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**UD75950HPU85132**

**AIU Exam – Introduction to Public Health**

**School**: Human & Social Studies

**Major**: Public Health

**Course title**: Introduction to Public Health

ATLANTIC INTERNATIONAL UNIVERSITY

**July/2022**

**Credits for course**: 3 credits

**Description of course**:

 Concept of health

 History of public health

 Different perspectives on Health

 Determinants of Health

 Globalization and Health

 Model of Disease causation theories

 Definition of public health

 Major disciplines in public health

**Book & chapter**: Introduction to Public Health by Gebrezgi Gidey, M.D., M.Sc., Sadik Taju, M.D., Ato Seifu Hagos, B.Sc., Chapters 1 and 2

**Link to book:**

http://aiustudev.aiu.edu/submissions/profiles/resources/onlineBook/W8e5d5\_intro to public health.pdf

**Bibliography of book**:

Gebrezgi Gidey, M.D., M.Sc., Sadik Taju, M.D., Ato Seifu Hagos, B.Sc. *Introduction to Public Health*. Ethiopia Public Health Training Initiative, 2006.

**Format of the assignment**: Assignment must have an AIU cover page, introduction to the topics of the chapter, answers to the questions below, conclusion about the exam and the bibliography of any source material at end of the exam.

Other source material may be used in answering the questions.

**Questions of exam. (Answer with 2 to 6 paragraphs for each question. You may also give examples from your own experience and community to answer the questions.)**

1. Describe the different concepts and perspectives of Health.

The different concepts and perspectives of health are viewed differently by different people.

The first school of thought views health as a ‘right’ which is like an entitlement for everyone. A right similar to consumption of food, education and shelter which are basic human rights. Of course, without good health a person can be prone to disease and poor health. Other schools of thought view health as an investment, this means that everyone has a responsibility to maintain good health for the purpose of the future. Communities that lack access to health care facilities have very high death rates especially for the vulnerable groups such as women and children. In my view, both perspectives are inter-linked because, health being a right should be sustained through investment in health care.

The other view is that health ‘as consumption good’ as a material objective. Being a goal of attainment ‘health’. People should strive to always achieve good health, and it should be an ultimate goal of everyone. This goal may sometimes be difficult to attain when people do not have the means to achieve this consumption good. Without the provision of the access to health care facilities, communities have challenges attaining this goal. One would argue that even before conventional medical was introduced, humans used to survive by practicing traditional ways of promoting health and the goal was still met. This therefore means that access to good health as consumption good is individual.

2. How do you perceive health?

I perceive health as the state of complete wellness at each time in life. Maintaining good health is dependent on what the body takes in and what it is exposed to from the environment. Health can fluctuate with age, place and time, it is the response to these factors that determines the status.

3. List the various determinants of health a community.

a. Social-cultural

b. Physical determinants

c. Community organization

d. Behavioral determinants

4. Outline the strengths and weaknesses, the preventive measures demanded by each model.

i) The Nineteenth Century models

a. Contagion theory

This theory was popular in the 19th Century when disease was believed to be contagious. The preventive measures that were used were mostly isolation and quarantining the sick people. The strengths of this model are:

* Disease was contained in specific areas
* There was realization that disease was spread through contact with sick people
* Involvement of the Military to cordon infected places was partnerships collaboration.
* The fumigation and washing of beddings were good preventive and control measures

These measures are actually being used even today with the emergence of communicable diseases such as COVID-19 Pandemic, Cholera and Ebola. Quarantining and isolation of the infected people has proved very useful in containing disease despite all the new and modern Technologies, the basic Universal precautions are still the best way of preventing spread of communicable disease. Even with all these efforts, the Contagion model had weaknesses as follows:

* The diseases were not being treated for the disease.
* The causes of diseases were not identified eliminated
* Many people died from the diseases within the quarantine areas.

b. Supernatural theory

This theory was mostly used by religious people who believed that disease causes, and prevention was by natural causes. Disease was believed to have been punishment caused by the transgressions of God’s Law. The poor people were more afflicted by disease and the rich people attributed that to punishment for the uncleanliness and untampered behaviors. The rich people were health and free of disease and could not support the idea that government needed to support poverty reduction. Some of the strengths of this theory are:

* There was a reality that disease was caused by natural causes
* Uncleanliness and untampered caused disease
* They believed in natural powers that had control over disease

Some of the weaknesses of Supernatural theory are:

* There were no preventive measures in place to control the spread of disease
* Disease was blamed on the poor that had no means of prevention, control or treatment of disease.
* Politicians were not focused on preventing disease in the communities but to blame the poor for it.

c. Personal behavior theory

This theory was based on disease resulted from wrong personal behavior and due to the democratic tendencies to allow ever individual to decide their own behavior. The source of disease was not tied to God’s mysteries and did not blame the poor for the cause of disease. The cause of diseases was purely on unhealthy lifestyles such as poor diet, poor hygiene, lack of exercise and emotional tension or stress. These causes were also used to prevent and control disease by avoiding them. This theory was common among the middle class and not the poor.

