SPECIALISED MEDICAL PROFESSIONALS' INSIGHTS ON ORAL FEEDING IN INFANTS AND YOUNG CHILDREN ON HIGH FLOW OXYGEN

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A BIT ABOUT ME

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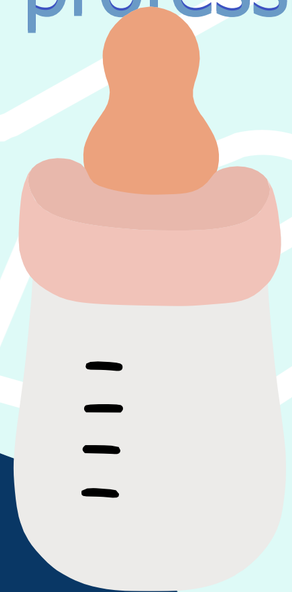
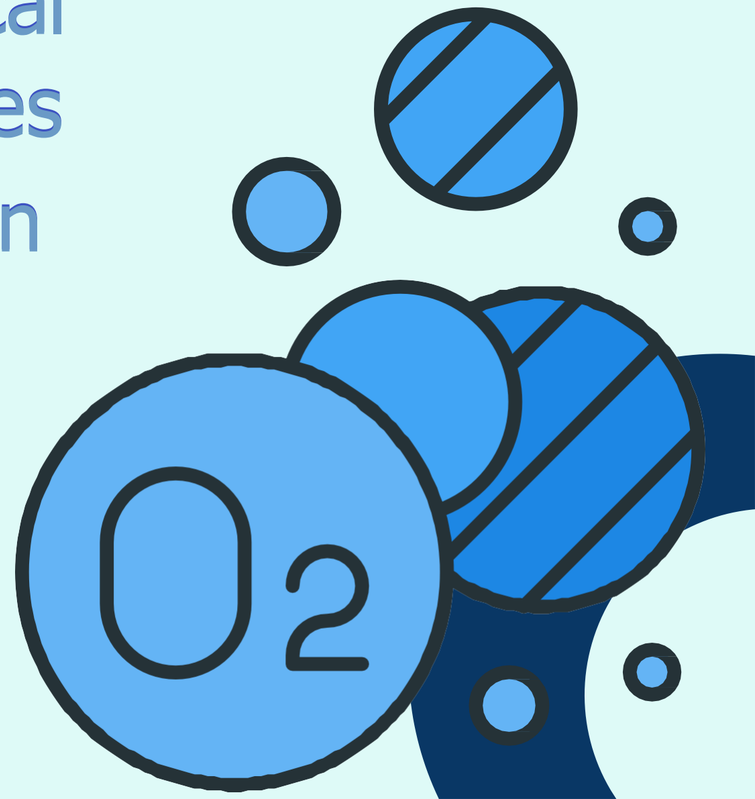
BACKGROUND TO THE STUDY

Current research on the safety of oral feedingin infants and young children receiving high-flow oxygen therapy is limited, with differing medical professionals' views on decision-making.



AIM

To explore perspectives of specialised medical professionals regarding oral feeding practices ofyoung children receiving high-flow oxygen



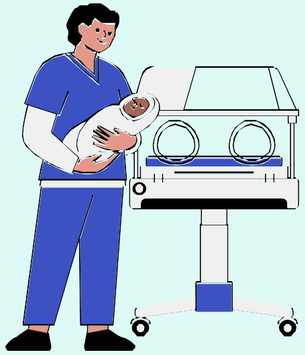
METHOD

40-item e-survey

37 South African specialist medical professionals.

Non-probability, purposive sampling

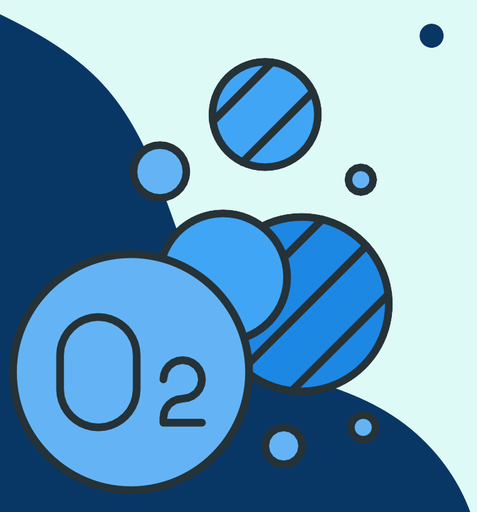
Data were analysed descriptively.



