

Nursing – Biology Integration: Case Study Example

The following shows an excerpt of the constructed case study and includes one follow-up question for each of the courses:

Pamela D. is 52 year-old Caucasian woman who has been working as an esthetician for 27 years at an upscale nail salon in downtown Montreal. [...] In the last year, her attacks have intensified and have become more frequent. Recently, Pamela has started to feel shortness of breath while eating. Her meals are taking longer to finish and has started purposely reducing her meal portions as a result.

At the clinic, you perform a routine initial patient assessment. The vital sign assessment results are shown below in Table 1.

Table 1: Pamela's Vital Signs

<i>Oral Temperature</i>	36.8°C
<i>Respiratory Rate</i>	18 breaths/min
<i>Heart Rate</i>	82 beats/min
<i>Blood Pressure</i>	115/72 mmHg

Following this, her doctor orders an ABG test. Test results are shown below in Table 2.

Table 2: Pamela's Arterial Blood Gas (ABG) Results

<i>pH</i>	7.36
<i>pO₂</i>	85.2 mmHg
<i>pCO₂</i>	44.4 mmHg
<i>SaO₂</i>	91%
<i>HCO₃⁻</i>	27.2 mmol/L

Possible nursing follow-up question:

Given the scenario presented above, provide three (3) questions that you would ask Pamela during the initial patient interview.

Biology follow-up question:

Are there any detectable abnormalities in Pamela's vital signs? Provide the normal range for each vital sign parameter and identify which of Pamela's vital sign readings are outside the range, if any. Provide a tentative physiological explanation for any outstanding value.