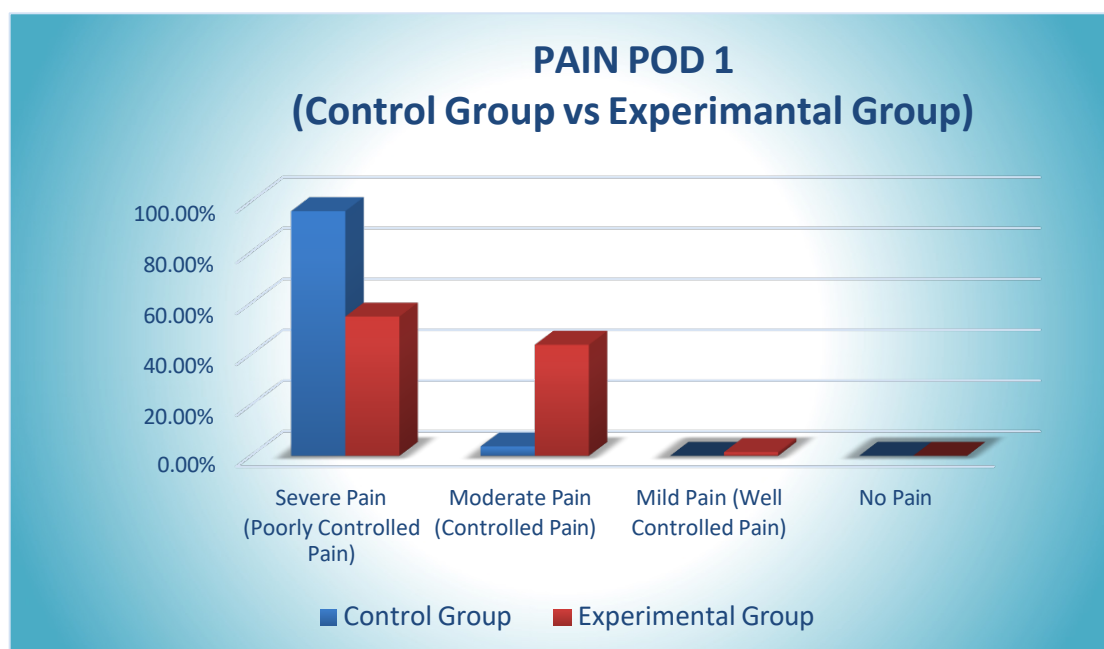

Figure 2: Bar Graph showing Comparison of Subject Distribution by Pain Category on POD 1

Table 3: Comparison of Category Wise Frequency and Percentage Distribution of Subjects According to Mean Pain Scores on POD 5 Between Control Versus Experimental Groups

Sl. No.	Pain Score	Pain Category	Control Group (n1 = 88)		Experimental Group (n2 = 87)	
			Frequency	Percentage	Frequency	Percentage
1.	7- 10	Severe Pain (Poorly Controlled Pain)	0	0%	0	0%
2.	4 -6	Moderate Pain (Controlled Pain)	20	22.72%	07	8.04%
3.	1 – 3	Mild Pain (Well Controlled Pain)	68	77.27%	80	91.95%

4.	0	No Pain	0	0%	0	0%

The tables in Table 3 and Figure 3 show that within patients who had open abdominal operations in the untreated and treatment groups, 0% of the individuals experienced severe pain (poorly managed suffering) on POD 5. A total of 68 individuals (77.27%) indicated little pain (well managed pain), compared to 20 patients (22.72%) in the treatment group who experienced mild to moderate discomfort (managed pain). Conversely, 7 people (8.04%) in the group receiving the treatment reported moderate pain (managed suffering), and 80 of the participants (91.95%) reported minimal discomfort (well-handled ache).

