

PAN AFRICAN GLOBAL ACADEMY

WEEKLY LESSON PLAN

UNIT 4

INSTRUCTOR:
David Lamptey

WEEK: 19th
Ending: XX – XX – XX

SUBJECT: Public Health

SPECIFIC TOPIC: *The Importance of Socio-Economic Development*

LEARNING OBJECTIVES

Students will be able to;

- Define productivity
- Suggest measures to improve the standard of living in Ghana
- Explain the reasons for low productivity in Ghana
- Suggest measures to increase productivity in Ghana
- Explain why the private sector performs better than the public sector
- Understand why it is important to increase productivity in Ghana

LESSON CONTENT

The following is largely taken from *Mastering Social Studies for Senior High Schools* by Isaac Ayertey (pages 266-275).

PRODUCTIVITY

In many ways, productivity is synonymous with output. **Productivity** is the level or amount of goods and services produced in a country within a given period of time. Productivity measures worker efficiency. High productivity is a good omen for development. Development is a condition of improved infrastructure of a state or institution. It is desirable that a country produces more goods and services. However, overall productivity is low in Ghana as well as across the whole of Africa.

PROBLEMS OF DEVELOPMENT IN GHANA

Ghana has been listed as developing or among the less-developed countries (LDCs). This classification identifies that countries like Ghana have not yet attained an advanced level of economic development. Some reasons that Ghana's economy has yet to attain this advanced level are:

1. High population growth – if a country does not have the resources to sustain very high population levels, then economic infrastructure often crumbles
2. Political instability – between 1966 and 1980, Ghana went through an alarming number of political upheavals involving the military. Because of this disruption of the government, many government projects were suspended and delayed, which stagnated growth. This instability also drove out foreign investors.
3. Inadequate capital – incapable of generating a sound economic base for herself, Ghana became over-dependent on institutions like the International Monetary Fund (IMF) and the World Bank. Ghana's ailing economic conditions grew and continue to grow worse as a result.
4. Lack of skilled personnel – Ghana lacks highly trained entrepreneurs to manage the sections of the economy efficiently. Almost all Ghanaians sell goods of some sort, however, these imported goods lack variation and thus do not yield high profits for their vendors. Also, the education system does not focus on

producing people with technical and vocational skills to exploit natural resources or run factories. Ghana often imports skilled labor at high cost.

5. Corruption – mismanagement and corrupt practices of state officials cause huge sums of money to be lost each year. These officials demand and accept ‘kickbacks’ for actions taken. For instance, this drains receipts from customs and excise duties into private pockets.
6. Low level of technology – Ghana possesses abundant natural resources, including agricultural land, sunlight and rivers. However, because the technology to exploit these resources is not available, Ghana fails to take advantage of them.
7. Poor attitude – some people arrive to work late or miss lots of workdays habitually. This causes productivity to become low.

Class Activity:

In order to demonstrate the effects of corruption, select ten students to come to the front of the classroom. Take out twenty-two 10-pesewa coins, and then explain the demonstration to the students. Tell the students that they are the government of Ghana. Assign one student to be the President, one to be the Minister of Health, one to be the Secretary of the Minister of Health, one to be the head of Korle-Bu Teaching Hospital and the rest to be physicians at Korle-Bu. Give the President the 22 coins, and tell her or him that these coins were collected from taxes and are for the physicians of Korle-Bu so that they can buy new syringes to use. Tell the President that he or she should pass these coins on to the Minister of Health for him or her to distribute. However, before passing on the coins, have the President take one for himself or herself. Have the Minister of Health pass the funds on to the Secretary, and then have the Secretary pass the funds on to the head of Korle-Bu, and have the head of the hospital distribute the funds to the physicians. Have the Minister, the Secretary, and the head of the hospital all also take one pesewa from the 21 remaining pesewas. In the end, 18 pesewas should be given to the six physicians. However, inform the class that each physician is responsible for 4 patients. Meaning that now the physicians do not have enough syringes for their patients if one syringe costs one coin. In the end, physicians may not have enough syringes to use to appropriately treat patients. Discuss with the students the negative effects of corruption and why it should not be practiced.

THE CONTRIBUTION OF THE INDIVIDUAL TO NATIONAL ECONOMIC LIFE

- Individual Ghanaians engage in *productive economic activities* in order to generate wealth. Farmers in cash crop cultivation, fishermen, animal herders and others all earn income for themselves and supply food to sustain the population of Ghana.
- Workers in *public service* enhance the structure of the country to sustain development.
- *Industries* built to produce goods employ workers and produce goods for both the domestic and international markets.
- *Law-abiding* promotes security and order to encourage local as well as foreign investors to provide resources for national development.
- Paying taxes is an important part of being a citizen because tax revenue is a significant means by which the government generates funds for development.

IMPROVING THE STANDARD OF LIVING IN GHANA

1. Government measures – because the population is currently growing at a rate of 3.2%, much pressure is being placed on the nation’s resources. If the population growth rate stops increasing or slows down, it is possible that the average income and quality of life in Ghana could increase.
2. Government policy – if the government creates jobs, then people will become employed and generate income to sustain themselves and their families.
3. Opportunities for Leisure – having time for leisure and recreation also improves the quality of life of

Ghanaians.

4. Social amenities – good drinking water, electricity, better roads, housing, educational and health facilities will improve the overall quality of life.
5. Clean environment – poor disposal of refuse, air pollution and choked gutters that breed mosquitoes
6. Stable and enabling political environment – by guaranteeing security, peace and order, Ghana can promote healthy economic activity.

REASONS FOR LOW PRODUCTIVITY IN GHANA

1. Inadequate capital – this is the major factor responsible for the low productivity in Ghana. It is difficult to come by money to start a business in Ghana. Salaries are low, and most farmers do not have collateral security to qualify them for credit facilities. Thus, the large scale production of goods remains low.
2. Low level of technology – technology increases the overall output of goods and services, however, unfortunately West African countries do not have the machines to increase productivity. This reduces output of goods and services in the region.
3. Lack of skilled personnel – in Ghana, there are many more unskilled laborers than skilled laborers. In industries where skilled workers are available, they are not sufficiently motivated to perform up to the needed standards to dramatically increase productivity.
4. Negative attitude towards work – these negative attitudes include lateness to work, laziness, absenteeism and loitering. Workers do not have a high sense of duty to increase productivity, and people waste a lot of production time on irrelevant issues.
5. Unreliable rainfall patterns – uncertainties in the weather cause productivity to be low in the rainy seasons and high in the dry seasons.
6. Lack of motivation – without motivation, workers will not give their full attention to their work. Poor conditions, low salaries and the absence of unity all contribute to low worker motivation.
7. Preference for foreign goods – because many Ghanaians have a preference for foreign goods over local goods, many farmers and industrialists are not able to increase production.

MEASURES TO INCREASE PRODUCTIVITY IN GHANA

1. Granting of credit facilities – granting soft loans to farmers and industrialists will greatly increase the number of goods and services in Ghana. Reducing the bank rate will encourage banks to do this. Also, farmers who have no collateral security should form co-operatives so that banks can provide them with financial assistance if needed.
2. Technical education – it is important that the government encourage students to seek knowledge in science and technology. Although the social studies are very important as well, science and technology help speed up production.
3. Irrigation projects – despite the fact that Ghana is primarily an agricultural country, the output of agricultural produce is consistently low. The traditional method of farming relies on the unpredictable rain patterns, which cannot help to increase the food production of the country. By providing a consistent supply of water to crops and livestock, Ghana will be able to increase her agricultural productivity.
4. Motivation of workers – low salaries, allowance and lack of accommodations not only create job dissatisfaction but also lower the morale of workers.
5. Public education – the press, religious organizations, opinion leaders and traditional authorities should campaign against laziness, drunkenness, absenteeism, pilfering and other inappropriate behavior that workers in Ghana sometimes exhibit.
6. Skilled labor – improving the quality of the labor force can increase productivity because education and training can equip workers with the skills and techniques needed to increase productivity.

PRIVATE – PUBLIC SECTOR PERFORMANCE

In Ghana, it is sometimes noted that the private sector seems to outperform the public sector. There are several reasons for this apparent difference:

1. Differences in conditions of service – higher pay and prospects for a better quality of life offered by the private businesses attract the best workers, whereas the lazy and absentee workers end up in the public businesses.
2. Level of supervision – because the best workers are attracted to the higher-paying jobs in the private sector, the supervisors in the private sector are more efficient and better than the supervisors in the public sector. This causes the other workers under the supervisor in the private business to work more efficiently than those in the public sector, widening the efficiency difference between the private and public sectors.
3. Availability of facilities – because the Ghanaian government has to manage a large number of responsibilities, the government can often find it difficult to provide workers with equipment and facilities. On the other hand, private businesses rely on output to survive, so they make attaining equipment and facilities for their workers to be their top priority to increase revenue.
4. Level of bureaucracy – because the bureaucracy of the government is much larger than any in the private businesses of Ghana, a lot of work hours are lost due to red tape and undue delay.

