Patient Navigation (PN) Improves Treatment Compliance in Women with Breast Cancer: An Observational Audit from India

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Abstract

Background: High breast cancer treatment default rates in LMICs due to logistical and socio-cultural barriers prompted an intervention to improve timely care.

Methods: The audit compared 391 newly diagnosed patients receiving standard care (NoPN, n=122) versus structured Patient Navigation (PN, n=269) over six months. Primary outcome: treatment default. Secondary outcome: treatment initiation within 30 days.

Results: Baseline characteristics were similar in both the cohorts. Default was significantly lower in the PN cohort (18.2% vs. 34.4%; *p*=0.03), a 47% relative reduction. Treatment initiation at 30th day was higher with PN (58.7% vs. 40.2%; *p*=0.009), of 46% relative improvement. On multivariate analysis PN was the strongest predictor of timely initiation (OR 2.6, 95% CI 1.65–4.19).

Conclusion: Patient Navigation is a low-cost, effective strategy that markedly reduces treatment default and improves timely breast cancer care in LMICs

Introduction

- Delays between breast cancer diagnosis and treatment worsen outcomes by enabling disease progression and increasing risks of metastasis and recurrence, leading to poorer prognosis and more aggressive, costly care. Timely treatment is therefore essential.
- In low and middle income countries - stigma, limited health literacy, and logistical barriers drive high treatment default rates.
- Trained patient navigators equipped with postgraduate training and clinical experience addressed patients' clinical, financial, psychosocial, and logistical needs.
- We assessed whether a Patient Navigation (PN) program could reduce treatment default and improve compliance in newly diagnosed breast cancer patients.

Aim & objectives of the study :

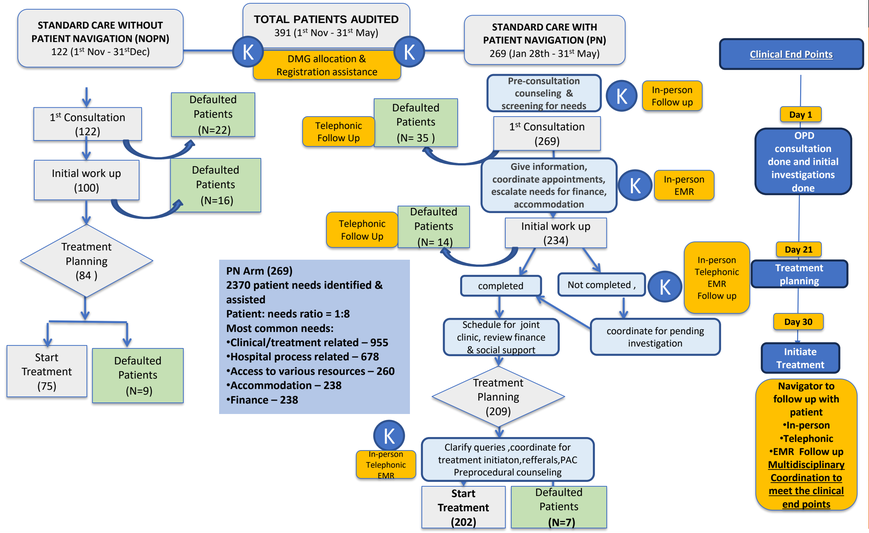
To assess patient navigation impact on default rate and compliance in newly diagnosed breast cancer patients in a tertiary care cancer centre.

Methods and Materials

The observational audit included 391 patients registered for breast cancer treatment at a tertiary center from Nov 2024 to May 2025.

- **Nov – Dec 2024:** 122 patients received standard care **(NoPN).**
- **Jan 2025 onward:** 269 patients received structured support from trained Patient Navigators **(PN).**Patients were actively tracked and followed up for compliance, by the navigators.
- We have analyzed the data for treatment planning at 21 days (from day of registration) and initiation of treatment at 30 days (from the day of patient registration).
- Demographic details (enlisted in Chart 3.)were included.
- Categorical variables were compared using chi-squared test.
- Multivariate logistic regression was performed including age, education, economic status and PN support to identify predictors of timely treatment initiation.

