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Health Care Professionals’ Perspectives on Sedation Practices when Caring for Mechanically Ventilated Patients:

A Case Study from Australia and the UK.

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Background

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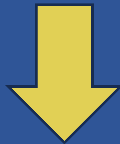
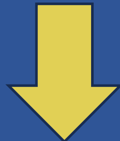
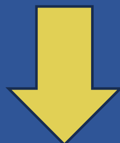
- Sedation is frequently used in the ICU.



- Oversedation increases mortality and morbidity.



- Research has focused on the impact of sedation, different approaches to sedation practice and different sedation agents.



- Little knowledge about how health care professionals' practice.

(Burry *et al.*, 2014, Devlin *et al.*, 2018, Kollef *et al.*, 2000, Shehabi *et al.*, 2018 and Varga *et al.*, 2022)

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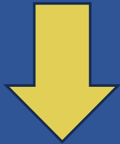
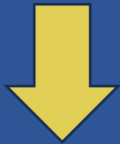
Aim

- Discover what influences sedation practice.



- Focus on health care professionals.



- Case Study approach.

- Australia and the UK.

(Stake, 1995)

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Methods

- Data collection November 2021 to February 2023.
- One ICU in Australia and one ICU in the UK.
- Focus Group, Participant Observations, Interviews.

	UK Case Study	**Australia Case Study**
Hospital Beds	1,100	1,013
General ICU Beds	36	28
Nurse:Patient Ratio (Level 3)	1:1	1:1
Main Initial Sedation Agents	Propofol + Alfentanil	Propofol + Fentanyl

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Methods

	Method of Data Collection					
	Focus Group		**Participant Observations**		**Interviews**	
	UK	**Australia**	**UK**	**Australia**	**UK**	**Australia**
Sex	Male x2 Female x2	Unreported	-	-	Male x3 Female x4 (4 unreported)	Male x1 Female x5 (2 unreported)
Profession	Nurse x3 Pharmacist x1	Nurse x2	85 Consented health care professionals	40 Consented health care professionals	Nurse x5 Pharmacist x2 Doctor x4	Nurse x6 Doctor x1
Age	(26-30) x2 (31-35) x1 (51-55) x1	Unreported	-	-	(18-29) x4 (40-49) x3 (4 Unreported)	(18-29) x3 (30-39) x2 (2 Unreported)
ICU Experience	3-21 years	Unreported	-	-	2-18 years (4 unreported)	2-5 years (2 unreported)
Hours	01:23:33	01:19:31	142 hours	188 hours	00:26:44-01:17:55 (range). **Total:** 10 hours 3 minutes	00:49:59-01:22:49 (range). **Total:** 7 hours 43 minutes

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Findings: Reflexive Thematic Analysis

