

Reducing Prone Positioning Pressure Injuries in Severe COVID-19 Patients Using Diverse Strategies



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Background and objective

COVID-19 patients are prone to developing Acute Respiratory Distress Syndrome, and prone positioning therapy is clinically used to improve their low blood oxygen levels. However, this therapy may lead to pressure injuries as a complication, causing pain, infections, prolonged hospital stays, and increased mortality rates. Our unit observed a pressure injury average incidence rate of 1.38% due to prone positioning in 2022, higher than the hospital's ICU average of 0.36%. Therefore, a project team was established to analyze the reasons, including the lack of standardized procedures, inadequate knowledge and care, and insufficient protective equipment. The completeness rate of pressure injury care was only 53.6%. We aim to equip nursing staff with correct care knowledge and skills to enhance the quality of nursing care.

Methods/intervention

From April to June 2023, this project implemented a diverse strategy improvement plan, including:

- (1). Conducting in-service education training on "Tracheal Tube Fixation Belt Skin Care Strategies."
- (2). Creating "Prone Positioning Care" prompt cards.

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- (3). Recording instructional videos on "Prone Positioning Turnover Techniques."
- (4). Establishing a fixed audit system.
- (5). Purchasing tracheal tube fixation belts and fat pads (C-type, limb, and shoulder-to-knee fat bed pads) tools, integrating multiple strategies into the standard operating procedures.

Results

From July to December 2023, after implementing the project, the completeness rate of pressure injury care among 32 nursing staff for severe COVID-19 patients undergoing prone positioning therapy increased from 53.6% to 95.2%. The incidence rate of pressure injuries decreased to 0.29%. These results indicate a significant effectiveness of the intervention measures.

Conclusions

By implementing this research strategy plan, we aim to prevent patients from developing pressure injury complications due to illness, promote the overall health of critically ill patients, and enhance the quality of nursing care in health-promoting hospitals and healthcare services.

