



Background/Introduction

Pressure ulcers (PU) are a substantial health problem, and they are considered a surrogate for compromised quality care. The prevalence of pressure ulcers in palliative patients is significantly high due to altered skin integrity, mobility issues, and chronic diseases.^{2,3} Pressure ulcers increase the burden on healthcare and treatment costs.^{1,4} The patients receiving palliative care at home are more likely to develop pressure ulcers, with a prevalence rate of 18.8%. The incidence of pressure ulcers in palliative patients receiving domiciliary care can be reduced by early detection and preventive strategies.^{5,6} The objective of the study was to reduce the number of home-acquired pressure ulcers in palliative patients.

Materials and Methods

Baseline data from January 2019 to March 2020 was reviewed. Multiple causes leading to process variation were identified using a quality tool, cause-and-effect diagram. The categories of problem areas identified were reviewed and analyzed by a team with multidisciplinary expertise and initiated a quality improvement project. A four-stage approach, the Plan-Do-Check-Act (PDCA) cycle, was undertaken to improve the service and resolve the issues faced.⁷ The measures planned to reduce the pressure ulcers included identifying palliative nurses, staff education, and family's engagement/education at the time of discharge, and implementation of skin bundles. The staff strictly adhered to comply with the dissemination of education brochures to patients' families and skin assessment at the time of follow up visits. The pre-intervention and post-intervention phases were statistically analyzed using interrupted time series (ITS) analysis and segmented regression to evaluate the effectiveness of interventions. The analyses were conducted by using R-software. All tests were two-sided, and a statistical significance level of 0.05 was used.

Results

The visual inspection of data showed that the average number of home-acquired pressure ulcers noticeably reduced from seven per month to two per month in the post-intervention period (Figure 1). The results of segmented regression indicated that there were five palliative patients with home-acquired pressure ulcers just before the initiation of the observation period while in the pre-intervention period, no significant month to month change was identified in the incidents of pressure ulcers (P-value = 0.12726). However, with the implementation of the preventive strategies in the post-intervention period, the number of incidents reduced significantly by four patients (P-value = <0.01) and remained significant after the post-intervention period (P-value = 0.015).

Conclusion

The implementation of quality tools, such as the cause-and-effect diagram and the PDCA approach, proved worthwhile in decreasing the number of home-acquired pressure ulcers. The incidents of pressure ulcers reduced significantly after providing family education brochures, detailed discharge instructions on pressure ulcers and skin assessment on follow-ups.

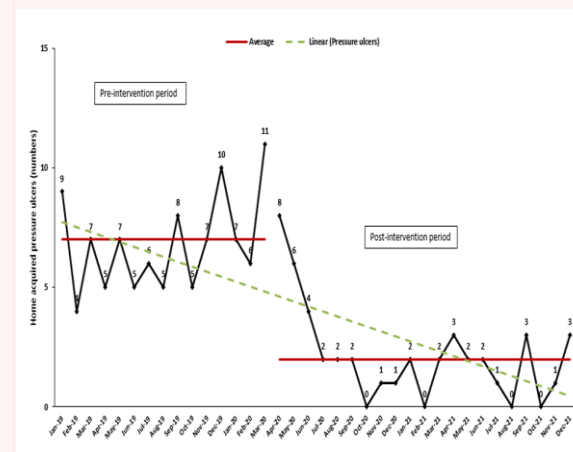


Figure 1: Home acquired pressure ulcers in palliative patients from January 2019 to December 2021.

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