Later, on POD 5, it was found that the people in the experimental group receiving the assistance of the Nurse navigation programme had better pain management than those in the untreated control cohort.
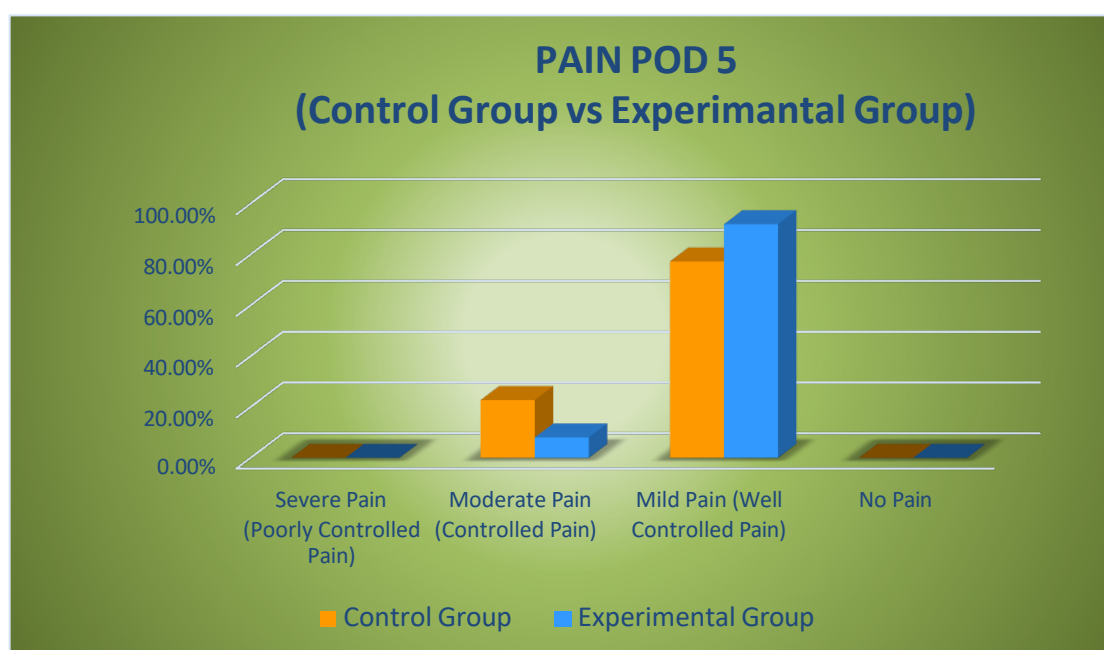

Figure 3: Bar Graph showing Comparison of Subject Distribution by Pain Category on POD 5

3.   CONCLUSION

Therefore, it was concluded from the aforementioned data from Tables and Figures that the experimental group's patients who received the "Nurse Navigation Programme" were more capable of postoperative pain management than the control group's patients from POD 0-5. The ability of the subjects in both groups to have postoperative pain management was comparable from POD 0 to 5.

4.   REFERENCES

1.   Nourse, R. (2021). Implementation of nurse navigation for behavioral health inpatient services to divert early readmissions: A pilot program. Archives of Psychiatric Nursing, 35(2), 168-171.

2.   Pallas, C. R., Boselli, D., Kuch, M., Neelands, B., & Carrizosa, D. R. (2022). Positive impact of oncology nurse navigation based on health insurance in head and neck cancer patients.

3.   Wang, T. (2021). Pre-Appointment Nurse Navigation: patient-centered findings from a survey of patients with breast Cancer. Number 5/October 2021, 25(5), E57-E62.

4.   Daly, K., & Pauly, B. (2022). Nurse navigation to address health equity: teaching nursing students to act on social determinants of health. Nurse Educator, 47(1), E5-E6.

5.   Byrne, A. L., Harvey, C., & Baldwin, A. (2022). Health (il) literacy: Structural vulnerability in the nurse navigator service. Nursing inquiry, 29(2), e12439.

6.   Lee, D., & Yoon, S. N. (2021). Application of artificial intelligence-based technologies in the healthcare industry: Opportunities and challenges. International journal of environmental research and public health, 18(1), 271.

7.   Sharma, D., Agarwal, P., & Agrawal, V. (2022). Surgical innovation in Lmics–the perspective from India. The Surgeon, 20(1), 16-40.

8.   Bahnasawy, N. E. A., Taha, N. M., & Mohamed, A. A. (2021). Nurses Attitude and Practice Regarding Patient Undergoing Abdominal Surgery. Zagazig Nursing Journal, 17(1), 96-112.