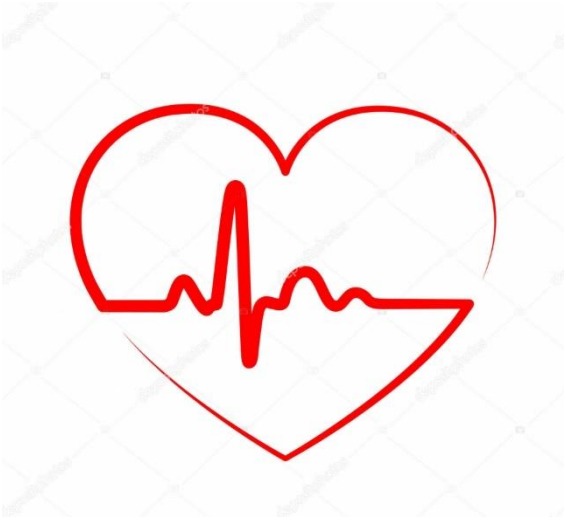

Grade 12

Health science

Almanahj.com/ae

(1st semester summary)

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Unit 1

Medical terminology

Learning outcomes:

1.1 Explain the rationale for medical terminology.
1.2 Interpret simple medical prefixes, suffixes and combing vowels.
1.3 Identify medical terminology within medical record report.
1.4 Respond appropriately to instructions which contain medical terminology.
1.5 Spell and pronounce medical terminology correctly.

Keywords:

Word	Definition	Form
1. Ab-	To be away from	Prefix
2. Acoust- / audio-	Hearing and sound	Prefix
3. Ache-	Pain	Suffix
4. An-	Without something or absence of something	Prefix
5. Anti-	Against something	Prefix
6. Complaint (medical)	Pain or sickness in the body	Noun
7. Confidential	Secret or private	Adjective
8. Derm-	Refers to skin	Prefix
9. Ecto-	External or outside	Prefix
10. Haem-	Anything related to blood	Prefix
11. Inter-	Between something	Prefix
12. Intra-	Within something	Prefix
13. -itis	Inflammation in the body	Suffix
14. -penia	Lack of something or nutrient deficiency	Suffix
15. Prefix	A letter or group of letters that is added at the beginning of a word to change its meaning	Noun
16. Pronounce	To say a word correctly	Verb
17. Respond	To say or write something as an answer to a question or request	Verb
18. Suffix	A letter or group of letters that is added to the of a word to change its meaning	Noun
19. Terminology	Special words or phrases that are used in a particular field	Noun
20. Vowel	A speech sound made with your mouth open and your tongue in the middle of your mouth not touching your teeth or lips. Vowels: A, E, I, O, U.	Noun
21. Root word	Main part of the word	

22. Confidential	Secret or private	
23. Demographic	The qualities (such as age, gender and income) of a group of people.	
24. Complaint	Pain of sickness in the body.	
25. Ethnicity	Where the patient is from, their religion and the language they speak	
26. diagnosis	the act of identifying a disease, illness, or problem by examining someone	
27. Respond	To say or write something as an answer to a question or request.	
28. appointment	an agreement to meet with someone at a particular place and time	

1.1 Medical Terminology

❖ Introduction to medical terminology

1. Define terminology:

- Special words or phrases that are used in a particular field.

2. Define medical terminology:

- Language used by medical professionals. It's the same for all the members who work as medical professionals.

3. What is the importance of medical terminology?

- Allows health professionals to communicate.
- Saves time in an emergency.
- Helps the emergency team identify the problem quickly.
- Helps the emergency team identify the right treatment.

4. Why do we need to understand medical terminologies?

- Helps us to understand the doctor easier when he or she uses medical terminologies.
- It will help us to understand our illness or condition.
- Helps us to understand the treatment the doctor is talking about.
- Helps to explain to the emergency services what is wrong using a few simple words.

