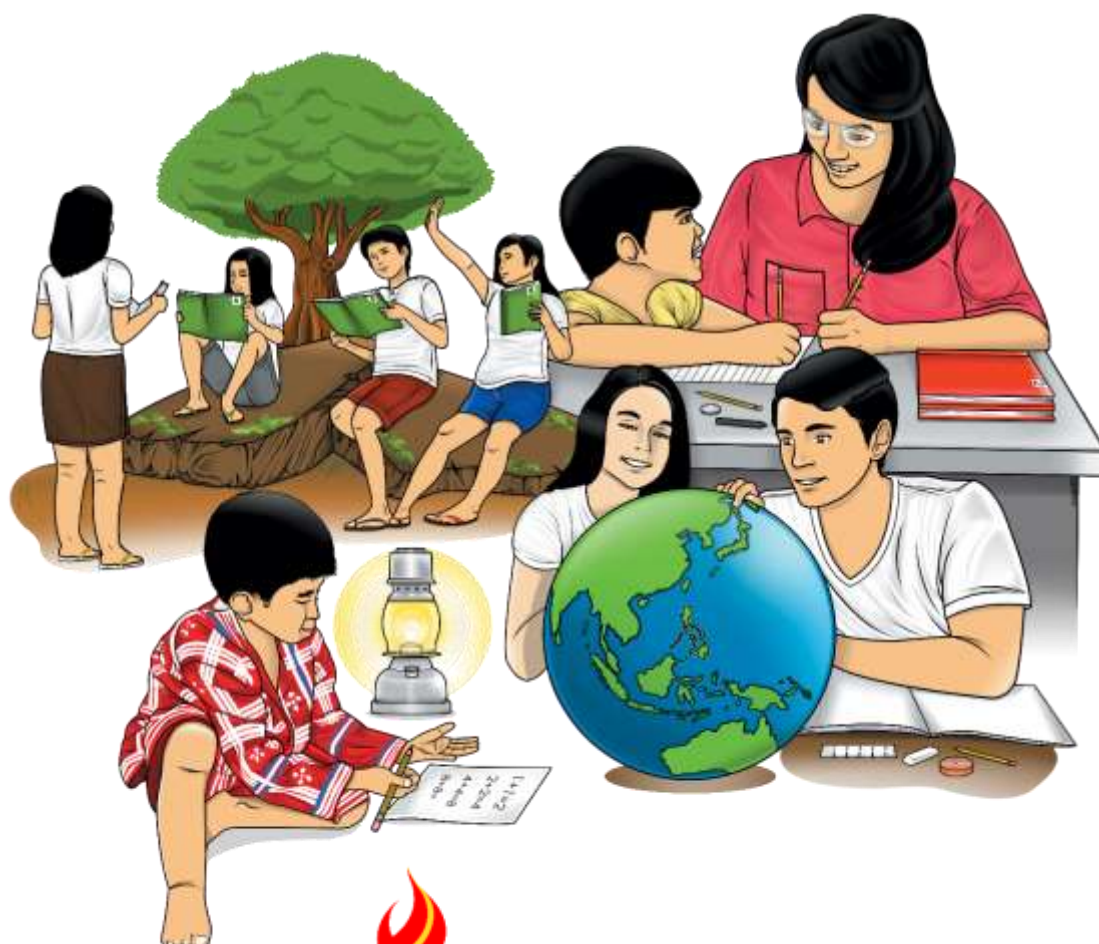


Health

Quarter 3 - Module 2: Morbidity vs. Mortality



Health – Grade 8
Alternative Delivery Mode
Quarter 3 – Module 2: Morbidity vs. Mortality
First Edition, 2020

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Health

Quarter 3 – Module 2: Morbidity vs. Mortality

Introductory Message

This Self-Learning Module (SLM) is prepared so that you, our dear learners, can continue your studies and learn while at home. Activities, questions, directions, exercises, and discussions are carefully stated for you to understand each lesson.

Each SLM is composed of different parts. Each part shall guide you step-by-step as you discover and understand the lesson prepared for you.

Pre-tests are provided to measure your prior knowledge on lessons in each SLM. This will tell you if you need to proceed on completing this module or if you need to ask your facilitator or your teacher's assistance for better understanding of the lesson. At the end of each module, you need to answer the post-test to self-check your learning. Answer keys are provided for each activity and test. We trust that you will be honest in using these.

In addition to the material in the main text, Notes to the Teacher are also provided to our facilitators and parents for strategies and reminders on how they can best help you on your home-based learning.

Please use this module with care. Do not put unnecessary marks on any part of this SLM. Use a separate sheet of paper in answering the exercises and tests. And read the instructions carefully before performing each task.

If you have any questions in using this SLM or any difficulty in answering the tasks in this module, do not hesitate to consult your teacher or facilitator.

Thank you.



What I Need to Know

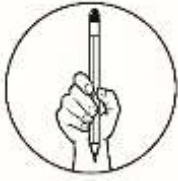
This module was designed and written with you in mind. It is here to help you master the Leading Causes of Morbidity and Mortality in the Philippines. The scope of this module permits it to be used in many different learning situations. The language used recognizes the diverse vocabulary level of students. The lessons are arranged to follow the standard sequence of the course. But the order in which you read them can be changed to correspond with the textbook you are now using.

The module contains:

Lesson 1 - Leading Causes of Morbidity and Mortality in the Philippines

After going through this module, you are expected to:

1. analyze the leading causes of morbidity and mortality in the Philippines (H8DD-IIIa-16)
 - a. define what is morbidity and mortality;
 - b. identify the leading causes of morbidity and mortality in the Philippines;
 - c. create an informative booklet using cut-out pictures on advocating preventive measures of morbidity and mortality in the Philippines.



What I Know

Directions: Read the questions carefully. Write the letter of the correct answer. Write in your activity notebook.

1. According to 2018 Philippine Health Statistics, what is the first (1st) leading cause of morbidity?
 - A. Diarrhea
 - B. Bronchitis
 - C. Hypertension
 - D. Acute Respiratory Tract Infection

2. What is the mortality rate of Tuberculosis in the Philippines in the year 2018?
 - A. 53.0
 - B. 48.5
 - C. 38.6
 - D. 28.8

3. According to 2018 Philippine Health Statistics, what is the first (1st) leading cause of mortality?
 - A. Accidents
 - B. Ischemic heart disease
 - C. Stroke
 - D. Tuberculosis

4. Which of the following is NOT a leading cause of mortality?
 - A. Accidents
 - B. Dengue fever
 - C. Heart disease
 - D. Hypertension

5. Which of the following statement is TRUE about morbidity?
 - A. It is the number of new cases of a disease over a defined period of time.
 - B. It is another term for death.
 - C. It affirms that a person can have several co-morbidities simultaneously.
 - D. It always result to death.

6. Which statement is FALSE about mortality?
 - A. It is the number of deaths due to disease divided by the total population.
 - B. It is another term for death.
 - C. It can be cause-specific and age-specific.
 - D. It is the total number of deaths during a given time interval.
7. Which of the following situations is NOT included in reporting morbidity rate?
 - A. Auring, an 85-year-old, sprained her ankle 25 years ago.
 - B. Boyet, a 12-year-old with autism.
 - C. Cate, a 2-year-old who was born deaf-mute.
 - D. Dudi, a 55-year-old in rehab for drug addiction.
8. Which of the following situations is part of infant mortality rate?
 - A. Ed, 31-year-old, hypertensive and diabetic who was involved in tragic accident two days ago and died.
 - B. Flor, 11-year-old diagnosed with acute myeloid leukemia (AML).
 - C. Greg, 68-year-old with kidney failure who missed multiple dialysis sessions and died.
 - D. Henry, 3-month-old, died due to septic shock.
9. What is the condition of being ill, diseased, or unhealthy?
 - A. morbidity
 - B. mortality
 - C. disability
 - D. normalcy
10. Which of the following is the condition of being dead?
 - A. morbidity
 - B. mortality
 - C. disability
 - D. normalcy
11. Estimates the frequency of a diseases in a defined population during a specified time.
 - A. birth rate
 - B. crude death rate
 - C. mortality rate
 - D. morbidity rate
12. Estimates the frequency of occurrence of death in a defined population during a specified time.
 - A. birth rate
 - B. crude death rate
 - C. morbidity rate
 - d. mortality rate

13. Which is NOT part of the top five (5) leading causes of mortality according to 2018 Philippine Health Statistics?
- A. Accident
 - B. Ischemic heart disease
 - C. Pneumonia
 - D. Malignant neoplasm
14. Which of the following is TRUE regarding the nature of mortality and morbidity in the Philippines as of 2018?
- A. The leading cause of both mortality and morbidity is a communicable disease.
 - B. The leading cause of both mortality and morbidity is a non-communicable disease.
 - C. The leading cause of mortality is a non-communicable disease.
 - D. The leading cause of morbidity is accidents.
15. All of the following clinical terms are translated correctly in layman's term, EXCEPT:
- A. Cerebrovascular disease: Stroke
 - B. Ischemic heart disease: Heart attack
 - C. Anemia: Low blood pressure
 - D. Malignant Neoplasm: Cancer

Lesson 1

Leading Causes of Morbidity and Mortality in the Philippines

How people die in the Philippines and what are the most common diseases among Filipinos are the core questions you must be able to answer in this module. Knowing the leading causes of death and the most common diseases are important at a national and community level for policymaking and implementation, and at personal level for awareness so that you can make informed choices regarding your lifestyle and behaviors affecting health.



What's In

In the previous lesson, you have already learned about the stages of infection which will help you to become more cautious about your health and how you take care of yourselves.

Let us see how you understand the concepts in your previous module.

Directions: Study the table below. Choose at least 1 infection from the box and write the signs and symptoms under each stage. Write your answer in your activity notebook.

Incubation	Prodromal stage	Illness stage	Convalescence stage



What's New

Loop-a-Word

Directions: Using the pool of letters below, look at least 10 diseases.
Write your answers in your activity notebook.

I	N	F	L	U	E	N	Z	A	Y	Y	H	S	E	E	D	R	F	E	S	W	T	T	N	M
U	U	J	K	L	M	U	N	N	G	V	B	U	I	I	J	N	H	K	T	Y	U	M	K	L
J	A	I	E	R	A	D	E	H	E	A	R	T	D	I	S	E	A	S	E	R	Y	N	I	Y
K	S	N	E	R	E	D	A	T	C	A	T	E	O	L	I	P	T	U	H	R	U	T	T	Y
L	A	J	N	U	B	E	R	D	U	I	J	K	O	L	O	D	C	U	I	L	A	S	I	P
A	C	U	T	E	R	E	S	P	I	R	A	T	O	R	Y	I	N	F	E	C	T	I	O	N
V	R	R	N	T	O	S	G	H	N	I	O	L	M	I	N	A	R	Y	T	A	N	C	E	E
G	F	I	O	U	N	G	U	I	M	K	O	L	P	U	D	A	R	E	I	N	D	U	G	U
T	G	E	K	O	C	H	Y	P	E	R	T	E	N	S	I	O	N	G	E	C	U	L	A	M
E	E	S	U	E	H	R	Y	U	I	B	N	U	C	S	A	A	E	V	T	E	E	F	N	O
E	O	T	D	D	I	A	B	E	T	E	S	D	U	L	R	U	L	E	E	R	A	N	U	N
W	O	E	E	S	T	E	F	B	N	U	A	F	L	U	R	E	C	U	L	I	N	A	R	I
S	L	L	C	U	I	T	U	M	I	L	O	P	P	R	H	Y	P	O	L	A	C	O	L	A
S	P	K	U	I	S	A	R	E	D	I	C	T	U	B	E	R	C	U	L	O	S	I	S	I
R	U	N	P	Y	A	Q	U	I	M	A	S	E	D	A	A	L	I	L	U	H	O	N	I	O
U	R	I	N	A	R	Y	T	R	A	C	T	I	N	F	E	C	T	I	O	N	E	I	L	N

1. What diseases have you seen?

2. Which among the diseases are you most familiar with? Why?



What is It

In this part of the module, you are going to enhance your understanding of the leading causes of morbidity and mortality. Take note of the terms that you will encounter in this module as this will help shape your understanding of the lesson.

MORBIDITY VS MORTALITY

They are often used together, they sound a bit similar, so its no wonder some confusion exists when it comes to choosing only one of them.

DEFINITION

- ***Morbidity*** is a condition of being ill, diseased, or unhealthy.
- This can include acute illnesses, as well as chronic illnesses.
- The morbidity rate examines how many people got a certain disease in a specific geographical location during a specific period.

EXAMPLES

- An example of an acute illness can be flu, a broken arm, or a heart attack.
- Chronic illness is more like diabetes, Chronic obstructive pulmonary disorder, or cancer.
- A person can live for several years with one or more morbidities.
- One morbidity may lead to another Morbidity.

DEFINITION

- ***Mortality*** is the condition of being dead.
- It's important to recognize that morbidities may or may not lead to mortality.
- Mortality rate examines the number of deaths in a population over time, either in general or due to a specific cause.

EXAMPLES

- It is important to recognize that morbidities may or may not lead to mortality.
- An example, one could have terminal lung cancer, but die of injuries after a road accident.

Top 10 Leading Causes of Morbidity and Mortality in the Philippines

The following are the top 10 leading causes of morbidity in the Philippines as of 2018, according to Department of Health (DOH)

MORBIDITY: TEN (10) LEADING CAUSES
Number & Rate /100,000 Population
Philippines, 2018

Cause	Number	Rate
1 Acute Respiratory Tract Infection (J22)	1,198,860	1,133.6
2 Hypertension (I10)	637,078	602.4
3 Acute Lower Respiratory Tract Infection and Pneumonia (J12-J18; J20-J22)	506,909	479.3
4 Urinary Tract Infection (N39.0)	294,136	278.1
5 Acute Watery Diarrhea (A09)	137,468	130.0
6 Bronchitis (J40)	135,195	127.8
7 Influenza (J10-J11)	103,250	97.6
8 Diseases of the Heart (I00-I13,I20-I51)	68,901	65.2
9 Dengue Fever (A90)	64,748	61.2
10 Acute Febrile Illness (R50)	50,202	47.5

Cause	Female	
	Number*	Rate
1 Acute Respiratory Tract Infection	643,494	1,230.1
2 Hypertension	385,939	737.7
3 Acute Lower Respiratory Tract Infection and Pneumonia	264,977	506.5
4 Urinary Tract Infection	195,728	374.1
5 Bronchitis	73,236	140.0
6 Acute Watery Diarrhea	67,392	128.8
7 Influenza	52,774	100.9
8 Diseases of the heart	40,517	77.5
9 Dengue fever	31,353	59.9
10 Acute Febrile Illness	25,531	48.8

The following are the top 10 leading causes of mortality in the Philippines as of 2018, according to Department of Health (DOH).

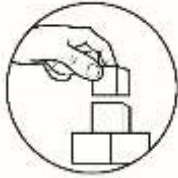
TEN (10) LEADING CAUSES OF MORTALITY AMONG MALES
Number, Percent & Rate /100,000 Male Population
Philippines, 2018

Cause	Number	Percent*	Rate
1. Ischaemic heart diseases	53,128	15.7	99.4
2. Cerebrovascular diseases	35,020	10.4	65.5
3. Malignant neoplasms	30,101	8.9	56.3
4. Pneumonia	27,863	8.2	52.1
5. Chronic lower respiratory infections	17,624	5.2	33.0
6. Diabetes mellitus	15,796	4.7	29.6
7. Respiratory tuberculosis	15,413	4.6	28.8
8. Hypertensive diseases	14,314	4.2	26.8
9. Other heart diseases	10,648	3.2	19.9
10. Transport accident	10,381	3.1	19.4

TEN (10) LEADING CAUSES OF MORTALITY AMONG FEMALES
Number, Percent & Rate /100,000 Female Population
Philippines, 2018

Cause	Number	Percent*	Rate
1. Ischaemic heart diseases	35,305	14.0	67.5
2. Malignant neoplasms	33,353	13.2	63.8
3. Pneumonia	28,952	11.4	55.3
4. Cerebrovascular diseases	26,939	10.7	51.5
5. Diabetes Mellitus	16,310	6.4	31.2
6. Hypertensive diseases	12,522	5.0	23.9
7. Other heart diseases	9,394	3.7	18.0
8. Chronic lower respiratory infections	7,196	2.8	13.8
9. Respiratory tuberculosis	6,690	2.6	12.8
10. Remainder of diseases of the genitourinary system	6,658	2.6	12.7

Based on the data above, what can you say about the nature of the leading causes of mortality and morbidity? Are there more communicable diseases or lifestyle related diseases? How about the similarities and differences between the two sexes?



What's More

Activity 1

Directions: Read the following questions below and write your answers in your activity notebook.

1. What is morbidity?

2. What is mortality?

3. What are the top 10 leading causes of morbidity in the Philippines?

4. What are the top 10 leading causes of mortality in the Philippines?



What I Have Learned

Directions: Based on your understanding of the lesson, complete the following statements. Write your answers in your activity notebook.

3 things I learned from the lesson _____

2 things I am interested the most _____

1 question I want to ask _____



What I Can Do

Directions: You are task to create an informative poster using cut- out pictures on the leading causes of morbidity and mortality in your locality. Refer to the cue card below for the instruction.

Cue Card

Situation:

You are Doctor in your locality. You are tasked to inform the people on the leading causes of morbidity and mortality and how to prevent them.

Guidelines:

You will write your poster in a short bond paper containing the following.

