

Unit 8 Leadership in healthcare

A good leader in healthcare will:

- Lead by example
- Strong vision for the future
- Good communication and teamwork
- Good at motivating others
- Influence and help others achieve goals
- Provide a high quality, safe service
- Have a caring attitude
- Good problem-solving skills

Types of healthcare professionals:

- Paramedic (ambulance)
- Nurse
- Doctor



WHO defines good leadership as:

“Good leadership and management are about **providing direction** to and **gaining commitment** from partners and staff, **facilitating change and achieving better health services** through efficient, creative and responsible deployment of people and other health resources.”



In the UAE there are many different healthcare career paths. In most of these job roles there will a change to become a manager. When you are a manager you are expected to lead your team to success.

To develop your leadership skills now:

- Attend school on time
- Volunteer in the community
- Take on responsibility (school/home)
- Read about leadership
- Don't be afraid of failure
- Never give up

Qualities of an effective leader:

- Works well with other people
- Good personal qualities (friendly etc.)
- Able to manage different services
- Thinks of ways to make services better
- Sets realistic goals and achieves them
- Solves problems
- Has a clear vision (what they want to do)
- Organized

Leadership and healthcare in the community

- The community needs **high standard healthcare** services if it wants **to grow and develop**.
- Effective leadership is very important to make sure **patients receive safe and effective care**.

Leadership styles

- The best style is one which is **FLEXIBLE**
- A healthcare leader should be strong but gentle when needed

4 styles of leadership

Autocratic – A person who rules with total power

Democratic – A form of leadership where the team are involved in making decisions

Laissez-faire – Leadership where members can work as they choose; power is given to the team

Visionary – A leader who is clear about what should happen

Exam tips:

- Read the question fully
- If the answer states 'all the above', make sure this is correct before selecting
- For the questions where you fill in the blanks. If you are unsure, re-read the sentence with each word and see which one sounds grammatically correct.
- Take your time
- **Revise all the material, use the revision sheet AND your workbook**

Good luck!

Unit 9 Diabetes

Types of diabetes:

Type 1 – (P.16 - 17) Body cannot produce enough insulin

Auto-immune: immune system attacks and destroys pancreas so no insulin is made

Risk factors / causes:

- Exposure to certain viruses
- family history
- genetics (not dependent on lifestyle)

Signs and Symptoms (P.22 – 23)



- feeling very thirsty
- excessive hunger
- excessive urination
- Feeling very tired
- Losing weight without trying
- Blurred vision
- Wounds that are not healing properly

IN TYPE 1 DIABETES SYMPTOMS OCCUR FAST AND CAN APPEAR IN DAYS

Type 2 – (P. 18 - 19) Body does not produce enough insulin or cannot efficiently use the insulin it produces (insulin resistant)

Risk factors / causes:

- Overweight or obese
- Eating an unhealthy diet
- Not doing enough physical activity
- Family history of type 2

Signs and Symptoms: (P.22 – 23)

Signs are the similar to type 1 - **REMEMBER:**

IN TYPE 2 DIABETES SYMPTOMS PROGRESS OVER TIME

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Health complications of diabetes

(P.32)



How to diagnose diabetes: (P.24 – 26)

1) Glycated Hemoglobin test (HbA1c test)



Measures the average blood glucose from the past 2 – 3 months (shows the % of blood glucose that is attached to haemoglobin).

2) Oral Glucose Tolerance Test(OGTT)

Blood glucose levels are measured at the beginning of the test when the person has not had any foods or drinks. The person is then required to **take a drink containing specific amounts of glucose**. The blood glucose is then measured at regular intervals to identify how the body manages glucose.

3) Random blood glucose test:

A finger prick blood test that measures the amount of blood glucose at that time.



4) Urine test:



Detects ketone bodies (products of the breakdown of fat) in the urine. When a person has diabetes, their bodies use fat from their food for energy as glucose cannot get to the cells without insulin

Unit 9 Diabetes

How to measure blood glucose and equipment needed (P.27).

