COMMON STRUCTURE FOR HIGH FIDELITY SIMULATION SCENARIO

SCENARIO TITLE

Blind Leadership

SCENARIO OVERVIEW

DUMMY TYPE:

HEALTHCARE SERVICE: Inpatient surgical unit

TARGET GROUP[1]: specialisation and master students

ESTIMATED SCENARIO DURATION: 15 minutes

SCENARIO SUMMARY[2]:

The students are invited to solve, in group, the clinical condition of a patient in cardiac arrest caused by hypoglycaemia associated to extended fast. A student must take on leadership of the process, but will do so with a blindfold. The different participants will need orders from the leader to implement the actions.

EDUCATIONAL OBJECTIVES

GENERAL OBJECTIVES:

To establish a structured and efficient communication; to lead a team in SAV

SCENARIO-SPECIFIC OBJECTIVES:

- To identify the patient's condition as critical, to obtain colleagues' help and specialised help
- to take commands, assign functions and guarantee their implementation
- to establish efficient communication within the team
- to take appropriate decision, taking priorities into account

[1] Skill level and number of participants
[2] Scenario key words

PARTICIPANTS' ROLE

STUDENT	1 -leader	3 –respond to request for help	
PROFESSIONAL	1 –doctor who answers the phone		
TRAINERS[3]	1 –managing the case	1 -debriefing	

EQUIPMENT LIST[4]

Medical supplies:
- Circulation[5]: vein catheter in position; needles, syringes, drip systems
- Ventilation[6]: O2, vacuum, suction tubes, catheter and O2 masks, manual bag valve mask, stethoscope
- Miscellaneous[7]: pupil lamp; glucometer

Medicines and solutes: SF and Ringer's solution; glucose 20%, adrenalin, amiodarone

Documents[8]: patient's file

Accessories[9]: phone, protection equipment

Environment[10]: general surgery infirmary; patient with surgical plaster on the abdomen, with bloodstains, abdominal drain with bloodstains.

SCENARIO PREPARATION

SIMULATION TYPE:

DUMMY TYPE:

SIMULATOR PREPARATION:
- Setting: corresponding to initial state (cf. table)
- Positioning[11]: patient lying, no breathing movements
- Accessories[12]: raised bed bars

ENVIRONMENT PREPARATION[13]:
- infirmary environment;

[3] Control of dummy setting / Debriefing/ Dummy voice/ Facilitator/ Disruptive element/ external stakeholder (phone speaker)
[4] Prefer Check-list for quick check-up
[5] Catheters, infusion lines, needles (IV, intraosseous, subcutaneous), blood collection tubes, tourniquet…
[6] Nasal cannulas, non-rebreather masks, intubation supplies…
[7] Capillary glycaemia, urinary catheter, thermometer, stethoscope, gloves, hand sanitizer….
[8] Patient medical file, transmission sheet, ECG, recommendation summary sheet
[9] Pen, phone, diagnostic penlight for pupils, work outfits (white coats…)
[10] Wig, basin, tissues with blood, patient's suitcase…
[11] Half sit-up, lying down
[12] Presence of oxygen, of a drip tube, already scoped…
[13] Raised bed rails, presence of patients belongings, tissues, needed information received (Displayed thermometer, glycaemia…)

- put a plaster on the abdomen with bloodstains;
- put an abdominal drainage bag with bloodstains;
- put a gastrostomy tube with remains

PREPARATION OF ADDITIONAL EXAMINATIONS[14]:
- if they ask for it, there is a radiograph of the thorax and one of the abdomen available – normal
- if they ask for it, there is the result of blood tests collected in the morning – normal

PREPARATION OF STUDENTS/LEARNERS[15]: professional outfit
- protection equipment
- if you ask for specialised help, a doctor answers the phone and say that you have to guarantee SAV, following the algorithm, help unavailable now because they are busy with other emergency situations

BRIEFING

TIME: 16:30

SITUATION[16]:

The patient has undergone abdominal surgery (exploration laparotomy) two days ago. He has a plaster and a drain with bloodstains. His abdomen is distended and refers that the analgesics has little effect on pain.
He had a scanner 30 minutes ago to evaluate possible bowel obstruction. He arrived in the unit not long ago. He had analyses in the morning, and a thorax and abdomen radiograph. The results have not arrived yet.

Challenge: to exercise leadership with a blindfold.
The trainer leads the leader to the bedside and explains the rules: the leader must lead and guide the team. The scenario starts and the trainer says he hears a bell and, while arriving to the patient's room, the other patient in the room says he does not answer anymore.

DOCUMENTS[17]:
Read infirmary notes

PATIENT DATA[18]

Surname: Silva Age: 48
Name: João Manuel Weight: 75 kg
Date of birth: 4th of January Height: 1.70
Allergies: no known allergies Gender: M
History: no relevant history until current disease
Medical history: colon tumour diagnosed two months ago
Surgeries: no prior surgery
Ob/gyn:

[14] If foreseen in the scenario, prepare additional examinations to display (chest radiograph, blood test…)
[15] Preliminary analysis of documents if needed
[16] Location where the scenario takes place, information before entering the simulation room
[17] Document handed during the briefing/ care record, biological results, written transmissions …
[18] Care record layout or if not necessary to the scenario, voice memo for the trainer

Personal treatment: João Silva

FRAMES OF REFERENCE / EXPERTS RECOMMENDATIONS[19]

- Follow SAV recommendations
- In 4H/4T evaluation you must suspect an allergy to the contrast agent and identify hypoglycaemia
- You must treat hypoglycaemia based on SAV recommendations
- Follow the "communication and leadership in emergency situations" protocol

DEBRIEFING IDEAS

- How communication is established
- How leadership goes
- How the leader handles the situation

SCENARIO PROGRESS

Monitor setting	**Patient dummy**	**Students' interventions (what we would like to see…)**	**Messages**
Beginning time of scenario:			
Initial state: AP: HR: RR: SpO_2: ECG curve [20]: pulseless SVT (PEA) Clinical signs: - eyes[21]: closed - pupils[22]: symmetrical, reactive, but with slow response - Pulmonary auscultation : clear, bilateral Glycaemia – 15 mg/dl	Symptoms, voice	- Evaluate ABCDE - Evaluate 4H and 4T - Correct hypoglycaemia administering 20% glucose (40-60 ml)	The roommate patient says that Mr. João Silva was complaining and stopped talking (answering)

[19] Quoted sources, bibliography
[20] Sinus, Fibrillation….
[21] Open, half-closed, closed
[22] Miosis, mydriasis, anisocoria, normal-reactive

State 2: After correcting hypoglycaemia AP: 100/60 HR: 120 RR: 12 SpO_2: 92 ECG curve: SR (120) Clinical signs: - eyes[23]: closed - pupils[24]: symmetrical, reactive - pulmonary auscultation: clear, bilateral Glycaemia – 105 mg/dl			
End time of scenario:			

SCENARIO EVALUATION

POSITIVE ASPECTS:

TO IMPROVE:

REALISM:

USED PROTOCOLS:

[23] Open, half-closed, closed
[24] Miosis, mydriasis, anisocoria, normal-reactive

PROTOCOLS TO IMPLEMENT: