

Administration of Regular Medication When 'Nil by Mouth' Before Surgery in Trauma Patients

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Introduction

The omission of essential regular medication before surgery can result in significant harm.^{1,2} This is especially hazardous in trauma patients who are often elderly with multiple co-morbidities. One of the reasons for withholding medication is that there is a lack of understanding of 'Nil by Mouth' (NBM) among nursing staff. The Royal College of Nursing cite Level 3 evidence that oral medication can be taken with up to 30mls of water when NBM preoperatively.³ We investigated the preoperative administration of oral medication in a sample of trauma patients at Addenbrooke's Hospital, Cambridge (a Level 3 trauma centre). The aim was to uncover the extent of missed medication due to NBM status.

Methods

All patients admitted to two designated trauma orthopaedic wards undergoing orthopaedic surgery between 1st of July to 4th of August 2015 were included. Patient records were examined using the electronic medical records system. A post hoc questionnaire was designed to explore the understanding and attitudes of the nursing staff.

Results

100 patient records were examined. 39 patients suffered drug omissions, of which 51% were in the ASA 3 and 4 category and 38% of them were in the over-80 age group. There were a total of 95 medications missed, of which 62 (65%) were due to NBM status. (Figure 1)

9 patients missed cardiac medication (anti-arrhythmic, anti-anginal or anti-hypertensive), 5 (56%) because they were NBM. 9 patients missed anti-reflux medication, all (100%) because they were NBM. 27 patients missed analgesia, 13 (48%) due to NBM. 4 patients missed steroids, all due to being NBM. (Figure 2)

A post-hoc survey of 20 nurses on the same wards showed that only 65% and 50% of them knew fasting guidelines for food and liquid respectively. Only 55% of nurses identified that all oral medications could be given pre-operatively with a sip of water. 100% of nurses thought there should be clearer guidance on fasting times and medication administration when NBM.

Conclusion

Our sample demographic represented a high risk category with a third being ASA 3 or 4 and over 80. Given the burden of trauma patients and surgery on our centre, our small study suggests that a significant proportion of patients are missing their regular medication preoperatively due to a lack of understanding of NBM practice among staff. While local guidelines exist they need to be accessible by all nurses, including agency staff whose contribution to staffing is not insignificant. Our findings have implications for training of timely drug dispensing by nursing staff as well as prescribing by junior doctors.