5. What do you need to know as a medical professional?

- You will need to have a proper understanding of medical terminologies.

1.2 Medical prefixes, suffixes and combining vowels

❖ Medical terms

1. What are the parts of any medical term? (know them in order and definition of each)

- Prefix
- Root word
- Suffix
- Combining vowel

2. How does these parts affect a word when they are added to it?

They change the word:

- Meaning
- Spelling
- How you pronounce each part

3. What is the purpose of each?

	Definition	Purpose
Prefix	Refer to page 3	Gives more information about the root word.
Suffix	Refer to page 3	Identifies the word condition, procedure, and disease.
Combining vowel	Letters used to combine words together.	Makes the word easier to pronounce

4. **Ex**:

Hyperthyroidism

Hyper / thyroid / ism

- Prefix: hyper-
- Root word: thyroid
- Suffix: -ism

5. What happens when we add prefix or suffix to any word?

- We will give more information about the root word.

6. Summary:

Prefix	Root word	Suffix
Anaesthetic		
An: without or lack of	Aesthesis: sensation	
Abnormal		
Ab: away from or off	Normal: typical usual regular	
Antibacterial		
Anti: against	Bacterial: bacteria	
Antenatal		
Ante: before	Natal: birth	
Bradycardia		
Bardy: slow	Cardia: heartbeat	
Epidermis		
Epi: above	Dermis: inner layer of the skin	
Hyperglycaemia		
Hyper: too high	Glyc: sugar	Aemia: blood
Hypoglycaemia		
Hypo: too low	Glyc: sugar	Aemia: blood
Intercellular		
Inter: between	Cellular: cells	
Intravenous		
Intra: within	Venous: vein	
Tachycardia		
Tachy: fast	Cardi: heart (cardia)	
Myocarditis		
Myo: muscle	Cardi: heart	Itis: inflammation
Leukaemia		
	Leuka: cancer	aemia: blood
Carcinogenic		
	Carcin: cancer	genic: forming
Hyperthyroidism		
Hyper: too high	Thyroid: thyroid gland	ism: condition or theory

Arthritis		
	Arthr: joint	itis: inflammation
Biology		
	Bio: study of the body	logy: study of
Osteoporosis		
	Osteo: bones, Poro: porous	sis: disease or condition
Neuropathy		
	Neuro: nervous system	pathy: disease or disease process

7. More examples of root words:

Gastr- (stomach)	Phleb (vein)	Psych (mind)	Pulmon (lungs)	Thromb (clot)
Tox (poison)	Lipid (fats)	Chem- (chemical)	Derm- (skin)	

Homework (1):

Find out full terminologies for these root words then assign the prefix or suffix for each:

Prefix	Root word	Suffix

8. Rules for using combining vowels:

- It does not change the meaning of the word.
- If the word contains 2 root words, then we use a combining vowel.
- A combining vowel isn't always needed when attaching a suffix to a root word.
- If a suffix begins with a vowel, then a combining vowel will not be used.

9. Examples of medical terms that use 'O' as the combining vowel:

Acid**o**sis	Haem**o**globin
Carcin**o**genic	Immun**o**therapy
Gastr**o**enteritis	Radi**o**therapy

- 'O' is the most common used combining vowel. Other vowels used to combine words in medical terminology are 'I' and 'U'.

1.3 Medical record report

1. **Define medical record report:**
   It is a report recorded by the healthcare providers that includes important information such as the following:

- Signs
- Symptoms
- Medical condition
- Treatment
- Allergies
- Medical history

2. **What is the purpose of medical record reports?**
   It is used to keep track of a patient care and progress.

3. **Differentiate between medical record and medical report?**
   Medical report: it is what goes into the folder
   Medical record: is the folder itself

4. **What are the information's needed for a making a medical record report?**

- Demographic information
- Medical complain
- Medication and allergies
- Physical examination
- Results
- Treatment plan and progress

Now lets explain each in details:

1. **Demographic/personal information:**
   - ❖ It is the first part of a medical record report.
   - ❖ It contains the patients:

Medical record report	
Name:	
Date of birth (DOB):	
Gender:	Male or female
Ethnicity:	Where the patient is from, their religion and the language they speak
Contact information	The patient's address, phone number and email address

2. Medical history

It contains the patient:

Medical conditions	Any medical conditions that the patient has, or any conditions they have had in the past. **Why do we need to know the patient medical condition in the past?** This can help to diagnose and treat their current medical issue
Medications	**Why do we need to know the medication that the patient takes?** This is important because some medications should not be taken with others.
Allergies	**Why do we need to know the allergies that the patient has?** The patient could be allergic to certain medications which could cause them harm.

3. Medical complaint

Why do we need to record the patient complaint?

Because there are signs and symptoms of their illness that should be written in this section. Therefore, the patient is visiting the hospital.

Differentiate between sign and symptoms:

Sign	is evidence of an illness that can be seen by others, such as a skin rash or a cough.
Symptoms	is a feeling or physical change experienced by a patient, such as pain or tiredness.

4. Physical examination

Define examination:

a close and careful study of someone to find signs of illness or injury

Why do we need to record the patient Physical examination?

To show if the patient has any abnormal signs.

What does physical examination include?

- ✓ Height and weight
- ✓ Vital statistics. **These checks are:**
  - Blood pressure: the pressure of blood in the circulatory system
  - Pulse rate: the number of times the heart beats each minute
  - Respiration: the rate of breathing
  - Temperature: how warm or cold the body is
- ✓ Examination of the body and body systems including:
  - head and neck.
  - chest, heart, and lungs.

- Skin and extremities (arms and legs).
- the stomach.
- the body's movement.

5. Test results and diagnosis

What happens in this step?

It is the part in which the results of the physical examination or any other tests that the patient has had are recorded.

What should we do to confirm that this patient has a disease or an illness?

By conducting different tests to confirm the presence of a disease such as: blood tests, X-rays, or other diagnostic assessments.
Medical terminology will be used to describe the different tests that have been taken and their results. This is so that anybody treating the patient knows exactly what is wrong with them.

Example:

Example

Dr Al Qasimi is examining a 56-year-old patient. The patient says they have been feeling very tired recently and have had some chest pain. The patient is overweight and has an unhealthy diet. During the physical exam, the patient's blood pressure and heart rate measurements are both high.

Dr Al Qasimi recommends that the patient has a blood test and an X-ray to help find the medical problem. The test results are recorded in the test results part of the medical record report. For example:

Test results	The physical examination results show that the patient is overweight. They have mild hypertension and mild tachycardia. The X-ray results show no abnormalities in the chest area. The blood test results show that the patient has hyperglycaemia. All other tests were normal.

Based on the test results, Dr Al Qasimi can diagnose what is wrong with the patient and make a treatment plan.

6. Treatment plan and progress report

What happens in this step?

the healthcare professional will write a treatment plan on this part of the report after he diagnosed an illness of disease.

What is included in this part of the report?

- ✓ Treatment plan, this includes:
  - any medication they must take.
  - any surgery that they need to have.
  - recommended lifestyle changes.

- ✓ Progress

WHY progress is important?

To make sure that the treatment plan is working.

1.4 Responding to medical instructions

1. Medical instructions:

Previously we knew that as a healthcare professional you will need to know and understand medical terminologies. Moreover, you will need to have a good understanding of medical instructions. **Why?**

To be able to respond to your doctor or during first aid situation. Or for example when you are given directions from a medical professional over the phone.