In this modern world, personal behavior is still the cause of chronic disease such as Sexually Transmitted Infections (STIs) which include Human Immune Virus (HIV) and AIDS which is spread by having unprotected sex with infected persons. Diabetes and Hypertension which have various causes including diet and lack of exercise. Diseases like diarrihoea and COVID-19, are transmitted by poor hand hygiene. Some of the strengths of the personal behavior theory are:

* Recognizing that an individual’s personal behavior causes disease
* That the causes can be used to prevent disease
* Poverty and God’s mysteries are not blamed for causing disease

Some of the weaknesses are:

* The theory was categorized as for the middle class when poor lifestyle is in any social class
* The democratic tendencies allow people to live their own lives with little or no control on how they choose to their lives.

d. Miasma theory

This theory was first discussed in the Hippocratic era when disease was related to climate. The belief was that disease was caused by decaying organic material in the environment. It was different from the other three theories which related disease to the afflicted persons.

This theory is in some way related to the causes of some of the modern-day diseases which are caused by organisms in the environment, in food and water. Some of the strengths of this theory are:

* Organisms in the environment cause disease
* The climate also affects people’s lives in different ways such as floods and draughts lead to disease.

Some of the weaknesses are:

* The theory did not pay much attention to the victims of the diseases but only to the cause
* Other causes should have been considered in order to determine the preventive measures.
* There were no measures used to prevent and control disease.

ii) Twenty Century Models

1. The Germ theory

This theory took over the other Nineteen Century theories with the belief that microorganisms caused disease which was treated and controlled by antibiotics and vaccines. Even though some theorists felt that the control of disease was attained long before the introduction of antibiotics and vaccines. They attributed this to uplifting the living standard of people helped a great deal.

These same measures of using antibiotics and vaccines are still being used now in the treatment and control of disease. With the same measures, some diseases have been eradicated like Smallpox. Some of the strengths of this theory are:

* The causes of disease were identified as microorganisms
* The discovery of antibiotics and vaccines treated and controlled diseases.
* The opposers made researchers into disease treatment and control work even extra hard to prove that the measures worked.
* The treatment and control of disease is not restricted to certain classes of people.

Some of the weaknesses are:

* Individuals have to be given the antibiotics for the treatment and vaccinations
* Treatment and vaccination are for specific diseases

1. The lifestyle theory

Similar to the personal behavior theory, the lifestyle theory attributes cause of disease to unhealthy lifestyles. Behaviors such as consumption of alcohol, stress, use of cigarettes lack of exercise and poor nutrition causes chronic disease. The theory, however, contradicts the Germ theory which states that each disease had a single cause. It supports the notion that each single disease is caused by several factors and that prevention requires personal change in behavior. Similarly, the world is experiencing the COVID-19 pandemic caused by the Corona Virus, which infection is fatal when coupled with other chronic conditions such as Hypertension and Diabetes.

Some of the strengths for the lifestyle theory are:

* It looks at the cause of disease holistically
* Changes in lifestyle behavior prevents and controls some chronic conditions

Some of the weaknesses are:

* Lifestyle behaviors such as lack of exercise, consumption of alcohol, cigarettes smoking and poor nutrition cause of disease.
* It does not consider other causes such as infections to contribute to cause of disease.

1. The Environmental Theory

This theory conceptualized the notion the toxins in the environment are responsible for causing diseases and that prevention requires change in the industrial production. Control of disease does not require treatment and good hygiene. The toxins in the environment are Occupational hazards due to substances in the soil which are radioactive. The other aspect to the theory is on the substances added to foods. Similarly, in the modern-day era, there are substances in the environment that lead to contamination or pollution of the environment, which cause diseases.

