

Drug Administration Errors by South African Anaesthetists – a Survey

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Objectives

To investigate the incidence, nature of and factors contributing towards “wrong drug administrations” by South African anaesthetists.

Design

A confidential, self-reporting survey was sent out to the 720 anaesthetists on the database of the South African Society of Anaesthesiologists.

Results

A total of 133 questionnaires were returned for analysis (response rate 18.5%). Of the respondents, 125 (94 %) admitted to having erroneously administered a wrong drug. Thirty respondents (22.4%) have made errors on at least four occasions. A total of 303 specific wrong drug administrations were described. Nearly 50% involved muscle relaxants. A further 43 incidents (14%) involved the erroneous administration of vasoactive drugs. Five deaths and three non fatal cardiac arrests

were reported. In 9.9% of incidents the anaesthetic time was prolonged by more than 30 minutes.

Contributory causes identified included syringe swaps (40%), misidentification of drugs (27.1%), fatigue (14.1%), distractions (4.7%), and mislabelling of syringes (4.7%). Only 19% of respondents regularly use colour coded syringe labels complying with the national standard.

Conclusions

Most anaesthetists experienced at least one drug error. The incidence of wrong drug administrations by SA anaesthetists appears to be similar to that in Australasia and Canada. The commonest error was a “syringe swap” involving muscle relaxants. Most drug errors are inconsequential. An important minority of incidents will result in severe morbidity or death. The study supports efforts to improve ampoule labelling, to encourage the use of syringe labels based on the international colour code and to develop a national reporting system for such incidents.