PARTICIPANT SELECTION

Eligible to participate:

- specialised medical professionals with the necessary qualifications such as registrars, consultants, and fellows (training in paediatrics or emergency medicine),
- specialists (paediatricians, neonatologists, emergency specialists or physicians) and
- registered nurses,
- based in South Africa,
- minimum of six months experience working with infants/young children on HFO2, in last five years, and experience working within NICUs/PICUs where HFO2 provided regularly (Canning et al., 2019)



PARTICIPANTS

Paediatrician 19 (51.4%)
Neonatologist 5 (13.5%)
Registered nurse 5 (13.5%)
Physician 4 (10.8%)
Physician in training: specialising in emergency medicine 1 (2.7%)
Other (Child Nursing Specialist); community service doctor; paediatric subspecialist) 3 (8.1%)

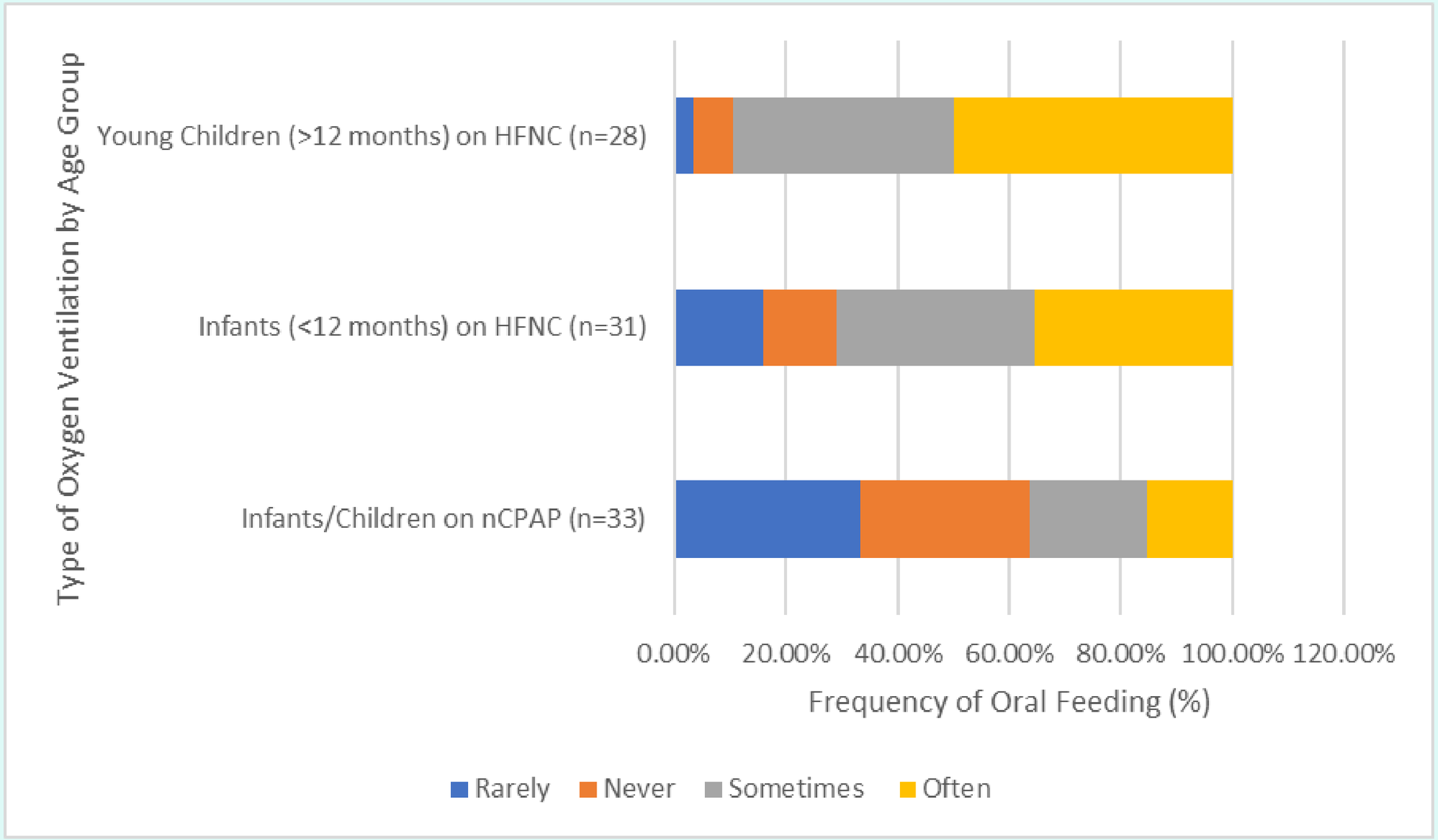
- third of the sample was between 30-39 years old (n=16;43.2%)
- public health sector (n=24;64.9%)
- 43% (n=16) were employed in Gauteng
- third worked in the NICU (n=29;33.0%)

