

A QUALITATIVE STUDY OF FACTORS AFFECTING TIME TO TREATMENT OF ANEURYSMAL SUBARACHNOID HAEMORRHAGE – THE REDDISH STUDY

Thuy Phuong Nguyen¹, Christine Stirling¹, Gemma Kitsos¹, Linda Nichols¹, Ronil V Chandra², Sabah Rehman¹, Karen Smith³, Ian Mosley⁴, Leon Lai², Hamed Asadi², Jens Froelich⁵, Nova Thani⁵, Amanda Thrift⁶, Seana Gall¹

¹ University of Tasmania, Australia, ² Monash Health, Australia, ³ Ambulance Victoria, Australia, ⁴ Alfred Health, Australia, ⁵ Royal Hobart Hospital, Australia, ⁶ Monash University, Australia



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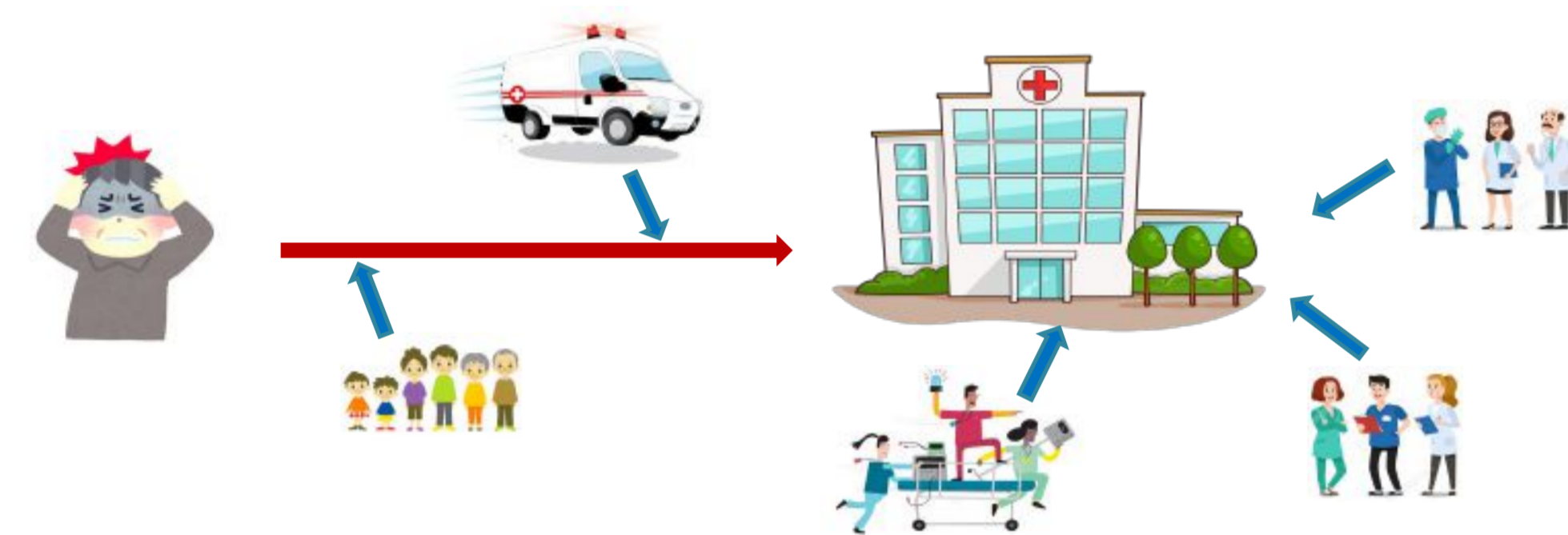
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Introduction

Aneurysmal non-traumatic subarachnoid haemorrhage (aSAH) requires urgent medical treatment to prevent death and reduce disability for patients. There are many stakeholders involving in the pathway of patient from onset until definitive treatment of endovascular coiling or surgical clipping.



However, delays in treatment of aSAH appear to be common but the causes are not well understood.

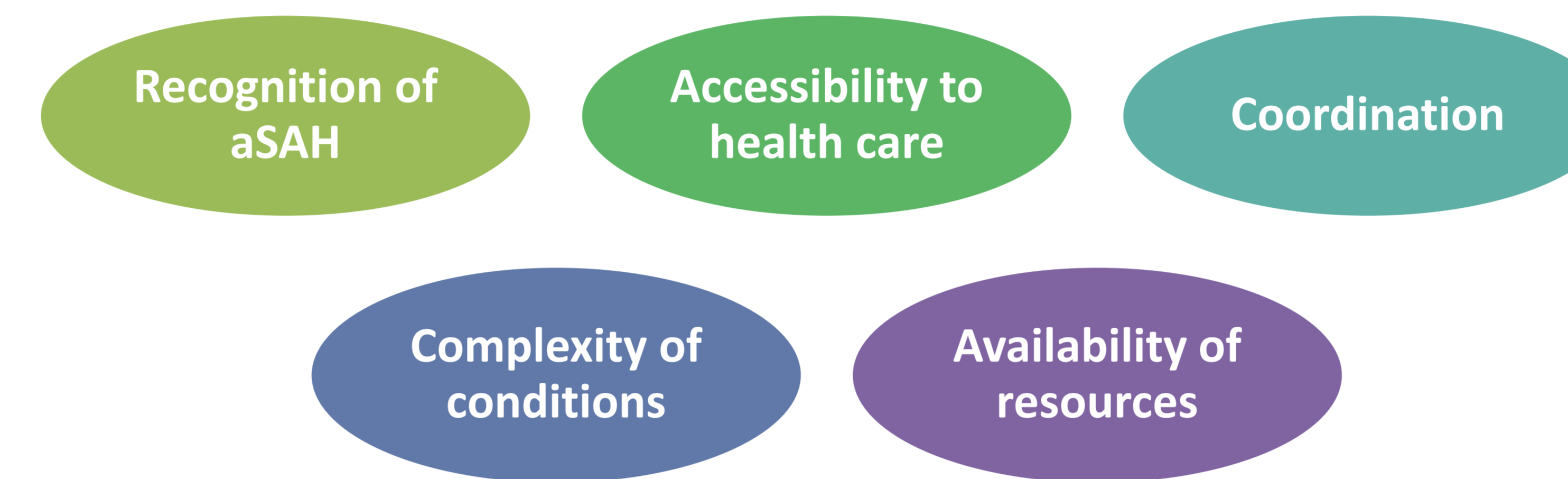
We conducted a qualitative study to explore facilitators and barriers to timely treatment of aSAH.

Materials & Methods

- Multiple case study approach across two tertiary referral centres in Australia.
- Cases of aSAH surviving >1 day were identified prospectively.
- Semi-structured interviews with the patient, their next-of-kin and health professionals focused on events from symptom onset to treatment to secure the aneurysm.
- Within-case analysis identified barriers and facilitators in 4 phases (pre-hospital, presentation, transfer, in-hospital) followed by thematic analysis across cases using a case-study matrix.

Results

Twenty-seven cases with 89 interviewees were included. Five themes were identified as following:



Each theme emerged in every time interval along the patient's pathway and covered both facilitators and barriers to timely treatment of aSAH. Figure 1 illustrates the density of a theme in relation to other themes in each time interval in patient's pathway to treatment.

	Barrier	Facilitator
Pre-hospital	Access to health care Recognition of aSAH Complexity of conditions <small>Availability of resources</small>	Access to health care Recognition of aSAH Coordination <small>Availability of resources</small>
Diagnosis	<small>Access to health care</small> Complexity of conditions Recognition of aSAH Availability of resources <small>Coordination</small>	<small>Complexity of conditions</small> Recognition of aSAH Coordination Availability of resources
Transfer	<small>Recognition of aSAH</small> Access to health care <small>Complexity of conditions</small> <small>Availability of resources</small> <small>Coordination</small>	Coordination Complexity of conditions Recognition of aSAH Access to health care <small>Availability of resources</small>
In-hospital	<small>Recognition of aSAH</small> Availability of resources Complexity of conditions <small>Access to health care</small> <small>Coordination</small>	Recognition of aSAH Availability of resources Coordination Complexity of conditions

Figure 1. Word cloud (larger font denotes greater important) of major themes identified along patient's pathway.

Discussion

- 'Recognition of aSAH' played a critical role during pre-hospital and diagnosis stage to quicken access to healthcare. Early recognition of aSAH by health professionals at the hospital emergency department led to high priority triage and a more urgent response.
- 'Good coordination' between and within healthcare facilities is a standout facilitator to more timely treatment for patients with aSAH.
- 'Availability of resources' was major theme arising during the in-hospital stage. Availability of health specialists such as neurosurgeons, interventional neuroradiologist and anaesthetist was the main factor affecting timely treatment.

Conclusions

1. We identified five major themes affecting timely treatment of aSAH
2. The identified themes may be modifiable at the patient/health professional level and health system level and may improve timely treatment of aSAH.
3. Targeted interventions addressing these barriers and facilitators may improve timely treatment of aSAH, subsequently contributing to improve morbidity and mortality of patients with aSAH.

For more information about our group and to explore the prospect of a collaboration please visit <https://menzies.utas.edu.au/research/participant-based-studies/reddish>