COMMON STRUCTURE FOR HIGH FIDELITY SIMULATION SCENARIO

SCENARIO TITLE

Safety when administering drugs

SCENARIO OVERVIEW

DUMMY TYPE:

HEALTHCARE SERVICE: medicine service

TARGET GROUP[1]: 1st year students (initial level)

ESTIMATED SCENARIO DURATION: 15 minutes

SCENARIO SUMMARY[2]: medication error; prevention; safety

EDUCATIONAL OBJECTIVES

GENERAL OBJECTIVES:

To be able to prevent medication errors using safety practices.

SCENARIO-SPECIFIC OBJECTIVES:

- To recognise a potential risk situation of medication error;
- To adopt prevention measures to avoid medication errors:
- To establish efficient communication with the patient and the multidisciplinary team.

PARTICIPANTS' ROLE

STUDENT	Identify the medication error	Avoid the medication error	Administer drugs safely
PROFESSIONAL			
TRAINERS[3]	Pass the information (new shift)	Control the dummy	Guide the debriefing

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[1] Skill level and number of participants
[2] Scenario key words
[3] Control of dummy setting / Debriefing/ Dummy voice/ Facilitator/ Disruptive element/ external stakeholder (phone speaker)

Medical supplies:
  - Circulation[5]: subcutaneous needles; insulin syringe
  - Ventilation[6]:
  - Miscellaneous[7]: glucose metre, alcohol, compresses, sample collector; gloves; tray

Medicines and solutes: two insulin vials (fast and slow)

Documents[8]: **two patients' clinical file**

Accessories[9]: phone, refrigerator

Environment[10]: two patients, stretched out

SCENARIO PREPARATION

SIMULATION TYPE:

DUMMY TYPE:

SIMULATOR PREPARATION:
  - Setting: one patient with a 195 mg/dl blood sugar level and the other patient with a normal blood sugar level (100 mg/dl) (prior evaluation)
  - Positioning[11]: patients stretched out
  - Accessories[12]: room divider curtain; cardex or therapy sheet

ENVIRONMENT PREPARATION[13]:
Two unidentified insulin syringes with 10U each (one with insulatard, the other with actrapid)

PREPARATION OF ADDITIONAL EXAMINATIONS[14]: not applicable

PREPARATION OF STUDENTS/LEARNERS[15]: not applicable

BRIEFING

TIME: 9 hours

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[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…)
[14] If foreseen in the scenario, prepare additional examinations to display (chest radiograph, blood test…)
[15] Preliminary analysis of documents if needed

SITUATION[16]:
Medical service; the patients are waiting for breakfast. The nurse of the previous team has **already measured the patients' blood sugar level and has prepared the insulin to** administer. When the following nurse arrives, the first nurse leaves the service.

DOCUMENTS[17]:
The two patients' clinical file, one with a slow insulin prescription and fast insulin in case of SOS, and the other with only fast insulin.

PATIENT DATA[18]

Surname: Martins/Santos
Name: António/Pedro
Date of birth: 25-04-1943 / 12-11-1967
Allergies: None
History: Type I diabetes / Still healthy (dizziness, thirst, polyuria)
Medical history: oral anti-diabetes / no treatment
Surgeries: No surgical history for either
Ob/gyn: Not applicable
Personal treatment: cares / cares

Age: 74 / 50
Weight: 82 kg / 75 kg
Height: 1.70 / 1.80
Gender: M / M

FRAMES OF REFERENCE / EXPERTS RECOMMENDATIONS[19]

DEBRIEFING IDEAS

For the student who has performed the scenario:
- How did you feel during this simulation scenario
- Describe the situation you have experienced
- What did you learn with this scenario
- What could be improved

For observer students:
- What are the procedures well performed by their colleague

For all students:
- Think about the five/ten certainties when administering drugs
- Cares when administering insulin

SCENARIO PROGRESS

Monitor setting	Patient dummy	Students' interventions (what we would like to see…)	Messages
Beginning time of scenario:			

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[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
[19] Quoted sources, bibliography

Initial state:	**Patient 1:** AP: 140/85 HR: 80 RR: 18 SpO$_2$: 99% Blood sugar level: 100 mg/dl ECG curve: sinus **Patient 1:** AP: 130/75 HR: 75 RR: 16 SpO$_2$: 99% Blood sugar level: 195mg/dl ECG curve: sinus	Evaluate the preparation of the two treatment (insulin)	The nurse (teacher) makes way saying: "I have evaluated the patients' blood sugar level and prepared the insulin to administer before breakfast." "I haven't had time to administer the treatments." - ask them to be administered - say goodbye to your colleague (student) and leave the service.
State 2:	The patients put pressure on the nurse saying they want to take the treatment in order to start eating breakfast. No change in vital signs.	Throw the treatment away because it is not identified; measure blood sugar levels again and prepare a new treatment if needed.	
State 3:	No change in vital signs.	Administer the right treatment to the patient.	
End time of scenario:			

SCENARIO EVALUATION

POSITIVE ASPECTS:

TO IMPROVE:

REALISM:

USED PROTOCOLS:

PROTOCOLS TO IMPLEMENT: