“Oxygen must be treated like a drug to avoid under or overdose”

Oxygen is a drug and must be treated as such. Upon hospital admission all patient medication is prescribed, including herbal and over-the-counter medicines. Oxygen is potentially a harmful drug if given incorrectly, and should also be prescribed.

There has been some improvement in the prescription and delivery of oxygen therapy since the British Thoracic Society’s emergency oxygen guideline was published in 2008 but there are still many areas of concern. These must be addressed so patients requiring oxygen therapy have appropriate therapy in line with their clinical need.

The 2015 BTS emergency oxygen audit was the seventh such audit since 2008 and the largest to date, with available data for 55,208 UK hospital patients, 7,741 of whom (14%) were using oxygen. The key finding was that 43% of patients who were receiving supplemental oxygen had no valid prescription, despite 70% of hospitals stating they had a policy of “setting a target saturation range for all patients at the time of admission to hospital”.

Other findings included that only 69% of patients with a prescribed target range had a saturation within the intended range, one in 10 patients were below it and two in 10 above it. Although oxygen saturation was reliably documented during observation rounds, oxygen was signed for on only 28% of drug rounds. In addition, the audit found over half of the hospitals investigated did not provide sufficient training in oxygen provision and monitoring for doctors and nurses.

There is concern that patients could be given an incorrect dose of oxygen, receiving one that is either too high or too low for their clinical requirements. The guidelines advocate safeguarding with a clear prescription of oxygen dose on the patient’s drug chart. The BTS has suggested that each hospital should prescribe and document all oxygen that has been administered. The Association of Respiratory Nurse Specialists strongly supports this recommendation.

The importance of assessing the target saturation range for patients who require oxygen and have a respiratory condition is essential to make sure they are not given too much or too little. As an example, giving patients with conditions such as chronic obstructive pulmonary disease too much oxygen could be dangerous. It is of particular concern, therefore, that the audit reveals that 9% of patients prescribed a low target range, because of the danger of them having too much oxygen, were given more than the prescribed amount. This could be life-threatening.

It is important that nursing knowledge on this topic is comprehensive. The assessment for the provision and prescription of oxygen requires clinical insight, problem solving and adaptation to the different clinical situations. Ensuring that oxygen is treated as a drug and that clinicians are trained in the risks associated with overdosing, should be a high priority to all areas in which oxygen is prescribed. NT

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