RESULTS

O_2

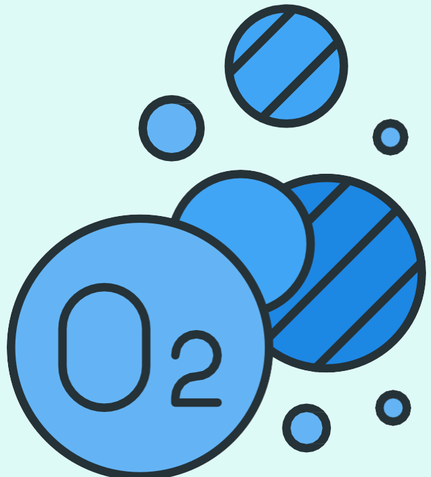
O_2

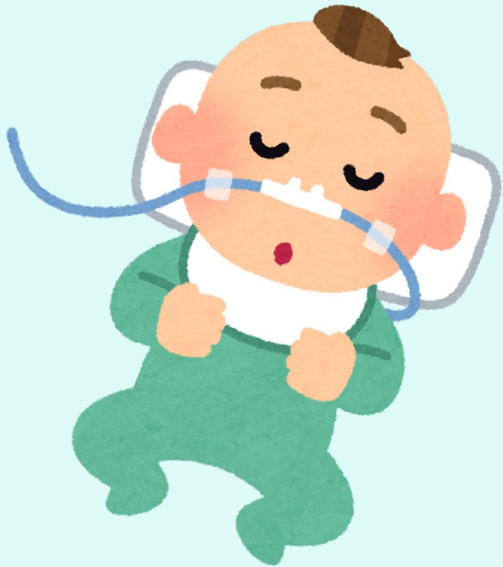
Frequency of oral feeding on nCPAP versus HFNC oxygen therapy (n=33)



Reasons for not offering oral feeding on HFO2

- nCPAP (n=5; 50.0%) and HFNC (n=1;16.7%) has unclear risk of aspiration
- medical team's decision to prohibit oral feeding for nCPAP (n=3;30.0%) and HFNC (n=1;16.7%).
- For infants on nCPAP: considered too young to begin oral feeding (n= 3;100.0%).



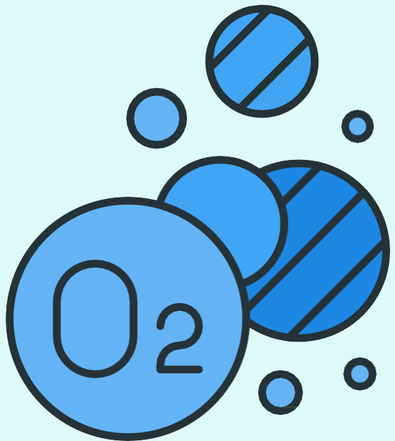


Feeding methods used

- Infants and young children receiving nCPAP: mostly syringe (n=12;48.0%).
- Infants on HFNC: breastfeeding (n=22;75.9%)
- Infants receiving HFNC: bottle feeding 62.1% (n=18)

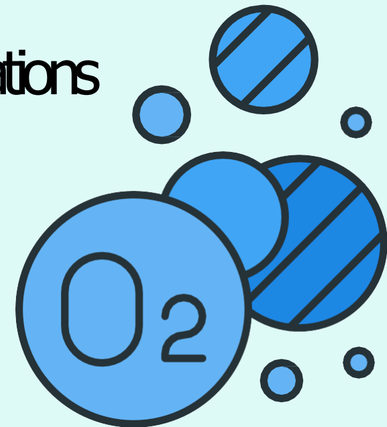
- Young children on HFNC: breastfeeding (n=22;81.5%)
- Young children receiving nCPAP: bottle feeding 74.1% (n=20)

- infants were not orally fed while on nCPAP: oro-gastric (n=2;8.0%) and nasogastric tubes (n=1;4.0%)



feeding services, tools, strategies

- 24/37 participants (79%): access to SLTs (daily or only on a referral basis)
- 12/34 responses (35.3%): use instrumental swallowing evaluation, i.e. videofluoroscopic swallow study or modified barium swallow (n=12;35.3%), pulse oximetry (n=9;26.5%), ultrasound (n=4;11.8%), video-endoscopy (n=3;8.8%), fiberoptic endoscopic evaluation of swallowing (n=2;5.9%), 1(2.9%) using cervical auscultation, and 1(2.9%) using pharyngeal manometry.
- strategies to support oral feeding for HFNC: monitoring for aspiration (n=25;78.1%) physiological stability (n=22;68.8%), and volume-limited feeds, and positioning modifications (n=15;46.9%).
- nCPAP: monitoring of physiological stability (n=1; 64.3%) and volume-limited feeds, and positioning modifications (n=14;50.0%)

