

## Doctor-Related Medication Safety Incidents on a Specialist Palliative Medicine Inpatient Unit: A Retrospective Analysis of Three Years of Voluntary Reporting

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Reference: Hannah O'Brien, Fiona Kiely, and Ann Carmichael J Pain & Palliative Care Pharmacotherapy (e-pub ahead of print)

**Abstract:** Patients receiving palliative care and those at the end of life are known to be susceptible to medical errors. Errors related to medications are the most avoidable cause of patient harm. This retrospective study examined reported anonymized medication safety incidents, related to physician errors, assessed by the risk committee in a specialist palliative care unit over a 3-year time period. The aim of the study was to describe medication errors, with specific attention paid to what type of errors occurred and when these errors happened. Of the 218 reported medication safety incidents 28% ( $n = 62$ ), were related to doctor prescribing. The data showed that there was a wide variation per year in the numbers of reported medication safety incidents. Medication prescribing errors were the most common error followed by medication omissions.

Medication safety incidents are at least in part dependent on staff reporting. Fostering a culture of openness that is blame free is crucial to medication error reporting. Formal reporting may help to increase patient safety and forms an essential element in the clinical governance and risk management of an institution.

**Strengths of study:** study was unfunded. The inpatient unit described would be of a similar nature to the TPCU at Grey Nuns, though they have 44 beds since 2014. It is important information to share, as it makes us examine our own practice and try to prevent errors before they occur.

**Weaknesses of study:** The study was conducted in a single center in Ireland and the results may not be generalizable to other centers. Only physician errors were investigated, but other members of the team may be responsible for errors including nurses and pharmacists. These errors may be of a different type eg: transcription errors from a verbal order, or misinterpretation due to illegible handwriting.

**Relevance to palliative care:** Medication errors are a cause of concern for any patient and palliative patients are not exceptions.

Medications commonly used in palliative care, particularly opioids, have the potential to cause severe patient harm, particularly when dose ranges can be considerable. For example we have seen methadone doses ranging from 0.3 to 300 mg (one thousand-fold).

Additionally medications are frequently used off-label in unusual doses. For example the use of methotrimeprazine in doses as low as 3.125mg for anxiety or nausea is an off-label indication and not uncommon. 37.5 mg is also an acceptable dose, and this ten-fold difference may potentially lead to errors

Consequently physicians, nurses and pharmacists must be vigilant when writing, interpreting and administering these agents pursuant to these orders. Medication error reporting is an important activity necessary to determine how/why errors occurred with a view to prevent similar issues in the future.