Diabetics should **regularly check** their blood glucose. Blood glucose is monitored when the **patient is fasting, before and after meal times, following physical activity.**

To measure blood glucose, you need:

- Antibacterial wipes
- Blood glucose monitor
- Cotton wool or plaster
- Lancet (needle)
- Lancet device (a device that administers the needle)
- PPE (gloves)
- sharp objects bin
- Test strips

Steps measure blood glucose: (P.28)

1. Wash your hands, wear PPE
2. Ask the patient to sit down and relax.
3. Decide on the site for the blood sample
4. Tell the patient what you are going to do
5. Using the antibacterial wipe and clean
6. Insert the test strip into the machine
7. Insert a new lancet into the lancing device
8. Press the lancet device against the finger, prick the finger. Put used lancet in sharps bin
9. Collect the blood sample.
10. Place cotton wool over the finger
11. Read and record the results.
12. Discuss the reading with the patient.

Complication	Definition	Cause	Signs	Treatment
<p>Hypoglycemia</p> 	Too little sugar in the blood	Normally happens to people with Type 1 diabetes if they take too much insulin thereby reducing the sugar levels too much, skipping a meal, too much exercise, not enough food	Dizziness, feeling hungry, irritated, pale, palpitations, shaking, sweating, sleepiness	Eat or drink something sugary and check blood sugar again
<p>Hyperglycemia</p> 	Too much sugar in the blood	Common in Type 1 and 2 diabetes and women with gestational diabetes. May result from eating too much, feeling stressed, forgetting to take medication (insulin), and not doing physical activity.	Feeling sick, fruity smelling breath, polydipsia (excessive thirst), polyuria (excessive urination), tiredness or fatigue, blurred vision, headache.	Adjust insulin doses and take medicine
<p>Diabetic retinopathy</p> 	A condition of the eyes that can lead to blindness.	Occurs when high blood glucose levels lead to damage of the retina in the eye which may lead to blindness.	May cause no symptoms or only mild vision problems.	Controlling blood sugar levels and regular eye screenings can help prevent this condition
<p>Diabetic neuropathy</p>  <p>-NUMBNESS OF LIMBS-</p>	A condition where sensory nerves get damaged. Sensory nerves carry messages about heat, cold and pain to the brain. Mainly affects the feet and hands.	Diabetes can reduce the flow of blood to the feet, making it more difficult for cuts or sores to heal. If left untreated, they can become infected which may lead to amputation.	It is often asymptomatic (no symptoms)	Continuous monitoring, surgery, laser treatments, and eye injections.

Unit 10 Patient assessment

Importance of basic health assessments: P.44-45

Basic health assessments that help the doctor to fully understand what the patient might be experiencing.

The following are parts of a basic health assessment:

Observation	<ul style="list-style-type: none"> Look for patient's visible signs of trauma, bleeding, cuts or burns. Note if they look pale or flushed. Note if their breathing is clear or obstructed. Monitor the person's feelings; anxious, worried or feeling pain.
discussion	Patient give information: <ul style="list-style-type: none"> Time of incident. If anyone was there. If any medicine was taken. What they remember about the incident.
Medical history	<ul style="list-style-type: none"> Give details of: Their doctor details. Any medical condition. Any allergies to medications.
General assessment	<ul style="list-style-type: none"> BMI Reflex tests Weight
Disease risk factor assessments	They include: <ul style="list-style-type: none"> Cholesterol test. Blood sugar level test

screening	They help to: <ul style="list-style-type: none"> Identify diseases before they start to affect health. Allow the patient to get treatment early. Increase the chances of recovering from certain life-threatening diseases like cancer.
Fitness assessment (physical assessment)	They include: <ul style="list-style-type: none"> Body composition (body fat percentage) Flexibility. Muscular strength Endurance tests.

Vital signs: P.46-47

Vital signs that should be included in a patient assessment are:

Body temperature - the temperature of the person which is regulated by the brain.

Respiration - the rate of breathing.

Blood pressure - the pressure of the blood against the blood vessels during the beat and between the beats

Heart rate - measured by finding the pulse and recording the beats per minute.

RESPIRATION: P.54-57

Measure respiration:

To measure respiration, you count the number of breaths the patient will take in one minute. Look for the chest to rise and fall. The patient should be at rest.

