## Unit 9 Paediatric/ Neurological / Cardio-pulmonary PT

# Task 1 A) In pairs, write down as many names of different medical professionals as possible:

E.g. dermatologist, paramedic,...

#### B) What do these people do?

E.g. A dermatologist studies and treats skin diseases.

A paramedic is a medical professional trained to give treatment to people at the place where an accident has happened.

#### **Task 2 Medical conditions**

#### Study the condition below. Can you guess their names?

A) ..... refers to a group of disorders that affect muscle movement and coordination. In many cases, vision, hearing, and sensation are also affected. It is the most common cause of motor disabilities in childhood. The symptoms vary from person-to-person and range from mild to severe. Some people with ..... may have difficulty walking and sitting. Other people can have trouble grasping objects. The symptoms can become more severe or less severe over time. They also vary depending on the part of the brain that was affected.

Some of the more common signs include:

- delays in reaching motor skill milestones, such as rolling over, sitting up alone, or crawling
- variations in muscle tone, such as being too floppy or too stiff
- delays in speech development
- stiff muscles and exaggerated reflexes
- tremors or involuntary movement
- problems with swallowing
- difficulty walking
- favouring one side of the body, such as reaching with one hand

Most children are born with ....., but they may not show signs of a disorder until months or years later. Symptoms usually appear before a child reaches age 3 or 4. The brain damage usually occurs before birth, but it can also happen during birth or the first years of life. In most cases, the exact cause of CP isn't known.

**B)** ... is an inflammatory disease of the airways to the lungs. It makes breathing difficult and can make some physical activities difficult or even impossible.

To understand ......, you need to understand a little about what happens when you breathe. Normally, with every breath you take, air goes through your nose and down into your throat, into your airways, eventually making it to your lungs. There are lots of small air passages in your lungs that help deliver oxygen from the air into your bloodstream.

...... symptoms occur when the lining of your airways swell and the muscles around them tighten. Mucus then fills the airways, further reducing the amount of air that can pass through. These conditions then bring on an ..... "attack," the coughing and tightness in your chest that is typical of ......

Symptoms include:

- coughing, especially at night, when laughing, or during exercise
- wheezing, a squealing or whistling sound made when breathing
- tightness in the chest
- shortness of breath
- fatigue

**C)** ..... is a progressive neurological disorder. It first presents with problems of movement. Smooth and coordinated muscle movements of the body are made possible by a substance in the brain called dopamine. Dopamine is produced in a part of the brain called the "substantia nigra." In ....., the cells of the substantia nigra start to die. When this happens, dopamine levels are reduced. When they have dropped 60 to 80 percent, symptoms start to appear. There's no cure for ..... This disorder is chronic and worsens over time.

The exact cause of ..... is unknown. It may have both genetic and environmental components. Some scientists think that viruses can trigger ...... as well. Some of the earliest symptoms of ..... are decreased ability to smell (anosmia) and constipation. These symptoms can precede motor problems by several years.

The four major motor problems seen in ...... are:

- tremor—shaking that occurs at rest
- slow movements
- stiffness of arms, legs, and trunk
- problems with balance and tendency to fall

Secondary symptoms include:

- blank facial expression
- a tendency to get stuck when walking
- decreased blinking and swallowing
- tendency to fall backwards
- reduced arm swinging when walking (adapted from https://www.healthline.com/health/)

### Task 3 Complete the gaps with correct forms of the words in brackets.

#### **Paediatric Physical Therapy**

#### **Neurological Physical Therapy**

Neurological problems, such as spinal cord injuries, strokes, multiple sclerosis, Parkinson's, Alzheimer's, brain injuries or cerebral palsy, strike at the nervous system, which is how your brain controls your body. Most neurological problems are chronic, meaning they are unlikely to be healed outright; but physical therapy can have a huge positive impact on life with a neurological disorder. By learning and practicing ...... (THERAPY) exercises, the effects of neurological disorders on muscles and movement can be made much more ....... (MANAGE).

#### Cardiovascular/Pulmonary Physical Therapy

Cardiopulmonary physical therapy is about building ...... (DEPEND) if you have a serious cardiovascular or pulmonary problem – a problem with your heart or circulation. These problems could include heart attacks, or pulmonary fibrosis, and physical therapy can help you to ...... (STRENGTH) key muscles and improve your endurance. In the long run, cardiopulmonary physical therapy is designed to help you build your independence.

(adapted from https://www.movementforlife.com/blog/6-different-types-of-physical-therapy.php)

### Task 4 Giving advice

A) Advice about lifestyle choices. When you listen for the first time, write down as many details as you can about the patient. Then compare your details in pairs.

Patient details (Mary)

B) Before you listen again, can you answer any of the questions below from the information you have?

1 What evidence can you find of the doctor's bedside manner?

2 What evidence can you find of the patient's cooperative manner?

3 How does the doctor seek to involve the patient in the lifestyle changes?

4 How does the doctor make a suggestion about lifestyle changes?

5 How does the doctor reassure the patient of the effect of the lifestyle change suggested?

C) GIVING ADVICE. When patients are hypertensive, they may have no symptoms. It is therefore not always easy for them to accept or follow any therapy or even remember to keep to it. You therefore need to be able to give patients advice and information in a way that fits the situation and does not put them off.

Look at the following examples:

advice about lifestyle changes.	Stop smoking.	The imperative here is inappropriate for giving patients advice about lifestyle changes.	
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D) GIVING ADVICE. Work in pairs. Look at these statements. Where and when can you say them without annoying a patient? Which are appropriate for making suggestions to patients about changing their lifestyle to reduce the risk of future heart attack? Give reasons.

1 You'll need to stop smoking from now on.

2 You could stop driving for a while, say 6 weeks.

3 Have you ever tried to do any kind of sport?

- 4 You mustn't drink any alcohol.
- 5 I'd strongly advise you to take the medication.

6 It's better for you if you avoid salt.

7 You need to make sure you take this regularly.

8 You might want to take this medication from now on.

9 You shouldn't eat fatty food like sweets and cakes.

10 Try and give up smoking if you can.

11 You take this once a day, preferably in the evening.

12 You need to come back and see me after one month.

13 You don't have to buy special dietary supplements.

(Adapted from: McCarter, S. (2010). Oxford English for Careers – Medicine 2, p. 87.)

# E) GIVING ADVICE. Work in pairs. Write at least three sentences giving advice about these topics to patients with hypertension or asthma.

1 relaxation / stress management

2 dynamic exercise – walking, swimming, cycling

3 strength exercise