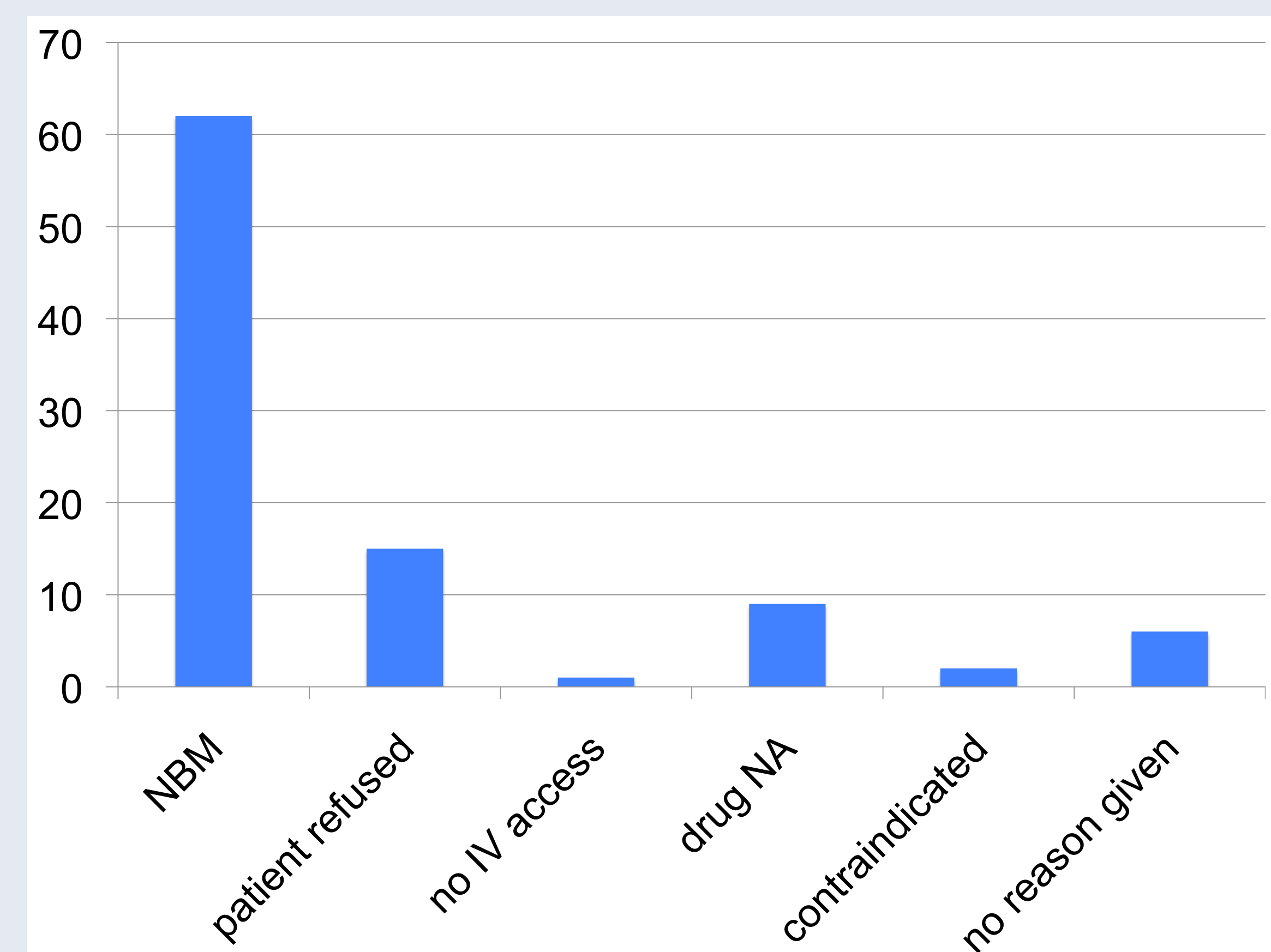


Figure 1. Reasons given for omission of medication

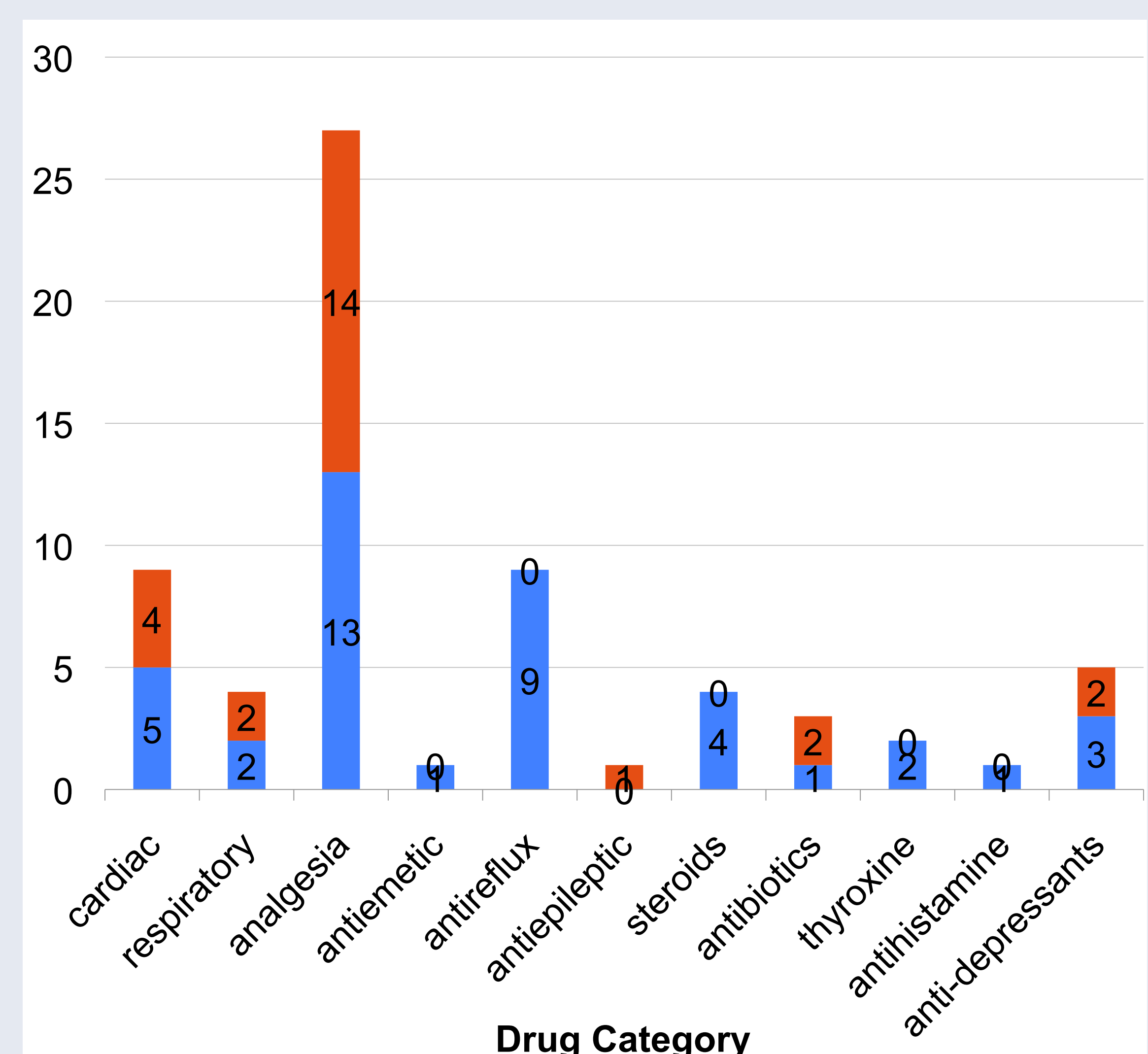


Figure 2. Number of patients missing essential medication by drug category (blue fraction representing omission due to NBM)

References

1. The 2002 Report of the National Confidential Enquiry into Perioperative Deaths. Functioning as a team? London; NCEPOD 2002
2. National Patient Safety Agency (2011) Risk of Harm to Patients who are Nil by Mouth/Signal.tinurl.com/NPSA-NBM.
3. Royal College of Nursing (2005) Peri-operative Fasting in Adults and Children. An RCN Guideline for the Multidisciplinary Team. London: RCN.