2. Common medical terms:

Acute	An illness that lasts for a short time, less than three months.
Chronic	A disease or illness that lasts three months or more.
Cure	Something (such as a drug or medical treatment) that stops disease and makes someone healthy again.
Diagnosis	This is when a medical professional identifies the disease or illness that a patient has.
Infectious	A disease that can be spread to other people by germs.
Prognosis	A doctor's opinion about how someone will recover from an illness or injury.
Remission	When the symptoms of the patient's disease get better (but are not cured).
Sign	Evidence of an illness that can be seen by others, such as a skin rash or a cough.
Symptom	A feeling or physical change experienced by a patient, such as pain.
Terminal	Having an illness that cannot be cured.
Treatment	Something that deals with a disease or injury to make someone feel better or become healthy again.

3. What should you prepare before visiting a doctor?

- Appointment
- Make sure you understand medical terms to communicate and understand what your doctor is saying.

Before the appointment	During the appointment	After the appointment
What is the reason for the visit? Make a list of the things that you want to talk to your doctor about so that you don't forget anything.	**You will need to tell your doctor the following:** • signs and symptoms in details as much as possible. • your medical history. • what parts of your body are affected by the medical complaint **why?** because you will conduct some physical examination. • ask them to explain it what they are saying if you did not understand. • Make notes of any lifestyle changes that your doctor recommends.	Before you leave you need to: • review your visit. • Ask yourself: ✓ Were your questions answered? ✓ Did you tell the doctor all your signs and symptoms? ✓ All the medications that should be taken or any tests that are still needed? ✓ If you have any questions, speak to the doctor again.

4. Medical emergencies

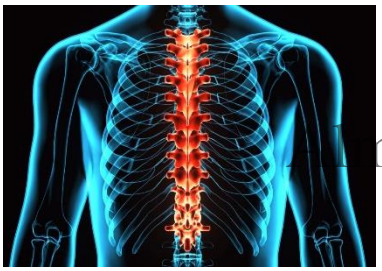
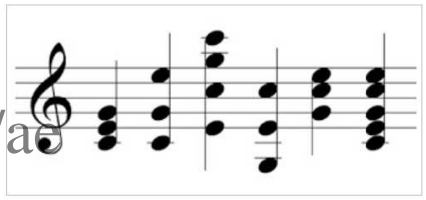
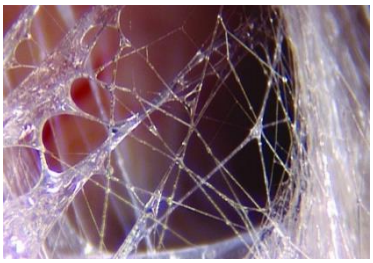
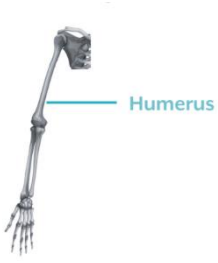
How you communicate with medical professionals in an emergency?

- Stay calm, you will be able to help more if you do not panic.
- Explain what is happening as clearly as possible. Include any signs and symptoms.
- Listen carefully to the instructions that the medical professionals give you. You might be instructed to give first aid.
- If you do not understand what you are being instructed to do, ask the medical professional to explain it more clearly.

1.5 Spell and pronounce medical terminology

1. **What would happen if you made a mistake when writing or saying medical terminology?**
   - the medical professional might not understand you.
   - It could lead to mistakes being made in treating a patient

2. **Medical term spellings:**
   - ❖ Many of the words are spelled in a similar way to other words that have a different meaning.
   - ❖ Medical words can be difficult to spell.
   - ❖ It is important to check that the words being used in documents, such as medical record reports, are correct.
   - ❖ Using a medical dictionary will help to make sure that the words are spelled correctly and have the right meaning.
   - ❖ **Examples:**

Cord: The spinal cord is part of the nervous system. 	**Chord:** chord is a set of music notes. 
Fascial: relating to fibrous tissues in the body 	**Facial:** relating to the face 
Humerus: the long bone of the upper arm that goes from the shoulder to the elbow 	**Humorous:** something that causes laughter and amusement