- Description of the disease
- Causes of the diseases
- Mortality rate
- Morbidity rate

Rubrics for Poster Making

	Good (5)	Fair (3)	Poor (1)
Content	The poster contains 5 accurate pictures of leading causes of morbidity and mortality	The poster contains 3 accurate pictures of leading causes of morbidity and mortality	The poster contains 1 accurate pictures of leading causes of morbidity and mortality
Organization	The poster is highly organized. Flows smoothly. Observes logical connection of ideas	The poster is organized. Flows is generally smooth and logical connection of ideas	The poster is illogical and obscure. No logical connection of ideas
Creativity	The poster is presented in an incredibly unique, original and creative way	The poster is presented in an ordinary way	The poster is not presented originally nor creatively.
Promptness	The poster is submitted on the deadline date	The poster is submitted 2 days after the agreed deadline	The poster is submitted 3 days after the agreed deadline.



Assessment

Directions: Read the questions carefully. Choose the letter of the correct answer.
Write your answer in your activity notebook.

1. Estimates the frequency of a diseases in a defined population during a specified time.
 - A. birth rate
 - B. crude death rate
 - C. mortality rate
 - D. morbidity rate
2. Estimates the frequency of occurrence of death in a defined population during a specified time.
 - A. birth rate
 - B. crude death rate
 - C. morbidity rate
 - d. mortality rate
3. Which is NOT part of the top five (5) leading causes of mortality according to 2018 Philippine Health Statistics?
 - A. accident
 - B. Ischemic heart disease
 - C. pneumonia
 - D. malignant neoplasm
4. Which of the following is TRUE regarding the nature of mortality and morbidity in the Philippines as of 2018?
 - A. The leading cause of both mortality and morbidity is a communicable disease.
 - B. The leading cause of both mortality and morbidity is a non-communicable disease.
 - C. The leading cause of mortality is a non-communicable disease.
 - D. The leading cause of morbidity is accidents.
5. All of the following clinical terms are translated correctly in layman's term, EXCEPT:
 - A. Cerebrovascular disease: Stroke
 - B. Ischemic heart disease: Heart attack
 - C. Anemia: Low blood pressure
 - D. Malignant Neoplasm: Cancer

6. According to 2018 Philippine Health Statistics, what is the first (1st) leading cause of morbidity?
- A. Diarrhea
 - B. Bronchitis
 - C. Hypertension
 - D. Acute Respiratory Tract Infection
7. What is the mortality rate of Tuberculosis in the Philippines in the year 2010?
- A. 53.0
 - B. 48.5
 - C. 38.6
 - D. 28.8
8. According to 2018 Philippine Health Statistics, what is the first (1st) leading cause of mortality?
- A. Accidents
 - B. Ischemic heart disease
 - C. Stroke
 - D. Tuberculosis
9. Which of the following is NOT a leading cause of mortality?
- A. accidents
 - B. Dengue Fever
 - C. heart disease
 - D. hypertension
10. Which of the following statement is TRUE about morbidity?
- A. It is the number of new cases of a disease over a defined period of time.
 - B. It is another term for death.
 - C. It affirms that a person can have several co-morbidities simultaneously.
 - D. It always result to death.
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- A. morbidity
 - B. mortality
 - C. disability
 - D. normalcy
15. Which of the following is the condition of being dead?
- A. morbidity
 - B. mortality
 - C. disability
 - D. normalcy



Additional Activities

Now that you have learned about the Top 10 leading causes of morbidity and mortality in the Philippines, your next task is to compose a slogan about healthy ways of avoiding or preventing those diseases that we may encounter. You may create your own melody or just copy an old tune.



Answer Key

Assessment

1. D
2. D
3. A
4. B
5. C
6. B
7. D
8. B
9. D
10. A
11. D
12. C
13. A
14. A
15. B

Activity 1

1. Influenza
2. Heart Disease
3. Acute Respiratory Infection
4. Hypertension
5. Diabetes
6. Tuberculosis
7. Urinary Tract Infection
8. Injuries
9. Bronchitis
10. Diarrhea
11. Cancer
12. Pneumonia

What I know

1. D
2. D
3. B
4. B
5. C
6. A
7. A
8. D
9. A
10. B
11. D
12. D
13. A
14. C
15. C

References

Department of Education, *Physical Education and Health 8, Learner's Module Philippines* (Vicarious Publication and Trading, Inc., 2013)

Lucia A. Mojica, *Honing Your Skills Through Mapeh 8* (Jo-es Publishing House Inc.)

"Leading Causes of Morbidity," Department of Health, accessed June 9, 2020, <https://www.doh.gov.ph/Statistics/Leading-Causes-of-Morbidity>

"Leading Causes of Mortality," Department of Health, accessed June 9, 2020, <https://www.doh.gov.ph/Statistics/Leading-Causes-of-Mortality>

"The 2018 Philippine Health Statistics," accessed February 17, 2021, <https://doh.gov.ph/sites/default/files/publications/2018%20Philippine%20Health%20Statistics.pdf>

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