REASONS WHY PRODUCTIVITY SHOULD BE INCREASED

1. Increased revenue – increasing productivity would increase the gross domestic product (GDP), which is the total output of goods and services produced in the country within a particular time span. Increasing productivity would also earn income for both the government and the individual, as well as overall economic growth and development.
2. Improved standard of living – improving the standard of living will also improve the quality of life of the people of Ghana. When the output of goods and services exceeds demand for them, the prices of the goods and services fall, which reduces the cost of living. When the cost of living is low, the standard of living will be higher.
3. Employment – increasing productivity will increase economic activities, allowing more industries to develop so that the unemployed will be offered good jobs. This will also limit unproductive activities such as gambling, fraud, drug trafficking and other social vices.
4. Prevents over population – when the people of Ghana exceed the number of resources that Ghana can provide to support them, productivity should increase to provide resources for all of the people. It is generally best to ensure that productivity exceeds population.
5. Reduces the dependency ratio – increased productivity does not only prevent overpopulation and unemployment, it also reduces the level of over-dependence. In a country where unemployment levels are low, productivity provides opportunities for individuals to fend for themselves. This could encourage the government, businesses and individuals to invest their income in productive activities.

MATERIALS AND AIDS

- Lecture Notes
- Twenty two 10-pesewa coins
- Ten student volunteers

TEACHING AND LEARNING ACTIVITIES:

Teacher will:

- Define productivity
- Help students suggest measures to improve the standard of living in Ghana

- Explain the reasons for low productivity in Ghana
- Help students suggest measures to increase productivity in Ghana
- Explain why the private sector performs better than the public sector
- Explain why it is important to increase productivity in Ghana

EVALUATION PROCEDURES

Sample homework

1. What is the level or amount of goods and services produced in a country within a given period of time?
2. Name five reasons why Ghana has not yet achieved an advanced economic state.
3. How does the individual contribute to national economic life?
4. Name five reasons for low productivity in Ghana.
5. Name five ways to improve the productivity levels of Ghana.
6. Why does it seem that the private sector outperforms the public sector?
7. Which of the following is NOT a reason that productivity should be increased?
 - A. Employment
 - B. Increased revenue
 - C. Prevents overpopulation
 - D. Decrease GDP

RESOURCE / REFERENCES:

Mastering Social Studies for Senior High Schools by Isaac Ayertey (pages 266-275)

PAN AFRICAN GLOBAL ACADEMY

WEEKLY LESSON PLAN

UNIT 4

INSTRUCTOR:
David Lamptey

WEEK: 20th
Ending: XX – XX – XX

SUBJECT: Public Health

SPECIFIC TOPIC: *Economics, Health and Productivity*

LEARNING OBJECTIVES

Students will be able to:

- Understand what individual capacity is
- Understand how health has an effect on an individual's economic capacity
- Understand what absenteeism is
- Understand how absenteeism can negatively effect a nation's economy
- Understand how illness and disease can negatively effect household income
- Understand general relationships between health and Ghana's economy
- Understand how money can affect one's access to healthy food and exercise
- Understand how malaria can negatively affect a country's economy
- Understand why it is difficult for people in Oshiyie to access methods to prevent malaria infection
- Understand how substance abuse can negatively affect the Ghanaian economy
- Understand why substance abusers do not always receive the help that they need

LESSON CONTENT

HEALTH AND ECONOMIC CAPACITY

Many Ghanaians are paid for the amount of work that they do. For example, a bush-clearer is paid for every stretch of land that he clears. Thus, his **individual capacity**, or the amount of work that he or she is able to accomplish, directly relates to how much money he is able to bring home to his family. If the man becomes sick, his individual capacity to work could decrease, thus decreasing the amount of money that he is able to earn. On a larger scale, if an economy has many workers who are sick, then the productivity of the overall economy decreases, causing the nation to suffer as a consequence.

HEALTH AND ABSENTEEISM

In a similar way to individual capacity to work, being physically present to work can also be affected by one's health. Although some illnesses can decrease a person's individual capacity to work while still allowing them to come into work (such as a common cold), some illnesses such as malaria can prevent a person from coming into work altogether. Not being present at your job to work is called **absenteeism**, and absenteeism is one of the primary economic consequences of illness and disease. Absenteeism can cause workers to be missing from the work force, which can negatively affect a country's national economy. The reduction of labor also influences the operations of businesses. Even if the business is able to maintain its normal levels of production initially, after losing workers it must either hire additional workers to replace those who were lost or reduce its overall production. It can also cause individual workers who are paid by the job to lose income and even possibly their jobs.

HEALTH AND HOUSEHOLD INCOME

Health is needed for workers of a country to maintain the country's economy. Thus, health is valuable since it allows us to earn income for ourselves and for our families. In families where most spending on health comes from out-of-pocket and not from savings or health insurance, being sick will cause the household to spend extra money on healthcare instead of on other goods and services, such as school tuition.