The most common type of pollution is environmental due to indiscriminate disposal of waste, and it is the world’s greatest problem (Ukaogo). This is being amplified by the current world’s problems of all sorts of pollution which affect people’s health. In Zambia, a town called Kabwe in the Central part of the country has been declared one of the most polluted places on Earth as a result of the long history of Lead and Zinc mining from 1904 to 1994 (Nakata). Over the years, studies had been conducted to determine the extent of the pollution and they have all concluded that the heavy metals had contaminated the ground water and the soils. Some of the strengths of this theory are:

* The environment has toxins that cause disease
* The control of disease does not require treatment and good hygiene only

Some of the weaknesses are:

* Disease is not caused by toxins in the environment only
* Change in production is not the only prevention and control of disease

d. The Multi Causal theory

As the name indicates, there are multiple causes to a single disease. It becomes difficult however, to come up with prevention guidelines with Multiple causes of disease with gaps in what it is able to offer. One of the strengths for Multi Causal theory is:

* There are several factors causing to disease.

One of the weaknesses is:

* It does not provide prevention guidelines due to the multiple causes.

5. What is the influence of globalization on community health?

Globalization ensure that the poor people have access to health services. People move from one place to another and find themselves in different countries. They all bring something to the table and their capabilities contribute to development. With increased trade in Globalization, there is increased development thus demand for quality health services. It is therefore Governments’ responsibility to provide health care services to all especially the poor. Globalization has increased knowledge in new technologies in health care and the interdependence has brought in a lot of knowledge sharing (Labonte'). Developing countries have been using technology to have access to some of the modern health care services that are being used around the world. In turn the community benefits from these advances in technologies through Globalization.

Globalization has helped in increasing health knowledge through the provision education. Developing countries are able to send their citizens to Developed Countries in order to build capacity in their own people. Through Globalization, there has been increased trade and financial liberalization which has opened up more access to health care services throughout the World (Labonte'). Globalization has led to Governments having to Privatize of State-owned institutions thus giving rise to introduction of private sector run institutions. This has also had negative impact on access to health care services through introduction to User Fees in health facilities.

6. Do you think that globalization affects the overall health situation of your country? How?

Globalization affects the overall situation in my country in so many ways which include positive and negative effects. Some of the positive ones are:

* Since liberalization of the economy in 1991, there has been an increase in free trade and increase in development. In the past 20 years, we have also seen an increase in the number of multinational companies being set up (Momba).
* There has also been an increase in technologies and capital from increased trade.
* In politics, there has been an increased democracy which has also increased the number of political parties over the years once 1991 when the multi-party democracy was introduced.
* There has also been recognition for Human Rights through democracy.
* Globalization has increased technology for the citizens, and this has provided for easy access to information sharing world-wide.
* Education has been made easy through technology (Momba).

Some of the negative effects of Globalization are:

* We have experienced closing down of local industries due to imports of foreign products. Local products had become unpopular and deemed inferior to imported products.
* States borrowing for development and end up in debt.
* Reduced State control of institutions due to privatization
* Rise in Unemployment levels due to increase in use of technology and competitiveness in payment of wages by the multinational companies (Momba).
* Increased poverty due to high cost of living
* Misplaced priorities by Government in order to pay foreign debts

7. Define public health and discuss the similarities and difference with clinical medicine.

Public Health is a Science that is concerned about prevention, preservation of life and promoting health through the involvement of the community, while Clinical medicine is the science of caring for the sick. Public Health is more diverse and is inclusive of Clinical Medicine especially in the preservation of life. Public Health deals with the whole community while Clinical Medicine is more individualistic because treatment of illness is specific. Public Health as well as Clinical Medicine are both concerned about diseases affecting people. Clinical Medicine is concerned about disease treatments and cure while Public Health is more concerned about disease before it affects people.

The similarities of both Public Health and Clinical Medicine are control of disease. It is in the ‘how’ that is different, but both are aimed at controlling of disease.

8. Mention the role of public health in the health care delivery system

The role of public health in health care delivery is in two ways, direct and indirect. The direct approach involves control and prevention of disease through individual deliver of health services. These include immunization against immunizable diseases especially in children and now that we have COVID-19 vaccinations, it is a public health role to get as many people as possible to get vaccinated world-wide. It has been observed that the COVID-10 Vaccination is a safer, more reliable way to build protection than getting sick with COVID-19 (CDC). In a bid to achieve 70% herd immunity against CIVID-19 pandemic, the Government of the Republic of Zambia through the Ministry of Health had embarked on a door-to-door vaccination campaign from May to July 2022 in anticipation of the 5th wave of the pandemic (Kunda). A public health specialist reported that as of April 2022, only 40% of the country’s 18 million population had been vaccinated (Kunda).

