SAFETY
simulation for medical practice

SIMULATION APPROACH FOR
EDUCATION AND TRAINING
IN EMERGENCY

Infant Dyspnea
Ludwig-Maximilians-University (LMU)

BODY INTERACT™
VIRTUAL PATIENTS

AUTHORS

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Summary

Scenario Description

Learning Target	**Description**	**Participants**
Medical: • Recognizing dyspnea • Primary care of a dyspneic infant • adequate mask ventilation CRM: • SA • Leadership • Communication	Where: Emergency department Frame conditions: Day shift, all resources available	students Who: • 2 doctors • 1-2 nurses

Notes: Needs an actor for the role of the mother, can be a student

Scenario Briefing

Briefing (everyone)	Additional Briefing (individual Positions)	Case Briefing (Roleplayers)
6 months old baby brought to the ED by worried parents. 3 days history of coughing and upper airway infection. Since today increasingly difficulties drinking and "strange noises"		Mother – very worried, but can be calmed down. Don't interfere too much with medical team.

Notes:

Script SIM Nurse/Co-Instructor

List of Material	Set-Up Room	Set-Up Simulator
• Pediatric ED cart • Baby Simulator (NOT newborn) and (optoional) SP	• ED stretcher with actor, sim on arm alternatively sim on baby bed	• Dressed • Iv line • O2 through nose

Notes:

Scenario Saver

How to react if the medical problem is not identified	How to react if the medical problem is identified too quickly	Other comments, material needed for savers (e.g. white coat)
Send in senior doctor	Mother ca be a bit more stressful, binding resources	

Notes:

Scenario End Criteria

Scenario ends when…		
• patient is ventilated • depending on curriculum maybe also intubate the patient? • volume is given		

Notes: Don't let the patient die!
General note – end the scenario saying:
"The patient is now going to be taken care of, thank you for solving the case"

Simulator Set-Up, Steering

	Phase 1 Start	Phase 2 Worsening	Phase 3 Ventilation	Phase 4 stabilisation
Vitals	HR: 170 bpm, SR BP: 61/32 mmHg; SpO2: 90 %, Resp. Rate: 52, Temp: 38,1°C; Cyanotic Auscultation: Ronchi over whole lung	HR: 170 bpm, BP: 61/32 mmHg; SpO2: 88 %, Resp. Rate: 70, Temp: 38,1°C More cyanotic Auscultation: Ronchi over whole lung	HR: 170 bpm BP: 61/32 mmHg; SpO2: 82 %, RR: 12, apnea episodes, Temp: 38,1°C More cyanotic Auscultation: Ronchi over whole lung	HR: 150 bpm BP: 61/32 mmHg; SpO2: 91 %, Resp. Rate: ventilated Temp: 38,1°C Cyanosis recedes Auscultation: Ronchi over whole lung
Text for patient	Description of patient: Limp, pale Retractions breathing Rhonchi over whole lung			
Other info				
Management during scenario				
Notes:				

Abstract

Learning Target:	Management of INFANT DYSPNEA
Description:	Bronchiolitis of young infant
Participants:	- 2 doctors - 1-2 nurses
Case Briefing:	6 months old baby brought to the ED by worried parents. 3 days history of coughing and upper airway infection. Since today increasingly difficulties drinking and "strange noises"
List of Material:	- pediatric ED cart - Baby simulator (NOT newborn) AND (optional) - SP
Set-Up Room	- ED stretcher with actor, sim on arm - alternatively sim on baby bed
Set-Up Simulator:	- dressed - iv line - O2 through nose
Scenario Saver:	Send in senior doctor
Scenario End Criteria:	Patient ventilated, Volume given
Management during Scenario:	Retractions breathing Rhonchi over whole lung
Other:	