Normal respiration rate for adults is between 12-20 per minute.

Interpret the results after measuring respiration

When a person's respiratory rate changes it can be an early sign of illness.

Conditions that can change a normal respiratory rate include:

- Asthma,
- Anxiety (stress)
- Pneumonia
- Heart Failure and Heart attack
- Lung Disease
- Use of medication

Respiratory rate can also be affected by exercise, emotions and environmental factors such as air pollution.



Unit 10 Patient assessment

BODY TEMPERATURE P. 51-25



Body temperature is a measure of how warm a person's body is.

Normal body temperature is 37 degrees Celsius (98.6 °F).

How to measure:

A **thermometer** is used to measure the body's temperature. A thermometer can measure body temperature from different parts of the body. These include the following:

- Under the armpit
- In the ear
- Under the tongue (oral)
- On the skin

WHAT IS TOO HIGH?

A reading between **38°** and **39.9°C** is **too high (oral or ear thermometer)**.

A reading between **37.4 °C** and **39.4 °C** is **too high (armpit thermometer)**

BLOOD PRESSURE: P.58-61



The strength of the blood pushing through the blood vessels.

2 types **Systolic** (high number)
Diastolic (low number)

How to measure blood pressure:

Digital blood pressure monitor:



-Does all the work itself. The person only must place the cuff in the correct location on the arm.

Manual blood pressure monitoring:



To measure it manually, there are a few items needed. These include the following: Cuff, Gauge, Bulb, Valve, Stethoscope.

Interpreting the results:

Systolic pressure is equal to above 140 mmHg,
Diastolic pressure is above or equal to 90 mmHg

= raised or high.

High blood pressure is known **as hypertension.**

HEART RATE: P.62-65



The heart rate is the number of times the heart beats per minute.

Steps to measure heart rate:

1. Make sure the patient is at rest.
2. Get a watch or a timer ready.
3. Locate their radial artery if possible.
4. Place the index finger and the middle finger between the bone and the tendon. This is on the thumb side of the wrist. Their palm should be facing upwards.
5. When you can feel the pulse, ask the patient to sit quietly.
6. Start timing the number of beats for one minute. You can count the beats for thirty seconds and multiply the result by two.

Interpreting results:



Healthy adults = 60 – 100 beats per minute (BPM)

Very active/Athletes = 50 – 60 BPM

Things which effect heart rate are:

- increasing temperature,
- if the person stands up
- emotions
- medication

Unit 11 Psychology

Psychology is the study of human behaviour. It examines the way people think and behave.

Types of psychology: P.71

1. **Clinical psychology** – mental illness
2. **Cognitive psychology** – study of brain processes
3. **Developmental psychology** – how people learn/develop behaviours
4. **Forensic psychology** – To investigate criminal cases
5. **Health psychology** – examines behaviours related to health
6. **Personality psychology** – focuses on behaviour and personality
7. **Social psychology** – how people interact with others
8. **Sport psychology** – how psychology effects performance in sport

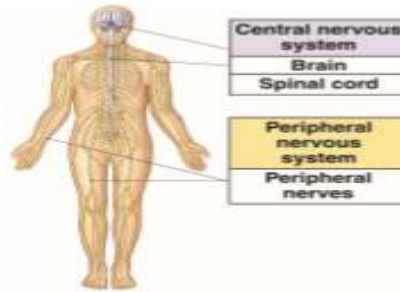
Role of a psychologist: P.72

- Specialises in psychology.
- Work with people in relation to their mental health. Including:
- Behaviour, thoughts, learning and development and their emotional health.

Psychology helps health professionals to:

- Understand why people behave the way they do.
- Identify what can motivate people to change their behaviour.

What is basic cognitive process? P. 75



The nervous system is made up of 2 parts:

The central nervous system:

The peripheral nervous system:

The basic cognitive processes refer to:

Sensation
Perception

- **Consciousness**
- They **happen without the person realizing**
- There is a lower level of consciousness for the basic cognitive processes.

What is sensation? P.76- 78

- Allows the brain to take information from the senses.
- This information is then used by the brain through perception.
- **The 5 sensory receptors are found in:**
- **Eyes, ears, nose, mouth and skin**

5 SENSES



What is perception?

