



Survey on the Use of Chlorhexidine Products in Scottish Critical Care Units

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Introduction

Chlorhexidine gluconate (CHG) is a broad-spectrum antiseptic agent used as part of daily mouth care in ventilated patients to reduce ventilator associated pneumonia. It is also used in CHG-impregnated dressings with the aim of reducing central line associated infections. However, evidence suggests that CHG mouthwash is associated with increased mortality⁽¹⁾. It also was identified in NAP 6 as the third most prevalent causative agent for anaphylaxis⁽²⁾.

We conducted a national survey of the current practice of Scottish critical care units on their use of chlorhexidine oral solutions, impregnated dressings and central lines.

Methods

All critical care units in Scotland were contacted by telephone in May 2019 and asked the following questions:

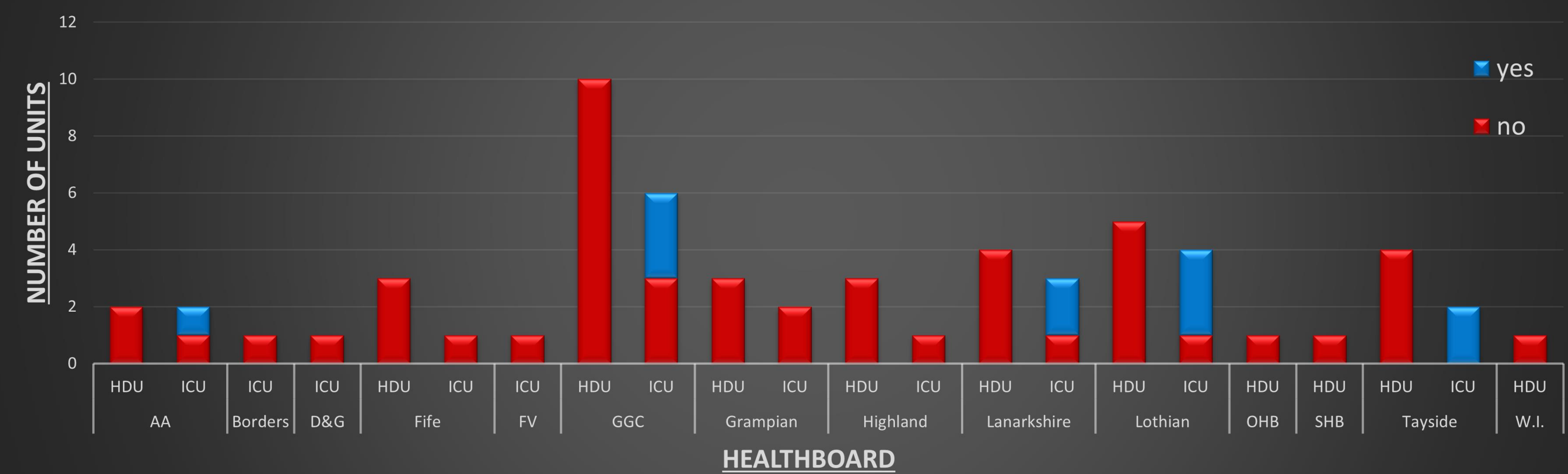
1. "Do you routinely use CHG mouth wash or mouth gel?"
2. "Do you routinely use CHG-impregnated dressings for central-line insertion?"
3. "Do you routinely use CHG-impregnated dressings for arterial-line insertion?"
4. "Do you use CHG infused central-lines?"

Data were obtained from 24 ICUs and 37 HDUs and recorded using a standard spreadsheet for each health board.

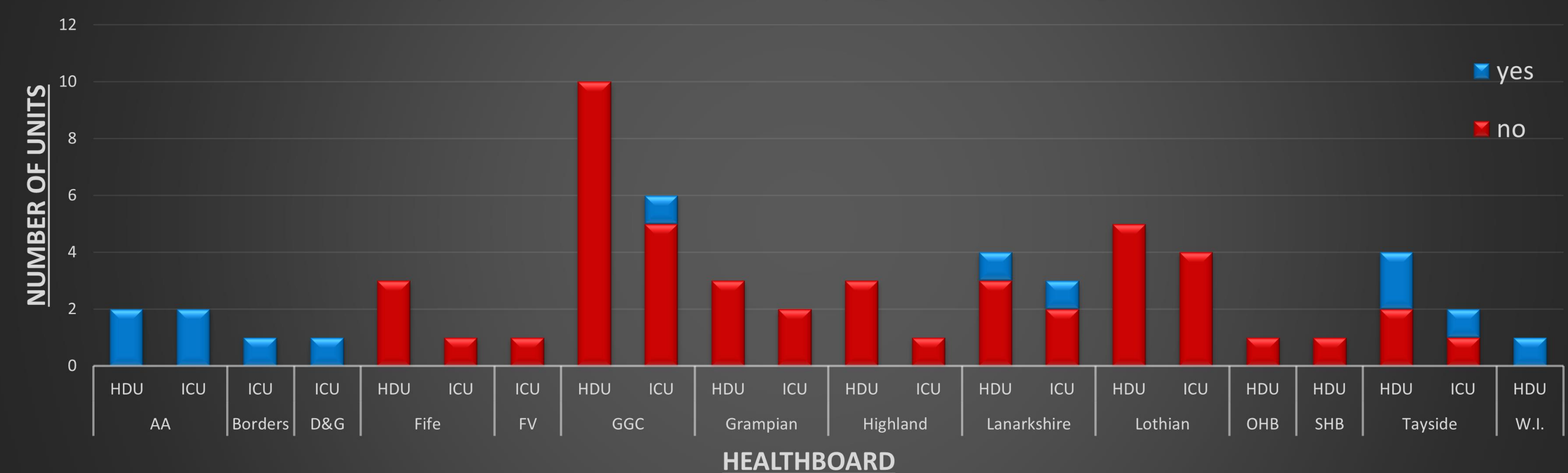
Results

CHG oral products were routinely used in ventilated patients in 11/24 (45.8%) ICUs. CHG-impregnated dressings were routinely used in 13/61 (21.3%) critical care units for central lines, and in 4/61 (6.5%) units for arterial lines. One unit in Scotland routinely used CHG infused central lines.

Question - Do you routinely use chlorhexidine mouthwash or gel?



Question - Do you routinely use CHG-impregnated dressings for central lines?



Discussion

CHG products are still widely used in critical care units in Scotland, with almost half of critical care units using CHG oral products. This is despite the fact that they are no longer recommended by the Intensive Care Society or NICE and are associated with increased mortality. Variability in practice exists amongst healthboards and between units within the same healthboard. The use of chlorhexidine impregnated dressings is less common and the evidence for their use is limited. Further research into current practice in relation to rates of infection and adverse effects is warranted to improve patient care.

References

1 - Price R, MacLennan G, Glen J. Selective digestive or oropharyngeal decontamination and topical oropharyngeal chlorhexidine for prevention of death in general intensive care: systematic review and network meta-analysis *BMJ* 2014; 348 :g2197 doi:10.1136/bmj.g219

2 - Anaesthesia, surgery and life threatening allergic reactions: Epidemiology and clinical features of perioperative anaphylaxis in the 6th National Audit Project (NAP6). Harper NJN, Cook TM, Garcez T et al. *Br J Anaesth* in press 2018. DOI: 10.1016/j.bja.2018.04.014 (Chapter 6 part A)