

Audit of Oxygen Therapy in Acute General Medical Wards Following an Educational Programme

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Abstract

Introduction: Previous studies have shown that the administration of supplementary oxygen (O_2) in hospitalised patients outside the intensive care units (ICU) was usually empirical, inappropriate and not in compliance with physiological guidelines. It has been suggested that routine use of portable pulse oximeters in general wards plus in-service education of doctors and nurses may ameliorate this problem. **Materials and Methods:** We introduced the use of pulse oximeters in general wards and instituted an educational programme on O_2 therapy in a University Hospital. We then audited the process of O_2 therapy in 100 consecutive adult medical inpatients. **Results:** We found that, despite an educational programme and the easy availability of pulse oximeters, the quality of O_2 therapy was poor. Half the patients did not receive objective pre-treatment assessment while 43% of patients were not adequately reassessed after O_2 supplementation had been started. The most common error was excess use of O_2 which occurred in 75% of patients. **Conclusion:** The quality of O_2 therapy in the non-ICU setting was poor. Excessive O_2 use was the most common error. We suggest that titration of O_2 therapy, guided by pulse oximeter-guided protocols, may be needed to improve the quality and reduce the cost of O_2 therapy in the hospital. This intervention may best be instituted within the environment of a continuous quality improvement model of health care delivery.

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Key words: Continuous quality improvement, Inpatients, Pulse oximeter, Supplementary oxygen

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