“the way a person interprets and understands the world around them through their senses”

- **Perception gives meaning to the sensations** that you feel.
- **Past experiences play a part in sensation.**
- **EXAMPLE:** If you ate something before that you didn't like, it is likely that you will remember you didn't like it. Next time you will not want to eat it.

What is consciousness?

“refers to understanding who you are, why you do what you do and why you behave the way you do; it is about being aware of your perceptions”

Three levels of consciousness: P.80

- **Conscious** – refers to all the things we know and are aware of.
- **Unconscious** – refers to the things we could be conscious of if we wanted to and includes memories.
- **Preconscious** – this refers to the things that we are not aware of. These are outside of the conscious awareness.

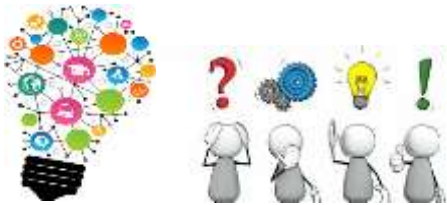
Unit 11 Psychology

Why sensation is important to healthcare professionals P.76-78

- They can encourage the patient to try new things like to try a food.
- Help the health professional to identify diseases or illnesses. Example, reduced appetite = cold because their sense of smell is affected.
- Senses change during the lifespan. A person can start to lose their hearing or have reduced vision as they get older. E.g. hearing/sight

Why perception is important to healthcare professionals P. 79

- They can help the patient identify negative perceptions that can lead to stress- so people can change.
- They can encourage the patient to try new sports or activities.
- They can discuss achievable targets that they might have thought they could not do. E.g. gaining weight.



Why consciousness is important to healthcare professionals P. 80

- They will better understand the patient's current or past behaviour.
- They can see why they haven't already changed their behaviour.
- They can set realistic goals with the patient
- To understand what changes the person wants to make.

Describe the higher cognitive processes:



Learning P.83 - happens all the time. There is no single process for learning. Learning depends on the other cognitive processes. You must be able to remember (memory), understand language, have the ability to think and have the intelligence to learn new things.

Health professionals must understand learning to:

- Keep learning.
- Keep up to date with research and new discoveries in healthcare.

Memory P.84 - 86

People have short-term memories and long-term memories. Memory helps you to learn new things and recall information from the past. If your memory isn't working, then you will not be able to learn. Memory can be broken down into three categories

Healthcare professionals must understand how memory works to:

- encourage patients to remember any signs or symptoms they have experienced.
- understand if patients have a developing illness in relation to their memory, for example, Alzheimer's disease and dementia.

Language - P. 86-87

Language refers to how we communicate with each other. People use language in many ways. People use words to make sentences to communicate with each other. People also use body language to communicate. Both verbal and non-verbal communication are important for communicating.

Healthcare professionals must understand language because:

- they must be able to communicate well with patients
- they must be able to read body language
- they must be able to communicate with other health professionals using medical terminology.



Unit 11 Psychology

Thinking P.87 - How people think is a very important cognitive process. It can help them make decisions, make judgements and it can affect their emotional health. Generally, people try to group certain things together to identify them as being positive or negative.

Healthcare professionals must understand the cognitive process of thinking to:

-discuss behaviour change with patients.

-get an understanding of why patients behave the way they do.

-identify if other specialists should be involved. Does the patient need a referral?



Intelligence P. 87 – there are many different types of intelligence.

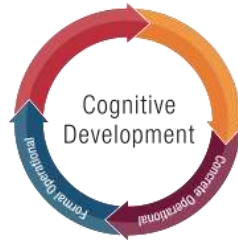
Healthcare Professionals need to be intelligent in many ways:

- people smart: to be able to communicate with the patients and build relationships with them.
- verbal smart: to understand medical terms and identify important words used by patients.
- logic smart: to be able to connect signs and symptoms with illness, diagnosis and treatment.

language smart: to be able to understand verbal and non-verbal communication.

