CONFERENCE ABSTRACT

Can Integrity be Safeguarded? Factors Predisposing to Non-Invasive Ventilation Associated Skin Injury (NASI)

Pooja Nair, RN

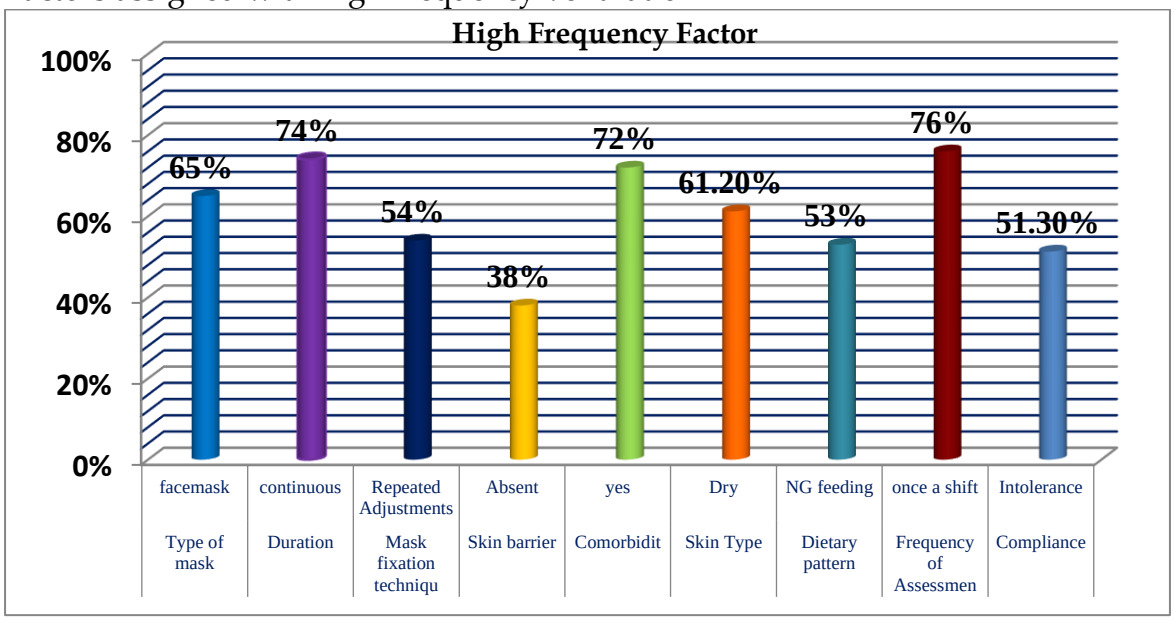
Introduction: Over the last two decades, there has been a significant increase in the use of non-invasive ventilation (NIV) therapy. However, this therapy has been linked to the development of pressure injuries in 10% to 31% of patients, with 5% to 20% of these cases resulting in nasal bridge pressure ulcers. Safeguarding skin integrity in patients on NIV is essential, yet challenging due to factors such as mask pressure, duration of use, and patient skin sensitivity. This study aims to identify and analyse the factors predisposing patients to NASI to develop better preventive strategies.

Objective: The primary objective of the study is to identify factors contributing to Non-invasive ventilation Associated Skin Injury (NASI) in patients on the non-invasive ventilator.

Material & Methods: A descriptive cross-sectional survey design was adopted.70 patients on non-invasive ventilation (NIV) therapy were recruited for the study. The sampling technique employed was non-probability purposive sampling. Ethical permission was obtained from the local IRB and written informed consent was taken prior to the study. Observation Checklist was used and data was analysed using descriptive statistics.

Results & Analysis: The findings suggest that majority (37%) patients were above 78 years and 33% between 39-58 and 30% belong to 59-78 years respectively. Mean age is approximately 65.4 years. The incidence of NASI was noted in 33 % patients and 67% patients did not have any signs and symptoms of NASI**.** Varying degrees of skin injury was observed in patients with incidence of NASI, 16% experienced first-degree Noninvasive Ventilation Associated Skin Injury (NASI), 12% experienced second-degree NASI, and only 5% were diagnosed with third-degree NASI (Figure 1).

Figure 1:
Factors assigned with high-frequency ventilation



The high-frequency factors identified were incorrect positioning or size of the mask, lack of protective skin barrier, infrequent assessment, and lack of communication prior to application.

Discussion: The findings of this study highlight several factors that predispose patients to NASI. Key among these are the duration of NIV therapy, the type , size of the mask, and patient-specific Factors Such As Skin Sensitivity And Underlying Health Conditions.

Conclusion: Prevention of NASI requires a multifaceted approach, including regular skin assessment, appropriate interface selection, padding and securing interfaces adequately, optimizing fit and positioning, implementing pressure relief strategies, maintaining skin hygiene, providing patient education, and fostering interdisciplinary collaboration among healthcare professionals.