CASE STUDY #1

Malaria has a detrimental impact on Ghana's economy at the individual level. According to UNICEF, malaria is responsible for a great deal of Africa's absenteeism, illness, death and lost education time when children become ill or skip school to care for their family members. The loss of productivity and household income that can result when family members contract malaria can financially devastate a family. On the community level, tourist industries can remain undeveloped and merchants may become unwilling or unable to sell their goods in local markets. Additionally, local farmers may choose to grow subsistence crops over labor-intensive crops in an effort to avoid labor problems associated with malaria.

In resource-poor settings malaria imposed high cost burdens on patients as well as on their families. It turned out that the average direct and indirect costs of illness for malaria were less than 10% of the household income, but that this was still significant when compared with the costs of other illnesses. The weakness of health services including low coverage, user charges and poor quality of care all contributed to high cost. Many families struggled to cope with the costs of healthcare as well as the decreased income resulting from the family member being out of work.

DISCUSSION QUESTIONS: How is malaria harming individual farmers in Ghana? How can malaria devastate a family? Do you know any families that have been devastated by malaria? Why would a farmer affected by malaria decide to grow subsistence crops over cash-crops?

CASE STUDY #2

A person's health is greatly impacted by drug abuse. Drugs can seriously impact your mood and general mental health because drugs interact with natural brain chemicals. Sometimes, if a person spends all of their money on drugs, the person is left with no money to feed himself or herself, resulting in a "wasted" appearance. Prenatal exposure to drugs can cause a variety of physical, emotional and psychological problems. Women are also acutely affected by the consequences of drug abuse, through ways including STIs, domestic violence and crime.

Drug abuse can deplete users' incomes, leading to a lack of care for families and loved ones as well as other responsibilities. Drug abusers can sometimes become so concerned with drug use that they think of almost nothing else than the drug, including their children. Not only this, but the time spent by users actually using drugs is wasted because users could have spent this time doing productive work. Productivity can substantially decrease when drug abusers are unable to work as a result of their addiction. This time lost depletes the individual's resources and prevents him or her from being able to provide for himself or herself as well as his or her family.

DISCUSSION QUESTIONS: How does drug use affect your health? What are two groups that are especially affected by drug abuse? How does drug abuse affect a family on the individual level?

MATERIALS AND AIDS

- Students notes

TEACHING AND LEARNING ACTIVITIES:

Teacher will explain:

- What economic capacity is
- How health has an effect on an individual's economic capacity
- What absenteeism is

- How absenteeism can negatively effect a nation's economy
- How illness and disease can negatively effect household income
- General relationships between health and Ghana's economy
- How money can affect one's access to healthy food and exercise

Class will discuss:

- How malaria can negatively affect a country's economy
- Why it is difficult for people in Oshiyie to access methods to prevent malaria infection
- How substance abuse can negatively affect the Ghanaian economy
- Why substance abusers do not always receive the help that they need

EVALUATION PROCEDURES

Sample Homework

1. What is the term for the amount of work that someone is able to accomplish?
2. What happens to an economy on a large scale if it has many workers who are sick?
3. Name one primary economic consequences of illness and disease.
4. Give an example of how the spread of diseases can have wide social and economic impacts on a nation.
5. How much money does malaria cost Africa each year?
6. Name one finding of the study conducted to try to measure the economic costs and consequences on households resulting from malaria.
7. Which of the following is not a weakness of health services in Ghana?
 - A. User chargers
 - B. Overfunding
 - C. Low coverage
 - D. Poor quality of care
8. Name two ways in which substance abuse affects a nation's economy?
9. How do drug abusers drain a nation's economy?
10. What fraction of drug abusers in Africa ever receive treatment? Offer two possible explanations for this fraction.

RESOURCE / REFERENCES:

UNICEF: *An Introduction to Malaria*

The Economic Costs of Malaria in Children in Three Sub-Saharan Countries: Ghana, Tanzania and Kenya by Elisa Sicuri et al as published in *Malaria Journal*

Russell, Steven. "The Economic Burden of Illness for Households in Developing Countries: A Review of Studies Focusing on Malaria, Tuberculosis, and Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome." Breman JG, Alilio MS, Mills A, editors. *The Intolerable Burden of Malaria II: What's New, What's Needed: Supplement to Volume 71(2) of the American Journal of Tropical Medicine and Hygiene*. Northbrook (IL): American Society of Tropical Medicine and Hygiene; 2004 Aug. Available from: <http://www.ncbi.nlm.nih.gov/books/NBK3768/>

"Guide to Identifying the Economic Consequences of Disease and Injury." World Health Organization. http://www.who.int/choice/publications/d_economic_impact_guide.pdf

"Chapter 1: Economic Consequences of Drug Abuse." International Narcotics Control Board. 2013. http://www.incb.org/documents/Publications/AnnualReports/AR2013/English/AR_2013_E_Chapter_1.pdf

"Youth Initiative: Discussion Guide." United Nations Office on Drugs and Crime. New York: United Nations, 2012.