DEVELOPMENTAL THEORIES IN PSYCHOLOGY – P.90-91

Theory of cognitive development including 4 stages (Piaget categories)



- **Sensorimotor** – from birth to 2 years of age. Children at this age rely on their senses. Using their senses, they are learning about their environment.
- **Pre-operational** – from 2 to 7 years. Children use the information they have learned from the sensorimotor stage for symbolic play.
- **Concrete operational** – this stage usually lasts from 7 to 12 years. Children during this stage usually have organised thinking. Children at this stage can understand conservation.
- **Formal operational** – from the age of 12, they can critically analyse situations and think about consequences.

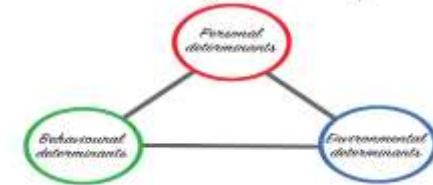
Social cognitive theory P.92 - 93

This theory explain how people can learn new behaviors from others.

It was developed by Albert Bandura in 1960.

According to the theory people's behavior is formed from past experience, environment and other people's behavior.

Bandura's model reflecting the Social Cognitive Theory.



People can learn from their parents, siblings and peers.

When they try the new behaviour, they are either rewarded or punished for it. If they are rewarded, they are likely to try it again.

According to the theory, people observe others behaviour. If they see the other person benefit from it, they are more likely to do it themselves.

You might have already learned lots of things from other people:

- 1.Morals
- 2.DIY
- 3.Cooking **you know?**

Albert Bandura defined **self-efficacy** as 'one's belief in one's ability to succeed in specific situations or accomplish a task.'

Unit 12 Environmental health

Different types of pollution:

Air Pollution – contamination of the indoor or outdoor environment by any chemical, physical, or biological agent.
P.106-107

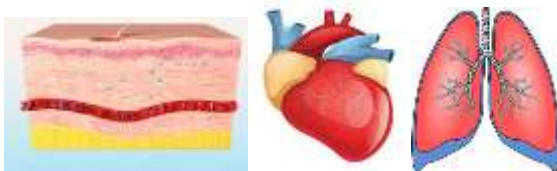


The causes of AIR POLLUTION:

Ambient air pollution – pollution of the air outside (can be caused by pollutants from cars and trucks, fires, factories, and households).

Household air pollution – pollution that comes from households (cooking, use of aerosols, and burning fossil fuels)

Air pollution effect on health?



Heart problems
Respiratory problems
Skin and eye damage
Immune system

Water pollution - can occur in any water including sea, lakes, rivers, oceans, and groundwater when there is a change in the water that is harmful to living things.
P.111-113



Causes of water pollution:



Sewage (bacteria, viruses, and parasites from human waste can cause serious illnesses and infections)

- Household waste water** (washing powder and liquids, plastic, household chemicals)
- oil
- petrol products
- fertilisers
- antibiotics
- pesticides

How water pollution can affect health

- **Communicable diseases** - diarrhea, typhoid, malaria and cholera.
- Chemical changes in water can lead to **nerve damage and poor growth** and development of bones.
- Can **causes skin rashes**
- Mercury effects the **development of the foetus**

Land pollution – occurs when the land or soil on the earth's surface becomes contaminated with toxins. P.116-117

Causes of land pollution:



Natural land pollution – from things like volcanos, changes in wind, and changes in the soil from rain.

Pollution from people – occurs when plastic, chemicals, or other waste gets onto the ground (examples: sewage, rubbish in landfills, acid rain, industry waste, deforestation).

How land pollution can affect health:

When food is eaten that has been grown in polluted soil, the food may not contain the amount of nutrients it should have.

Rats and mice in landfills can easily spread disease.



Ways to **reduce** environmental pollution

- Use public transport or walk instead of driving
- Manage your air conditioning (try not to have it too cold in the summer)
 - Recycle
- Save energy – turn off lights when they are not in use
- Correctly dispose of chemicals from your home
- Ask for paper bags instead of plastic bags when shopping
- Don't litter

How to **reduce the harmful effects of** environmental pollution (practicing sustainability):

- Being efficient with energy use
 - Using renewable energy
 - Correctly managing waste
 - Recycling
- Correct use and disposal of water
- Limiting emissions that can harm the environment