THE CASE STUDY

ANNOUNCEMENT Internship at an addiction centre

As a medical student, you will soon intern at an addiction treatment centre. You will be asked to complete a case study. The patient you will be treating must overcome a serious drug, alcohol or anabolic steroid dependency. At the end of your internship, you must present information to your patient that will help him or her stop consuming.

To complete your case study, you are to:

- Select one of the cases included in the table at the bottom of this page.
- Prepare an outline for a poster illustrating the desired and adverse effects of consumed substance(s) on the nervous, musculoskeletal and reproductive systems.
- Present written information that complements the information on the poster including measures for remedying the adverse effects, community resources, valuable sources of information consulted, and so on.

In this case study, you are to play the role of a medical student interning at an addiction treatment centre.

Cases to be studied

| | | Patient | | | |
|------|--------|----------------|-------------|---------------|--|
| Case | Phy | sical ch | aracteris | tics | Toxic substances consumed and |
| No. | Gender | Age (years) | Weight (kg) | Height (m) | duration of consumption |
| 1 | М | 22 | 98 | 1.75 | Anabolic steroids for 4 years |
| 2 | F | 14 | 56 | 1.64 | Cannabis (hashish, marijuana) for 9 months |
| 3 | F | 19 | 53 | 1.61 | Hallucinogens (LSD, MDA, mushrooms, ecstasy, PCP) for 4 years |
| 4 | М | 22 | 61 | 1.65 | Stimulants (amphetamines, cocaine) for two years |
| 5 | М | 15 | 73 | 1.60 | Solvents and glue for 14 months |
| 6 | F | 28 | 59 | 1.69 | Tranquilizers and sleeping pills (GHB, barbiturates) for 3 years |
| 7 | F | 21 | 52 | 1.58 | Opiates (heroin, opium) for 5 months |
| 8 | М | 29 | 102 | 1.87 | Alcohol for 6 years |

| Name [.] | Group: |
|-------------------|--------|

CREATING THE CONTEXT

I ask myself questions

| Cas | se studied: |
|-----|---|
| 1. | What is addiction? |
| | |
| | |
| 2. | For whom is this case study intended? |
| | |
| 3. | What questions might guide you as you gather information? |
| | |
| | |
| | |
| m | nust |
| | Restate the goal of your case study. |
| | |
| | |
| tŀ | nink |
| 5. | In your opinion, what are the effects of the substance(s) consumed by your patient on his or her body? Explain your answer. |
| | |
| | |
| 6. | In your opinion, what measures would allow your patient to overcome his or her dependency? Explain your answer. |
| | |

CREATING THE CONTEXT (continued)

What I know and what I must find out

7. Write down the information you already know and what you need to find out.

What I know . . . What I must find out . . .

I prepare my work

8. Where will you find the information to give to your patient?

9. Organize the principal steps of your work in chronological order.

Reflection

Do I fully understand what I need to do?

No

| Name: | Group: | |
|-------|--------|--|
| | | |

GATHERING INFORMATION

I do research

| Case | e studied: | Substance(s) consumed: |
|--------------|---------------|---|
| 1 . V | Vhat are the | effects of the consumed substance(s) on the systems of the human body? |
| - | | |
| - | | |
| - | | |
| - | | |
| | | res could be taken to remedy the adverse effects of the substance(s)? Inity resources exist for people with addictions? |
| - - | | |
| _ | | |
| 3 . V | Vhat other in | nformation would be helpful to give to the patient? |
| - - | | |
| 4. V | Vhat are you | ur principal sources of information? |
| - - | | |
| - - | | |
| - | | |

GATHERING INFORMATION (continued)

I apply my research results

5. Link the effects of the consumed substance(s) to the corresponding systems of the human body, as well as to their organs or tissues.

Effects of _____ on the systems of the human body

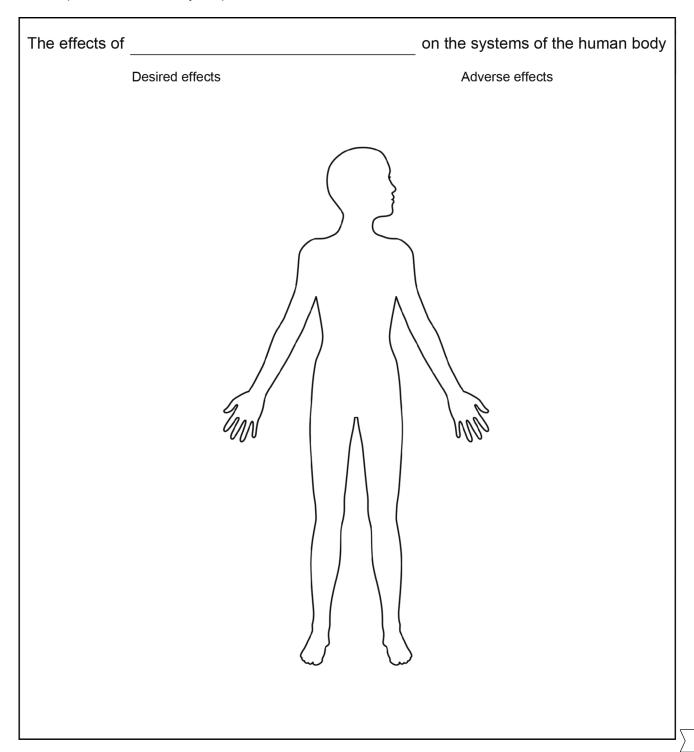
| | | Affected | I systems |
|---------------------|--------|---------------------------|-----------|
| Name of sy | rstem | Affected organs or tissue | Effects |
| Reproductive | Male | | |
| system | Female | | |
| Nervous sy | rstem | | |
| Musculosk systen | | | |

