



# Adaptive capacity within intensive care during the initial wave of COVID-19 - a grounded theory study

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*When the enemy attacked, all you could do  
was to row with both arms and  
do magic with your knees...*

*Who else would save the situation?*

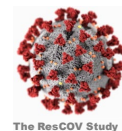
Synthesis of metaphors from informants in the research project  
'Resilient performance in healthcare during the COVID-19 pandemic (ResCOV)'

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# Resilient performance in healthcare during the COVID-19 pandemic (ResCOV): study protocol for a multilevel grounded theory study on adaptations, working conditions, ethics and patient safety

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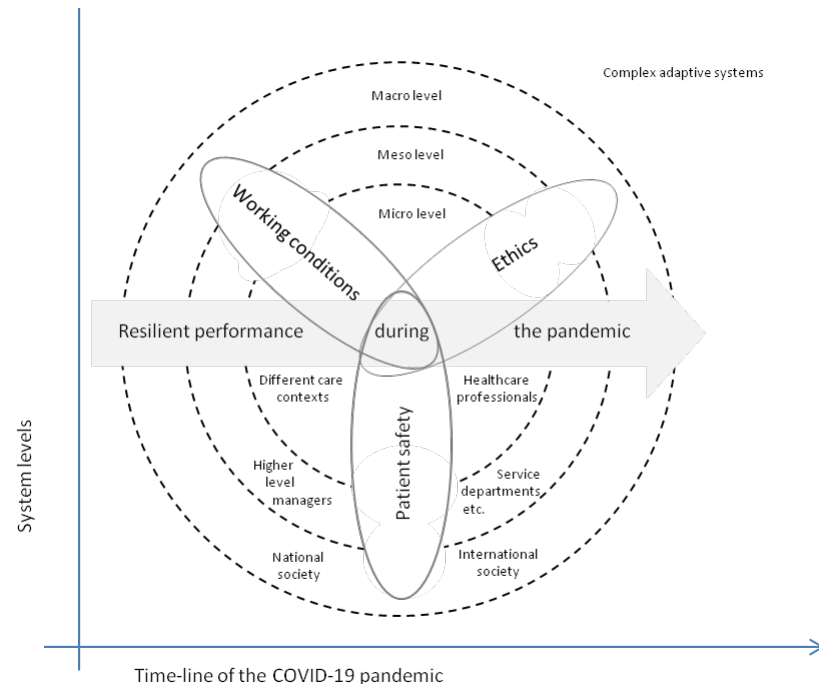
# Introduction

## Resilience in healthcare

The capacity to adapt to challenges and changes at different system levels, to maintain high-quality care

(Wiig, Aase, Billet, et al, 2020)

- Processes involved to facilitate resilience are still largely unknown
- Healthcare is a Complex Adaptive System (CAS)
  - constant internal and external interactions
- Challenged by the COVID-19 pandemic
  - full scale test of resilience



**Fig. 1** Overview of system levels, contexts and dimensions in focus in the ResCOV study (BMJ Open 2021;11:e051928)

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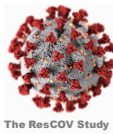
# Aim & Method

- Aim** Explore the escalation process of intensive care during the initial wave of the pandemic, with focus on adaptive capacity from a micro level perspective
- Design** Grounded Theory – exploratory theory generating – offering explanation
- Data** Healthcare professionals’ stories (written narratives/interviews)
- Analysis** Constant comparative analysis

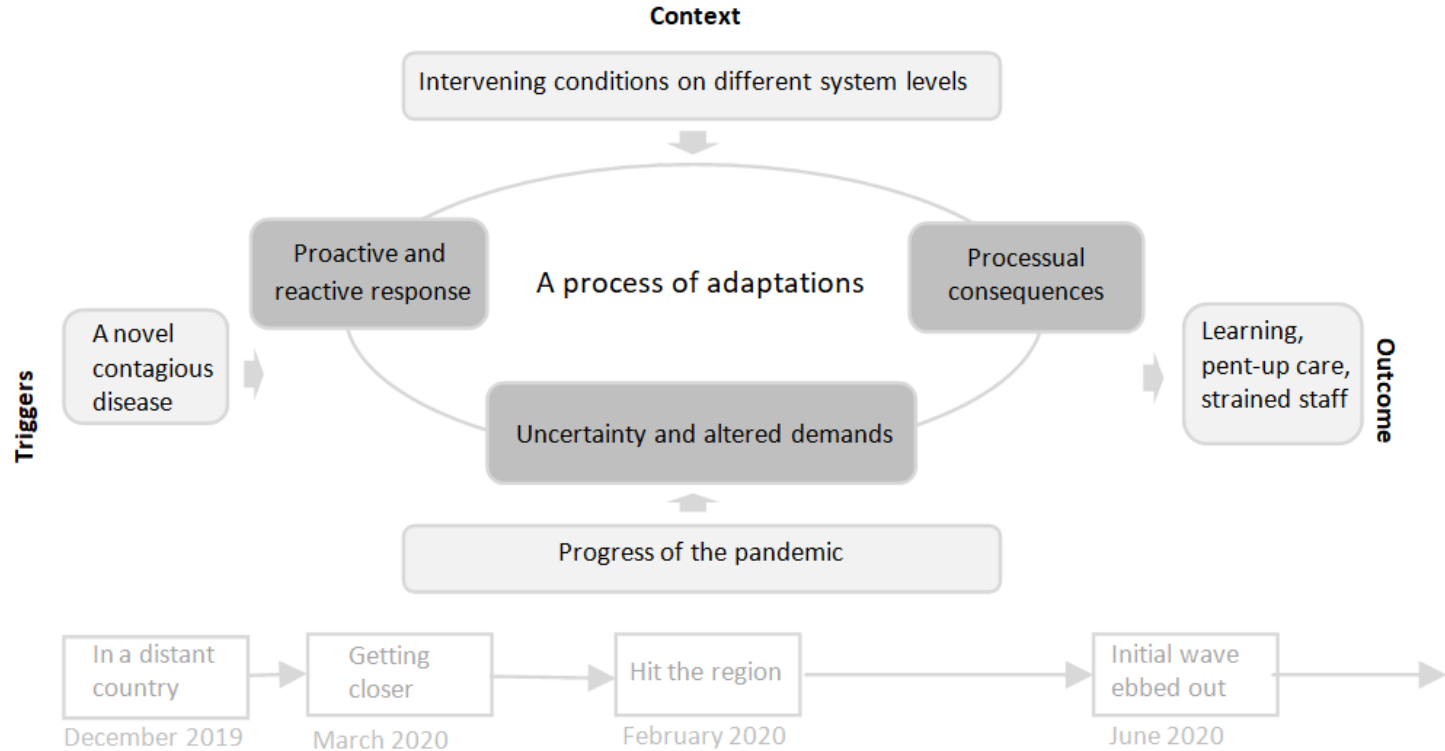
**Table 1** Participants

	Total number	Region		Data source		Gender	
		Sörmland	Dalarna	Narrative	Interview	Female	Male
Ass. nurses	6	3	3	4	2	6	-
Reg. nurses	37	22	15	30	7	29	8
Physicians	16	12	4	5	11	5	11
Managers	11	5	6	8	3	10	1
Total	70	42	28	47	23	50	20

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## The escalation process of intensive care



**Fig. 2** Conceptual model of the escalation process of intensive care during the initial wave of the COVID-19 pandemic (work in progress)

# Adaptive capacity

## Enabling conditions

- A sense of emergency - A joint focus - Committed individuals
- Bottom-up initiatives – Micro level self-organisation - Responsive meso level management
- Large premises - Access to oxygen and compressed air
- Professional competence - Collegial support - Routines
- Support from other ICUs - Support from the civil society

## Aggravating conditions

- The novelty of the disease - Uncertainty
- Insufficient crisis stockpile - Purchase difficulties
- Lack of intensive care competence
- Slow response on meso and macro level

# Conclusion

- Skills of the professions - Individuals' ability of resilience
- Micro level -> meso level -> macro level
- Intervening conditions on all system levels
- Intensive care to many patients
- Impaired patient safety, ethics and working conditions
- Strained staff and pent up care need for other patient groups
- The organizational adaptive capacity increased over time

*Thank  
you!*



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