HAPPEN STUDY

Hospital Acquired Pneumonia PrEventioN study

Avondale UNIVERSITY

THE PROBLEM

- Non-ventilator hospital acquired pneumonia (NV-HAP) is the most common healthcare-associated infection, accounting for around one quarter of all infections acquired in hospital.
- NV-HAP increase hospital costs, patient morbidity, mortality and length of stay.
- Oral care is not performed optimally or frequently enough. Barriers to improving oral care exist and we sought to overcome those.

POTENTIAL SOLUTION

Improving the quality and frequency of oral care may reduce the risk of NV-HAP.

Details on the study including study updates

happenstudy.com

Resources for patients and clinicians

happtrial.com

WHAT WE DID

Largest world first, multicentre RCT involving 3 Australian hospitals.

Evaluated the effectiveness of improving the frequency and quality of oral care, in reducing the incidence of NV-HAP.

Intervention was designed and informed by consumers, clinicians and research.

The intervention included: the supply of oral care products and education of patients and staff.

Patients were provided with a HAPPEN bag, which included a toothbrush with a written prompt suitable for patients, toothpaste and educational material.

» **Dedicated study website** with resources for patients and clinicians ***(go to https://happtrial.com or scan QR code)***

» **More information on the trial design** can be found on the clinical trial website ***(go to https://happenstudy.com or scan QR code)***

MONTHS SINCE TRIAL COMMENCEMENT

Hospital	Cluster	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
A	1															
	2															
	3															
B	4															
	5															
	6															
C	7															
	8															
	9															

Control | Intervention

Figure 1. Stepped wedge trial design; observed treatment sequences

WHAT WE FOUND

8,870 participants (Control: 4,523; Intervention: 4,347).

NV-HAP cases reduced from 46 cases during the Control period (1.1%) to 32 during the Intervention (0.70%).

NV-HAP incidence reduced by 1.00 to 0.41 infections per 100 at risk admission day.

Oral care increased from 15.9% to 65.%, averaging 1.5 times per day.

CONCLUSIONS

The HAPPEN study increased oral care provision and reduced NV-HAP.

Oral care is an important element of nursing care and patient safety.

PROFESSIONAL AND INDUSTRY PARTNERS

This study brought together expertise from 15 academic partners across Australia and internationally.

The project was guided by an advisory group comprising seven partner organisations.

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