



# Eye Care in the Intensive Care Unit (ICU)



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Units: Pulmonary ICU and Trauma Intermediate Care

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## PICOT Question

In the Pulmonary Intensive Care Unit would providing education regarding routine eye care increase nurses' compliance compared to not providing education when monitored over a one-month period?

## Description of Change

- A pre-survey consisting of five questions on eye care and compliance were given in the pulmonary ICU unit.
- Following the survey, an educational flyer was created. The flyer described the harmful effects on eyes for sedated and ventilated patients and how routine eye care can decrease damage significantly. This flyer was put up on the huddle board for a one-month period.
- Following the one month of education, a post-survey consisting of five questions on compliance and effectiveness of eye care was completed.

## Recommendation

- Creating an eye care protocol that states routine eye care be conducted at a minimum of once a shift.
- A yearly educational presentation of eye care.

## Evidence Summary

- In critical care patients, research shows the implementation of routine eye care has decreased the rate of corneal infection and injury (Azfar, et al., 2013).
- Superficial eye disorders are one of the most common complications of improper eye care in the intensive care unit, thus causing corneal ulcers and potentially permanent damage (Hearne, et al., 2018).
- Creating an eye protocol where patients' eyes are rinsed with warm water and then ointment/ lubrication is applied significantly decreased the incidence of corneal injury (Hearne, et al., 2018).

## References

Azfar MF, Khan MF, Alzeer AH. Protocolized eye care prevents corneal complications in ventilated patients in a medical intensive care unit. *Saudi J Anaesth*. 2013 Jan;7(1):33-6. doi: 10.4103/1658-354X.109805. PMID: 23717229; PMCID: PMC3657921.

Hearne BJ, Hearne EG, Montgomery H, Lightman SL. Eye care in the intensive care unit. *J Intensive Care Soc*. 2018 Nov;19(4):345-350. doi: 10.1177/1751143718764529. Epub 2018 Mar 22. PMID: 30515243; PMCID: PMC6259085.

Plaszewska-Żywko L, Segal A, Bukowa A, Wojnar-Gruszka K, Podstawa M, Kózka M. Risk Factors of Eye Complications in Patients Treated in the Intensive Care Unit. *Int J Environ Res Public Health*. 2021 Oct 25;18(21):11178. doi: 10.3390/ijerph182111178. PMID: 34769697; PMCID: PMC8583589.

Pourghaffari Lahiji, A., Gohari, M., Mirzaei, S. *et al*. The effect of implementation of evidence-based eye care protocol for patients in the intensive care units on superficial eye disorders. *BMC Ophthalmol* 21, 275 (2021). <https://doi.org/10.1186/s12886-021-02034-x>

## Results

- Pre-data from the pre-survey showed very low compliance with eye care (20%).
- Results from the post survey showed a significant increase in compliance (90%).

## Eye Care Self Reported Compliance Rates

■ Eye Care Self Reported Compliance Rates

