

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

Name: _____

Group: _____

CREATING THE CONTEXT

I ask myself questions

Case studied: _____

1. What is addiction?

2. For whom is this case study intended?

3. What questions might guide you as you gather information?

I must

4. Restate the goal of your case study.

I think

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.

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Group: _____

What I know and what I must find out

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

[illegible]

7

Name: _____

Group: _____

GATHERING INFORMATION

I do research

Case studied: _____ Substance(s) consumed: _____

1. What are the effects of the consumed substance(s) on the systems of the human body?

2. What measures could be taken to remedy the adverse effects of the substance(s)?
What community resources exist for people with addictions?

3. What other information would be helpful to give to the patient?

4. What are your principal sources of information?



Name: _____

Group: _____

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 anabolic steroids on the systems of the human body

Affected systems			
Name of system		Affected organs or tissue	Effects
Reproductive system	Male		
	Female		
Nervous system			
Musculoskeletal system			

Reflection

Do I fully understand the scientific concepts involved in this situation?

Yes

☐

No

☐

Name: _____

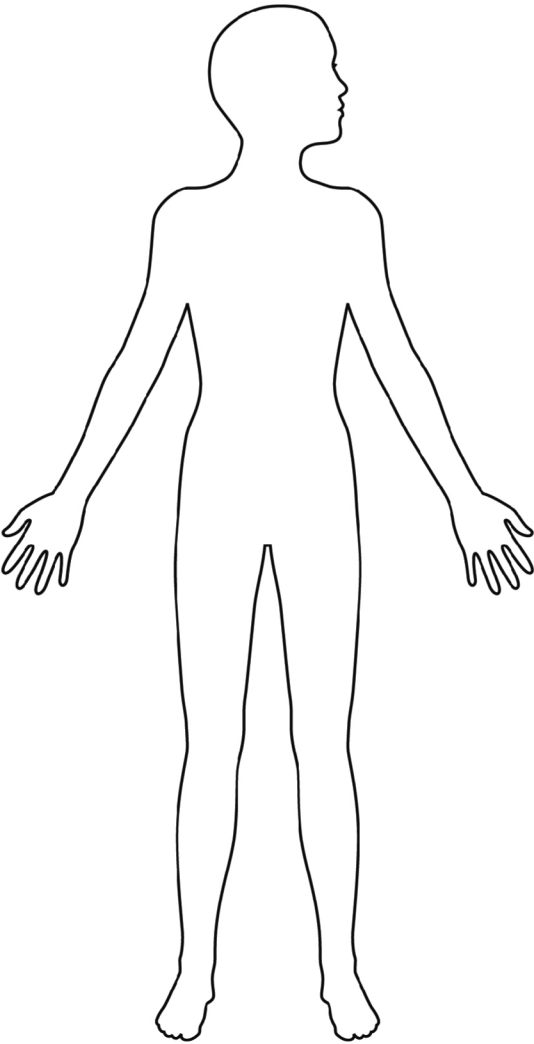
Group: _____

COMPLETING THE CASE STUDY

I make suggestions

1. Prepare the outline of your poster.

The effects of _____ on the systems of the human body

Desired effects	Adverse effects
	

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Group: _____

2. Write down other information to give to your patient such as ways to remedy adverse effects, community resources, sources of information, etc.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Yes No

1

1

Name: _____

Group: _____

VALIDATING THE PROJECT

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 yes, 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.

Name: _____

Group: _____

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 his/her knowledge of science and technology				
Criteria*	Observable indicators	Me	Teacher	Comments
1	Creating the context Formulation of questions for information gathering and definition of the case study goal		<input type="checkbox"/> With help	<div></div> <div></div> <div></div> <div></div> <div></div>
2	Gathering information Listing of effects produced by consumed substances and identification of their repercussions on systems and organs (or tissues)		<input type="checkbox"/> With help	<div></div> <div></div> <div></div> <div></div> <div></div>
3	Completing the case study Grouping of listed effects into desired and adverse ones, and citing of community resources		<input type="checkbox"/> With help	<div></div> <div></div> <div></div> <div></div> <div></div>
4	Validating the case study Justification of the solution using information sources		<input type="checkbox"/> With help	<div></div> <div></div> <div></div> <div></div> <div></div>

* Evaluation criteria

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

EVALUATION GRID

✓ SSC2] Makes the most of his/her knowledge of science and technology

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

* Evaluation criteria

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