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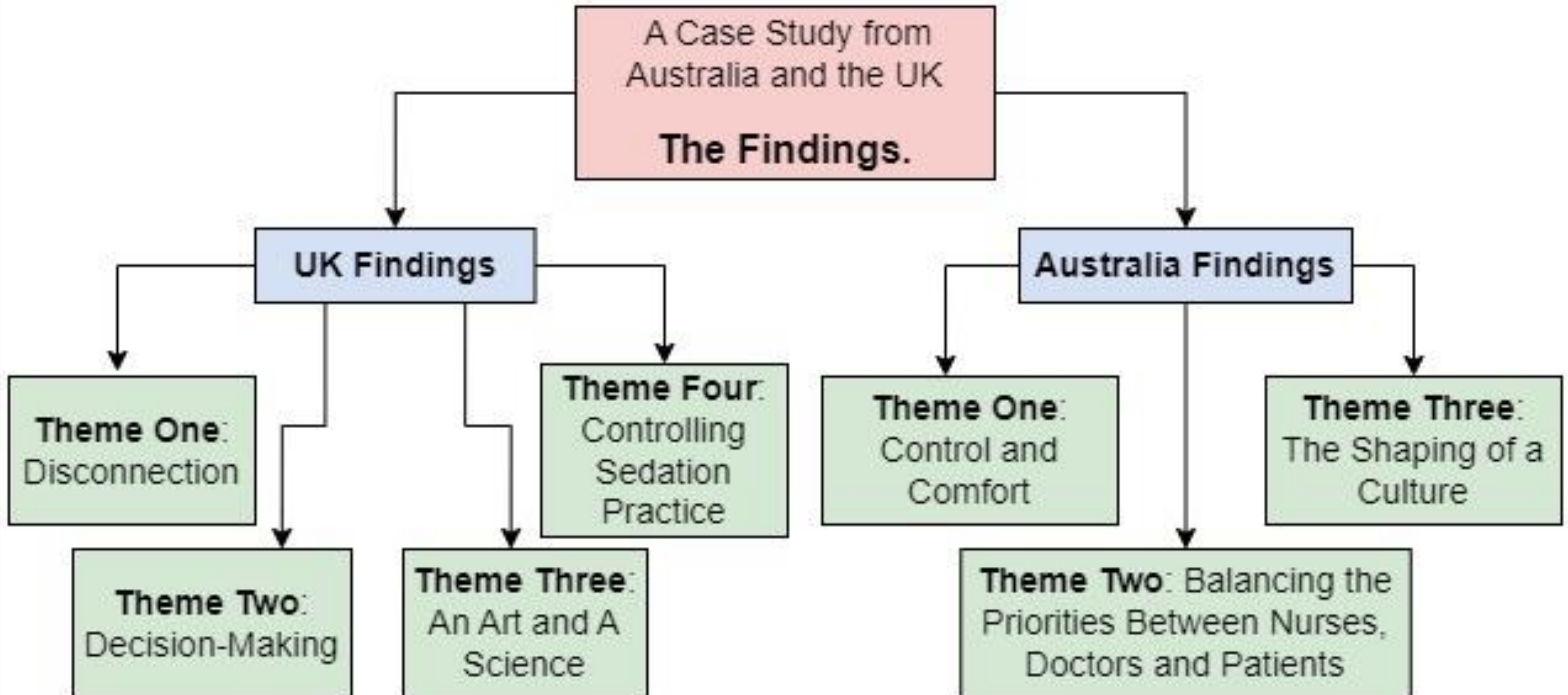

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UK Findings: Disconnection

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"[couldn't] possibly leave that bed space [side room] for more than 10 mins [...], why sedation creeps up sometimes" (Focus Group, Nurse RUP).

"decisions being made [...] without the full picture" (Interview, Nurse TTR).

"To do a sedation hold on those patients and not have a doctor present almost feels a little bit, not pointless, but if you then have to re-sedate that patient for safety you've missed out on an opportunity there to extubate them" (Focus Group, Nurse TE3).

"bugbear [...] [if] sedation gets restarted without a discussion" (Interview, Doctor 25U).

"Come on, just come, you need to come and have a look at them with your own eyes" (Interview, Nurse 2Y3).

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UK Findings: Decision-Making

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‘Pharmacy [team] feel very integral to the running of the intensive care unit. I witnessed them advising the consultants, setting plans’ (Observations, Day 7, Pharmacist WYA).

“final decision makers” (Interview, Doctor ZCK).

“the experience of staff might not be great […] [they’ve] had to sedate patients more […] just to keep everyone safe” (Focus Group, Nurse TE3).

“It's really hard to get a feel for [sedation] unless you are involved with it” (Interview, Doctor YHK).

“agenda to do a sedation hold no matter what” (Interview, Nurse PPC).

‘it’s kind of cruel’. [action] Propofol increased to 20mls/hr (Observations, Day 19, Nurse 53R).

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UK Findings: An Art and A Science

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“balancing that double-edged sword” (Interview, Doctor ZCK).

“walk that fine line” (Interview, Pharmacist 83F).

“cycle through lots of drugs before we get it right” (Interview, Doctor ZCK).

“one of those things that’s the art of nursing for intensive care, its where you're having to decide what's happening. […] it’s a good example of nurse-led practice” (Interview, Nurse TTR).

“once it’s [sedation] been started, we don’t necessarily have much to do with the up and down […]. We tend to set the targets and rely on the nursing staff to change the medications within the parameters to meet those targets.” (Interview, Doctor 2WN).

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UK Findings: Controlling Sedation Practice

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"don't go above 10ml [of propofol]" (Focus Group, Nurse RUP).

'Doctors say 'don't increase', but they aren't here experiencing the distress' (Observations, Day 25, Nurse ESU).

"different tolerance of what we thought was acceptable for the patient [...]" (Interview, Nurse 43S).

"manage their [...] moral injuries by trying to have easy shifts, I think often that results in a little bit more restraint and a little bit more sedation" (Interview, Nurse TTR).

"never been asked about it [restraints], they're usually on before I get involved" (Interview, Doctor 25U).

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Australia Findings: Control and Comfort

"a little bit of propofol, a little bit of fentanyl does wonders for everyone" (Interview, Nurse XRLD).

"Probably a bit more sedation than what would be considered lightly, and it just enables me to do a lot more tasks" (Interview, Nurse UT5Y).

Nurse reports *'Morally distressing when seeing a patient who is perceived to struggle. [and are] Much more likely to give a bolus'* (Observations, Day 19, Nurse JLKB).

"nobody can hear you. Nobody can see you. It's closed doors." (Interview, Nurse 95M2).

"we definitely don't ever do sedation holds in general intensive care" (Focus Group, Nurse 95M2).

"I must admit, I'm more of a sedation wean kind of person than a sedation pause" (Interview, Nurse XRLD).

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Australia Findings: Control and Comfort

"I'm a big fan, most of us are" (Interview, Nurse 95M2).

"love using Precedex™" (Interview, Nurse XRLD).

"get away with a lot less Propofol" (Interview Nurse UT5Y).

"extubate patients a lot sooner when we [doctors] put them on Dexmedetomidine because we can often extubate them on Dexmed" (Interview, Doctor 2PG5).

'Patient does seem a lot more settled now that Dexmedetomidine has been started' (Observations, Reflexive Notes, Day 16).

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Australia Findings: Balancing the Priorities Between Nurses, Doctors and Patients

"their background, and what medications that they're on, […] age, comorbidities" (Interview, Doctor 2PG5).

"everyone's interpretation of patient sedation is different." (Focus Group, Nurse 95M2).

'Don't think its right to tell them what to do if only seeing the patient for a few minutes while walking around' (Observations, Day 9, Doctor 2UEV).

"the medical team might be like turn everything off, and then you've got no option but to turn off everything" (Interview, Nurse XRLD).

"recently had a patient who's on Propofol, Fentanyl and Precedex™, and they were getting Quetiapine down their NG as well. Then the only note that was written was just 'wean sedation'" (Interview, Nurse UT5Y).

"we get a bit pissed off when other members of the multi-disciplinary team touch our patient's sedation rates" (Focus Group, Nurse 95M2).

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Australia Findings: The Shaping of a Culture

"rotate the opioids at their [doctors] discretion" (Interview, Nurse UT5Y).

'at night, [you've] just got to keep them asleep- keep them sedated' (Observations, Day 16, Nurse DA8F).

"you don't want to be the person everyone sees having this distressed, uncomfortable patient" (Interview, Nurse UT5Y).

"ooooo, you might need a little bit more [sedation] than that" (Interview, Nurse GSPM).

"with the nurses at the start of the shift to say, 'look, you know, they're not going to be extubated any time soon, don't worry about weaning the sedation'" (Interview, Doctor 2PG5).

"high risk of self extubation […] physical restraints come in" (Interview, Nurse XRLD).

"not the best thing to do" (Focus Group, Nurse EPEA).

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Implications for Practice: Policy

- Challenging ICU layouts need additional staffing to facilitate lighter sedation practices.
- Formal Nurse-Protocolised sedation practices should be considered, especially if there are hierarchical barriers between nurses and doctors.
- ICU's should have psychological support for the workforce.

(Intensive Care Society and The Faculty of Intensive Care Medicine, 2022).

Implications for Practice: Education

- Collaborative and interprofessional learning should be promoted regarding sedation practice.
- Educational spaces such as a ward round should be utilised.

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Implications for Practice: Future Research

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Focus on:

- Moral distress on ICU health care professionals caused by sedation practices.
- Dexmedetomidine and burnout rates of ICU health care professionals.
- Exploring the layout of an ICU and the impact on sedation practices.
- Developing a nurse-led protocol for sedation practice.
- Different approaches to sedation reduction e.g. sedation wean vs sedation hold.

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Thank you for listening!

Is there anything else that you would like to know?

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