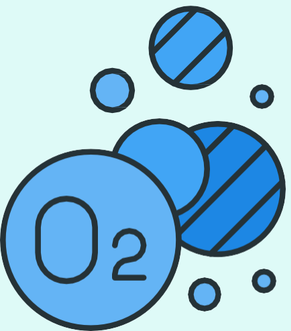


Feeding decisions

- Doctors alone would decide to commence or recommence oral feeding for infants and young children (n=15;44.1%).
- SLTs were involved in decision-making (n=9;24.3%).
- Two participants reported using a collaborative approach involving SLTs and nursing staff:

"Infants are assessed by speech therapy and fed if deemed to be ready."

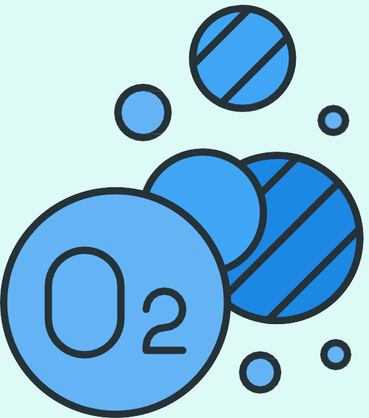
"I usually assess the child clinically in consultation with the nursing staff to decide if a child may be fed orally whilst on non-invasive support."



"All these children are kept NPO for at least six hours after starting HFNC. Then feeds will be started if the baby is hemodynamically stable"

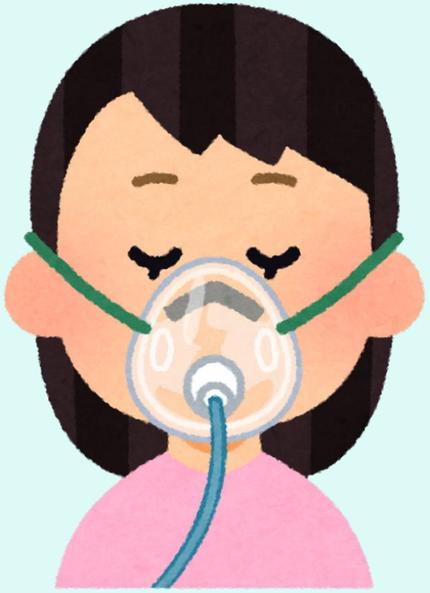
"Initially, a patient will be kept NPO. As the respiratory distress improves, feeding will be commenced orally. If the respiratory distress doesn't improve, oro-gastric feeds will be favoured in infants only”

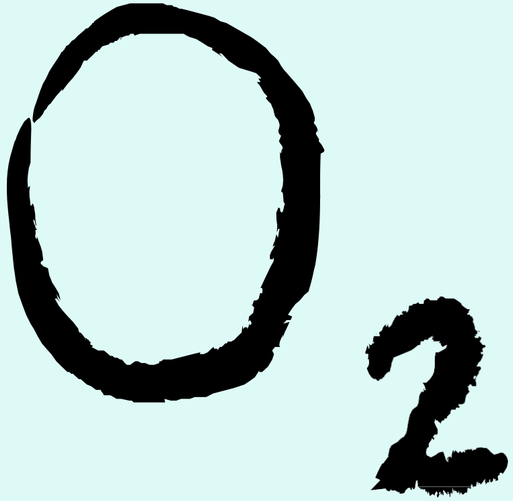
“[their] experience of oral feeding has been very haphazard and not guided by clinical evidence or formal guidelines,”



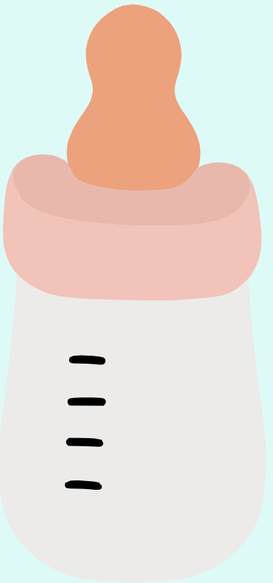
“very individually based on the patient or physician”

DISCUSSION





CONCLUSION



HFNC is perceived as safer - requires further research

evidence-based guidelines assessment tools may minimise potential risks and optimise outcomes for young patients

Feeding decisions remain complex and team work =key