Chart 1. Patient Navigation Intervention Process



Results

Chart 2. Comparison of Default Rate across Treatment Timelines for Patients without Patient Navigation (NoPN) and with Patient Navigation (PN)

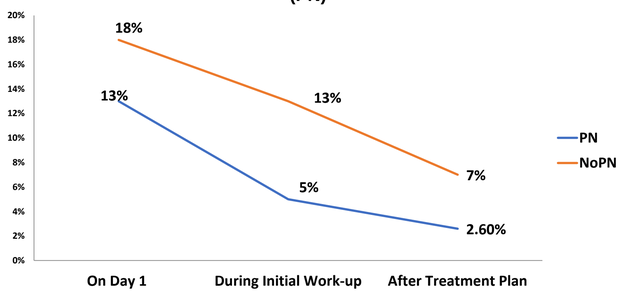
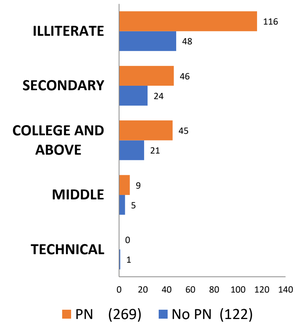


Chart 3 . Demographic Details of the Patient Population Enrolled in the Audit

	NoPN Arm (122)	PN Arm (269)
Age		
Minimum-max (years)	24-93	18-94
Median (years)	53	53
Gender		
Male	2	1
Female	120	268
Registration		
Paying	28	55
Free	94	214
Occupation		
House wife	106	242
Others	16	27
Monthly Family Income		
Avg (In Rs)	20975	19631
Min-max (In Rs)	5000-200000	1000-500000
Financial Support		
Government insurance	43	140

Educational Status: PN v/s NoPN



- **Limitations and Future Scope**
- Small sample size
- Long term impact needs to be recorded to assess survival outcomes.

- Baseline characteristics (age, education, socioeconomic status) were similar between both the cohorts.
- **Overall default rates were significantly lower in the PN cohort (18.2%, 49/269) compared to NoPN (34.4%, 42/122; p=0.03).**
- Post treatment planning, patient defaults were reduced PN (2.6%) vs. NoPN(7.3%) with (p=0.05).
- **Treatment initiation within 30 days was achieved in 58.7% of PN patients (158/269) versus 40.2% in NoPN (49/122; p=0.009), representing a 46% relative improvement.**
- No significant difference was observed in achieving treatment planning within 21 days (43.8% vs. 41.8%; p=0.78).
- **On multivariate analysis PN was the strongest predictor of timely treatment initiation (OR 2.6, 95% CI 1.65–4.19) followed by higher education level (OR1.27, 95% CI 1.02–1.58)**

Discussion and Conclusions

- **Patient navigation reduced patient default rates by 47% and increased treatment initiation within 30 days by 46%.**
- Integration of trained patient navigators can be considered as an effective low cost strategy to enhance care delivery for breast cancer in LMIC's for improving compliance with investigations and planned treatments, thereby significantly reducing default rates.
- This audit corroborates with findings of other studies that have demonstrated reduced default rate and improved compliance due to patient navigator interventions.[1,2]
- Need for randomized control trial.

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References

1. Jaganathan M, Rajoo Y, Rajaram N, Khairy AM, Zainal NH, Zakaria J, et al. Impact of Patient Navigation on Timeliness of Diagnosis and Treatment, and Adherence to Treatment in Middle Income Asian Country. *JCO Glob Oncol*. 2022;8:e2200029. doi:10.1200/GO.22.29000.
2. Jaganathan M, Ang BH, Ali A, Sharif SZ, Mohamad M, Mohd Khairy A, et al. Presentation of Breast Cancer and Impact of Patient Navigation on Timeliness of Diagnosis and Treatment and on Adherence to Treatment Recommendations in a Multicenter Network in Malaysia. JCO Glob Oncol. 2024;10:e2300297. doi:10.1200/GO.23.00297.

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