Modern birth control and hypertension and diabetes are also some of the other direct approaches of public health in the health delivery. Since birth control is an individual’s responsibility, public health facilitates distribution and sensitization of communities on the importance of birth control. It has several benefits to the mother, the baby, the family and the community at large. Identifying the risk factors for chronic conditions such as hypertension and diabetes is a public health concern. These Non-Communicable diseases are described as silent killers for the fact when they get complicated, they kill people without warning. It is therefore the responsibility of public health to prevent, control and restore life through identification of the risk factors in the community. Being chronic diseases, these conditions are long term and demand long term management. With the high poverty levels, in the country, the management of these conditions is rather difficult for most affected citizens.

9. What are the challenges of public health practice?

Some of the challenges of public health are as follows:

Politics conserve the broad scope of public health and would rather it be restricted to management of chronic diseases. Since public health requires political will to achieve its objectives, lack of commitment from political stakeholders can derails progress.

Public health regulations can affect the economy. Some of the public health restrictions can lead to long term effects on the economy, for instance, due to the COVID-19 pandemic some businesses all over the world had to be closed down during the lock down. The Public Health guidelines on prevention of spread of the COVID-19 Virus had negative impact on most governments. Alot of the countries had to redirect funds from governmental projects to COVID-19 prevention measures, thus affecting their economies negatively.

Public health is concerned with improving public welfare at the expense of individual liberty. This is a challenge because in a bid to prevent health conditions in the community, the people’s concerns are not considered. For instance, during the COVID-19 prevention lockdown, individuals suffered depression from losing loved ones to the pandemic and from the of quarantining alone. In as much as the COVID-19 prevention measures are good to fight the pandemic, they affected a lot of people, families and communities in so many ways which will leave a lasting mark.

Public health and religion have been a very serious challenge over the years. Some of the public health measures have been conflicting with religious beliefs such as vaccinations and family planning measures. With the COVID-19 vaccinations becoming the main preventive measure for the pandemic, there have been some scores of the public that have refused to get vaccinated based on their religious beliefs that ‘my body is a temple’ concept (Stevenson). These beliefs have negatively impacted on public health objective.

These are some of the challenges of public health practice.

**Conclusion**:

In the following space, write 4 to 8 paragraphs to conclude this course.

Health has different perspectives and views, some of the schools of thought views health as a right, similar to food and education, which are considered human rights. I perceive health as the state of complete wellness at each time in life. Maintaining good health is dependent on what the body takes in and what it is exposed to from the environment.

The determinants of health in a community are mainly: Social-cultural, Physical determinants, Community organization and Behavioral determinants that are all concerned with an individual’s life in the community. An imbalance in any of these determinants can lead to failure to achieve good health.

Several models of health have been used since the Nineteenth Century. Some of these common models include the Contagion theory, when disease was considered to be contagious. This saw a lot of measure introduced which included quarantine and cordoning of infected areas. Supernatural theory was a religious belief that there was a natural that controlled disease and those that did not believe were infected with diseases. The other theory was the personal behavior theory. This theory was based on disease resulted from wrong personal behavior and due to the democratic tendencies to allow every individual to decide their own behavior. The Miasma theory was another theory which become commonly used in the Nineteenth Century. This theory was first discussed in the Hippocratic era when disease was related to climate.

In the Twenty Century several health models were being used. Some of which are; the Germ theory, this theory took over the other Nineteen Century theories with the belief that microorganisms caused disease which was treated and controlled by antibiotics and vaccines. The lifestyle theory Similar to the personal behavior theory, the lifestyle theory attributes cause of disease to unhealthy lifestyles. Behaviors such as consumption of alcohol, stress, use of cigarettes lack of exercise and poor nutrition causes chronic disease. The Environmental Theory was another theory that was popular in the Twenty Century. This theory conceptualized the notion the toxins in the environment are responsible for causing diseases and that prevention requires change in the industrial production. The last but not the least was the Multi causal theory, where there are multiple causes to a single disease. It becomes difficult however, to come up with prevention guidelines with Multiple causes of disease with gaps in what it was able to offer.

The other concern of public health is Globalization. It ensures that the poor people have access to health services. People move from one place to another and find themselves in different countries. They all bring something to the table and their capabilities contribute to development. With increased trade in Globalization, there is increased development thus demand for quality health services.

The role of public health in health care delivery is to two ways, direct and indirect. The direct approach involves control and prevention of disease through individual delivery of health services.

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