| Reflection | Yes | No |
|---|-----|----|
| Do I fully understand the scientific concepts involved in this situation? | | |

COMPLETING THE CASE STUDY

I make suggestions

1. Prepare the outline of your poster.



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COMPLETING THE CASE STUDY (continued)

| ommuni | ty resources, sour | ces of information | patient such as n, etc. | |
|--------|--------------------|--------------------|----------------------------|--|
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Reflection

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Yes No

Have I considered other solutions or explanations?

ALIDATING THE CASE STUDY

I justify my approach

| 1. | What are the most adverse effects of the consumed substance(s) on your patient's health? |
|----|---|
| 2. | Do you think the information you will give to your patient will help him or her stop consuming? Is certain information more convincing than others? If so, explain your answer. |
| 3. | What are the benefits and drawbacks of the measures you are suggesting to your patient to encourage him or her to stop consuming? |
| 4. | Among your sources of information, are certain ones more useful than others? Justify your answer. |
| 5. | Do you think your poster is a good method for giving useful information to your patient? If not, what would you suggest? Explain your answer. |
| | |

MY EVALUATION

Use the evaluation grid on the next page to do a self-evaluation. Write A, B, C, D, or E in the appropriate space.

| | SSC2 Makes the most of and technology | of h | is/her | knowledge of science |
|-----------|---|------|-------------------|----------------------|
| Criteria* | Observable indicators | ЭМ | Teacher | Comments |
| 1 | Creating the context | | | |
| | Formulation of questions for information gathering and definition of the case study goal | | □ With help | |
| 2 | Gathering information | | | |
| | Listing of effects produced by consumed substances and identification of their repercussions on systems and organs (or tissues) | | □ With help | |
| 3 | Completing the case study | | | |
| | Grouping of listed effects into desired and adverse ones, and citing of community resources | | □ With help | |
| 4 | Validating the case study | | | |
| | Justification of the solution using information sources | | □ With help | |

* Evaluation criteria

- 1 Formulation of appropriate questions
- 2 Appropriate use of scientific and technological concepts, laws, models and theories
- 3 Relevant explanations, solutions or actions
- 4 Suitable justification of explanations, solutions or actions

EVALUATION GRID

Makes the most of his/her knowledge of science and technology

|) | | | | | | |
|-----------|---|--|---|---|---|------------------------------------|
| *Criteria | Observable indicators | ٧ | В | c | D | Е |
| _ | CREATING THE CONTEXT | The questions directing the | The questions directing the | The questions directing | The questions directing the information | The work |
| • | Formulation of questions for information gathering and definition of the case study goal | information gathering process are relevant. The case study goal is very clear. | information gathering process are relevant. The case study goal is clear. | gathering process are more or less relevant OR the case study goal is more or less clear. | gathering process are more or less relevant AND the case study goal is more or less clear. | redone. |
| 2 | GATHERING INFORMATION | Many effects are listed | Many effects are | Some effects are listed | Some effects are listed | The work |
| I | Listing of effects produced by consumed substances and identification of their repercussions on systems and organs (or tissues) | the appropriate systems and organs (or tissues). | are linked to the appropriate systems and organs (or tissues). | appropriate systems and organs (or tissues). | appropriate systems and organs (or tissues). | redone. |
| 3 | COMPLETING THE CASE STUDY | All the listed effects are correctly grouped into desired and | All the listed effects are correctly arouped into desired | The grouping of listed effects into desired and adverse | The grouping of listed effects into desired and adverse ones contains | The work needs to be redone. |
| | Grouping of listed effects into desired and adverse ones, and citing of community resources | adverse effects; several community resources are mentioned. | and adverse effects; a few community resources are mentioned. | ones contains some errors; at least one community resource is mentioned. | several errors. | |
| 4 | VALIDATING THE CASE STUDY | The information presented is supported by varied and reliable | The information presented is supported by reliable | The information presented is supported by sources of | The information presented is not supported by any | The work needs to be redone. |
| | Justification of the solution using information sources | sources of information. | but unvaried sources of information. | information that are more or less reliable and varied. | sources of information. | |

Evaluation criteria

- 1 Formulation of appropriate questions
- Appropriate use of scientific and technological concepts, laws, models and theories Relevant explanations, solutions or actions
 Suitable justification of explanations, solutions or actions