PAN AFRICAN GLOBAL ACADEMY

WEEKLY LESSON PLAN

UNIT 4

INSTRUCTOR:
David Lamptey

WEEK: 21st
Ending: XX – XX – XX

SUBJECT: Public Health

SPECIFIC TOPIC: *Economic Problems Affecting Health and Ways to Combat Them*

LEARNING OBJECTIVES

Students will be able to:

- Understand barriers to providing comprehensive healthcare coverage across all of Ghana
- Understand measures that have been and still can be taken to improve healthcare services across Ghana
- Understand what the community-based health planning and services (CHPS) is
- Understand why CHPS was implemented
- Understand the elements and characteristics of CHPS in Ghana
- Understand the drawbacks of CHPS
- Understand what the implementation gap is in the context of CHPS
- Understand ways that the implementation gap can be solved

LESSON CONTENT

BARRIERS TO HEALTHCARE

1. Geography – In Ghana, geographic access is a major barrier to healthcare. High levels of child mortality are also related to service inaccessibility. 70% of the population of Ghana lives more than 5km from the nearest healthcare facility. In those communities that are farther than 5km from the nearest healthcare facility, child mortality is 40% higher than in communities located within 5km from a healthcare facility. Globally, mortality in rural West Africa is the highest of any region in the world, with morbidity among children accounting for much of this. Although West Africa possesses strong traditions of social organization and leadership for organizing and promoting family planning as well as health services, these systems have yet to utilize these networks to enhance the health of people in West Africa.
2. Discrepancies – There is a large difference in the quality of healthcare offered in urban and rural regions in Ghana. As Ghana entered the 21st century, it was estimated that infant mortality rates were 60% higher than rates prevailing in urban areas.
3. Staff turnover and “brain drain” – losing regular staff as well as the highest-performing officials leaves rural areas without highly trained health care officials to provide healthcare services in those regions.

POSSIBLE MEASURES TO REFORM HEALTHCARE

1. Government spending – if the government provides more money to the healthcare sector, then better and wider-reaching healthcare services will be able to be offered across Ghana
2. Experimental evidence – experimental program evidence in northern Ghana indicates that healthcare reform could have a major impact on mortality and fertility levels. An experimental study on the Navrongo Health Research Center (NHRC) reduced childhood mortality in the area by 38% using low-cost health technologies. The experiment also reduced the total fertility rate by one birth using social mobilization techniques and family planning outreach services.
3. Creation of the Ghana Health Service (GHS) – in 1996 Parliament created the GHS to improve the quality

of healthcare in Ghana. GHS is outside of the civil service, freeing the health sector to change, innovate and reform health practices in Ghana.

4. Decentralization – Decentralization allows healthcare to be adapted to local needs and cultural circumstances. This is very important to providing efficient and effective healthcare in a multi-ethnic African society such as Ghana.

THE COMMUNITY-BASED HEALTH PLANNING AND SERVICES (CHPS) INITIATIVE

GHS has adopted a model known as CHPS. CHPS shifts the focus of healthcare from district and sub-district levels to convenient and high-quality healthcare at community and doorstep levels. This tries to solve the problems of discrepancies in healthcare by decentralizing healthcare practices across Ghana.

- CHPS relies on community resources for construction labor, service delivery as well as program oversight and management.
- CHPS gives GHS the resources to limit inequalities in healthcare across Ghana as well as remove geographic barriers to healthcare.

ACTIVITY

Have the CHPS nurses of Oshiyie come and speak to the class about safe sex and contraceptive methods that they offer. Also ask them to speak about abortion. Encourage them to use models, particularly to demonstrate the correct way to put on a male condom.

ELEMENTS OF CHPS

The specific elements of CHPS are based on the government's Navrongo research results. These results demonstrate that:

- Placing a nurse in a community drastically reduces the childhood mortality rate
- Combining outreach efforts of nurses with local leader and volunteer involvement enhances male participation in family planning and improves the accountability of the health services provided within a community
- Training in midwifery is provided to the nurses to allow them to supervise births in the community area
- Nurses work to greatly expand access to family planning by providing extensive family planning services
- Nurses also work to expand primary healthcare, including access to immunizations
- Some nurses have been equipped with radio telephones to develop and test a program for remote clinical support and emergencies involving women having babies
- Nurses are also flexible regarding payment for health services. Studies have shown that trust between the nurses and the communities in which they work translate into social arrangements that, for example, allow mothers to defer payment for healthcare services until her family can come up with the money. This parallels traditional Ghanaian social customs for obtaining the services of traditional healer services, which increases the effectiveness of this approach. *Nurses with CHPS will help you pay for medical care even if you cannot afford it at the time you go in for services.*

DRAWBACKS OF CHPS

Many plans to establish healthcare centers in local communities do not move past the planning stage. This is a result of resource limitations. The fact that some communities have yet to take action on their healthcare plans has resulted in a disparity between districts that have started CHPS and districts that have not started. This has resulted in an **implementation gap** between the areas that have started CHPS and areas that have not. Manpower shortages and the limited funding also result in a disparity in healthcare resources offered in areas that have implemented their CHPS and areas that have lingered in the planning stage.

WAYS TO SOLVE THE IMPLEMENTATION GAP

1. Identifying success – by monitoring which CHPS services are succeeding in certain areas and which are not, improvements can be made to struggling CHPS areas.
2. Enhancing success – research has suggested that in the absence of communication methods successful CHPS practices spread relatively slowly from one district to the next, despite the fact that successful practices spread rapidly within a district.
3. Disseminating successful practices across regions – communication methods between local communities that allow successful practices to be shared and adopted should be encouraged.
4. Investment in the local dissemination of success – it has been shown that when CHPS has been completely and successfully implemented in an area, diffusion rapidly spreads the initiative to surrounding areas. Investment in construction material and equipment in “pilot zones” can lead to widespread improvements in healthcare services.
5. Investment in manpower development – the CHPS program often sends trained nurses to areas that are far away from their homes where local languages, social customs and community organizational structures may be unfamiliar. The CHPS program also does not allow communities to choose or select their own nurses.

CASE STUDY #1

Angela is 17 and lives with her parents and her seven brothers and sisters in Oshiyie. Her father is a mason, and for the last month has been struggling to find work around Kokrobite or Bortianor. Her father has become desperate to find money to provide food for the family. One day, Angela’s father tells her that there is a man in Kokrobite who wants to meet her. The next day her father takes Angela to Kokrobite introduces her to an old man in a suit. Her father says to her, “Next week you will come back here alone. Do what this man wants. He has given us enough Ghana to buy food for six months.” Angela is confused and scared. She does not know what to do. Is there anywhere that Angela can go for help?

SOLUTION: Angela could go to the CHPS nurses in Oshiyie. These nurses could help her talk to an aunt or other trusted family member to help her find money to pay for food for her family in a different way. However, if Angela wants to go through with the man’s request, then the nurses could offer Angela contraceptive methods such as the shot to help her prevent unwanted pregnancy, although she would still be at risk to catch STIs.

CASE STUDY #2

Brian is 16 and lives with his parents and his five brothers and sisters in Bortianor. Brian is in Form 2 at Pan-African Global Academy Secondary High School in Oshiyie. Brian has a girlfriend named Tina. Brian has been taking Tina out for eight months, and recently they have been talking about having sex. Tina is 20 and in Form 4. Tina is pressing Brian to have sex with her. Brian likes Tina a lot, but is worried about getting her pregnant. Is there anywhere that Brian can go for help?

SOLUTION: Brian could go to the CHPS nurses in Oshiyie on his way home from school. The nurses could talk to him more about whether he is ready to have sex with Tina. The nurses could talk to Brian and Tina together or just Brian by himself, depending on what he wants to do. The nurses could advise him and provide him with information about contraceptive methods he could use if he wanted to have sex with Tina, such as the male condom.

MATERIALS AND AIDS

- Lecture notes
- CHPS nurses as guest lecturers
- Any props or demonstrations that the CHPS nurses might need, including both male and female

condoms as well as other contraceptive methods offered by CHPS

TEACHING AND LEARNING ACTIVITIES:

Teacher will explain:

- The barriers to providing comprehensive healthcare coverage across all of Ghana
- Measures that have been and still can be taken to improve healthcare services across Ghana
- What the community-based health planning and services (CHPS) is
- Why CHPS was implemented
- The elements and characteristics of CHPS in Ghana
- The drawbacks of CHPS
- What the implementation gap is
- The ways that the implementation gap can be solved

EVALUATION

Sample Quiz

1. Name three significant barriers to providing comprehensive healthcare across all of Ghana.
2. What are three things that can be done to improve healthcare practices in Ghana?
3. What is the focus of the community-based health planning and services (CHPS) initiative?
4. Name four elements of the CHPS.
5. Will nurses of CHPS help you pay for healthcare if you are unable to do so?
6. What is the implementation gap?
7. What are four ways to solve the implementation gap?

RESOURCE / REFERENCES:

“The Community-Based Health Planning and Services (CHPS) Initiative.” Ghana Ministry of Health.

<http://www.ghanachps.org/wp-content/uploads/2008/05/servicestoclients.pdf>

Nyonator, Frank K., J. Koku Awoonor-Williams, James F. Phillips, Tanya C. Jones and Robert A. Miller. “The Ghana Community-based Health Planning and Services Initiative: Fostering Evidence-based Organizational Change and Development in a Resource-constrained Setting.” Population Council, 2003. No. 180.

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“Guide to Identifying the Economic Consequences of Disease and Injury.” World Health Organization. 2009.

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PAN AFRICAN GLOBAL ACADEMY
WEEKLY LESSON PLAN
UNIT 4

INSTRUCTOR:
David Lamptey

WEEK: 22nd
Ending: XX – XX – XX

SUBJECT: Public Health

SPECIFIC TOPIC: *Pharmaceuticals and Herbal Medicines*

LEARNING OBJECTIVES

Students will be able to:

- Understand what pharmaceutical medicine is
- Understand the difference between self-care and self-medication
- Understand the potential dangers of self-medicating and ways to minimize these dangers
- Understand why counterfeit medications can be dangerous to use
- Understand what herbal (traditional) medicines are and how they are commonly used in West Africa
- Understand the advantages as well as the disadvantages of using herbal medicines

LESSON CONTENT

PHARMACEUTICALS

Pharmaceutical medicine is a medical specialty concerned with the discovery and development, evaluation, licensing and monitoring of medical products for the benefit of patients and public health in general. Pharmaceutical medicine seeks to understand how drugs work, how effective different drugs are and how drugs can best be used to make people feel better.

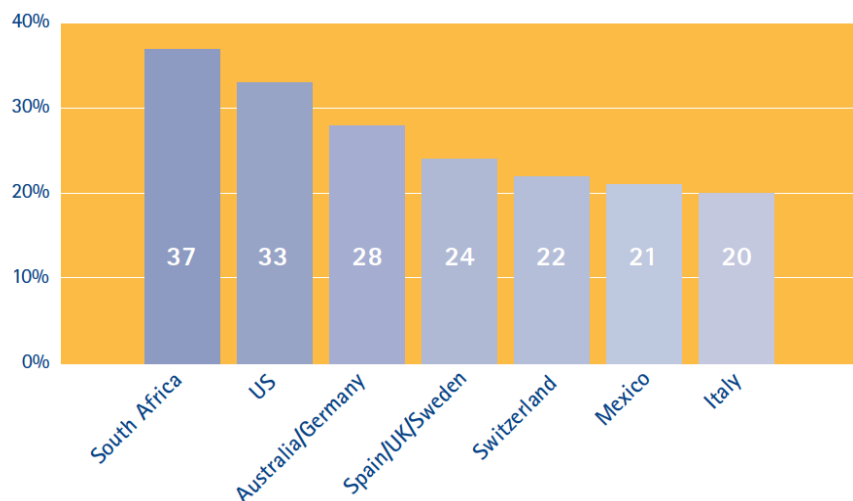
SELF-CARE AND SELF-MEDICATION

Self-care is defined as the care that individuals take to improve their own health and well-being, including the care extended to their family members and others. Self-care involves the actions that people take to remain in good physical and mental health; meet their social and psychological needs and prevent illness or accidents.

Self-medication is the treatment of common health problems medication specifically designed for use without medical supervision. These are often called “non-prescription” or “over the counter” (OTC) medications. These medicines are safe to use without talking to a health official if the instructions are heeded on their packages. They are available at pharmacies without a doctor’s note. Self-medication with OTC medications is NOT the same as the practice of purchasing and using prescription medicines without a doctor’s note. *This practice is irresponsible and can be very dangerous.*

The chart below, collected by the World Self-Medication Industry, shows the percentage of problems treated with non-prescription medications by consumers in 10 nations across the world. A country like South Africa perhaps relies on self-medication as a major contributor to health maintenance because of lower levels of infrastructure and professional staff.

Percentage of common conditions treated with OTCs



World Self-Medication Industry. *The Story of Self-Care and Self-Medication: 40 Years of Progress, 1970-2010*

CLASS DISCUSSION

Have students come up with a list of the dangers of self-medication.

THE POTENTIAL DANGERS OF SELF-MEDICATING

Although self-medicating can produce positive results for your health, there are also many risks when you self-medicate for a condition for which you really should seek medical expertise. If you are already taking several medications and decide to take another medication to self-medicate, you risk having the medicines interact and have a negative effect on your health. Also, in Africa there are many illnesses that cause people to have fevers, diarrhea and chills, and unless you seek medical are you cannot know which illness you have. You not only risk wasting money on a medication that will not treat your illness, but you also risk getting sicker from your condition or having the medication have a harmful effect on your body. It is important to remember that a fever and headache is not always the result of malaria, and taking a course of anti-malarial medications without having been told by a physician that you have malaria can increase the rate at which *Plasmodium* is becoming resistant to anti-malarial medications.

COUNTERFEIT MEDICATIONS

According to the WHO, a counterfeit medication is one that is deliberately and fraudulently mislabeled with respect to its identity or source. According to the Center for Medicine in the Public Interest, worldwide counterfeit sales are increasing at about 13% annually, about twice that of legitimate pharmaceuticals. Counterfeit products may have the correct ingredients, the incorrect ingredients, without active ingredients, without insufficient ingredients or with fake packaging. Counterfeit medications are dangerous because they are not produced under safe manufacturing conditions and they are not inspected by regulatory authorities. This makes it impossible for customers to know exactly what is in the counterfeit medications that they are about to take.

One of the biggest risks of counterfeit medications is that patients might not get the therapeutic benefits expected from the product. For example, if a patient takes a counterfeit medication to shrink a cancerous tumor, the drug might not benefit the patient because it contains none or too little of the active ingredient. Counterfeit medications can also contain too much of the active ingredient, which can negatively affect your health.

The best way to avoid counterfeit drugs is to purchase prescription medications from a reputable pharmacy with which you are familiar. If you choose to buy your medications online, see your doctor and get a written

prescription first. *Do not buy medications from an online pharmacy that isn't licensed, that offers to write prescriptions for you, or that sells medications without prescriptions.*

HERBAL (TRADITIONAL) MEDICINES

Herbal medicine is the indigenous practice of applying herbs, roots and the bark of trees in order to cure diseases. Sometimes the use of the herb is accompanied by spiritual incantations.

CLASS DISCUSSION

Have students come up with a list of the advantages and disadvantages of using herbal medication before talking through the suggested points below.

ADVANTAGES OF HERBAL MEDICINE

1. Less expensive – because it is prepared locally, herbal medicine is generally less expensive than orthodox medicine.
2. Accessibility – in some situations, Ghanaians are more familiar with the traditional herbalist than the medical doctor. However, both the traditional herbalist and medical doctors at hospitals can both be consulted day and night.
3. Utilization of local resources – traditional herbalists make use of local forestry resources where herbs, particularly in rural areas roots and bark of trees are widely available.
4. Easy to prepare – the raw materials for herbal medicine are not difficult to find, and these medicines do not pass through rigorous manufacturing processes. This causes them to be easy to prepare. The most popular method of preparation is boiling.

DISADVANTAGES OF HERBAL MEDICINE

1. Dosage problems – traditional herbalists often face problems standardizing the dosages of his and her herbs. Lack of uniform dosages makes herbal medicine prone to cause side effects.
2. Unhygienic conditions – the cleanliness of the production centers of herbal medicine is often not up to orthodox standards. In many cases herbal medicines are prepared in unhygienic conditions, making users vulnerable to infections.
3. Multi-purpose use of herbal products – because some herbal medicines are said to cure all diseases, many skeptics of herbal medicine question the drugs' effectiveness.
4. Poor storage facilities – because modern equipment is often not used to effectively store and preserve the leaves, herbs and roots of medicinal plants for long periods of time, herbal medicines are often not produced in large quantities.
5. Attitudinal problems – some see that there is a conflict between orthodox and herbal medicine. Some orthodox practitioners question the scientific basis of herbal medicines. Some people do not patronize herbal doctors with spiritual aspects which may conflict with their spiritual beliefs.
6. Lack of resources – herbalists often lack adequate funds to purchase modern facilities to standardize their work. They do not have laboratories, computers and medical equipment to meet high standards of production. Thus, they are often not given international recognition.

MATERIALS AND AIDS

- Lecture notes

TEACHING AND LEARNING ACTIVITIES:

Teacher lead class to:

- Understand what pharmaceutical medicine is
- Understand the different between self-care and self-medication

- Understand the potential dangers of self-medicating and ways to minimize these dangers
- Understand why counterfeit medications can be dangerous to use
- Understand what herbal (traditional) medicines are and how they are commonly used in West Africa
- Understand the advantages as well as the disadvantages of using herbal medicines

EVALUATION PROCEDURES

Sample homework

1. What is pharmaceutical medicine?
2. What is the difference between self-care and self-medication?
3. What are two reasons that might explain why South Africa has a higher rate of self-medication for common illnesses than other countries?
4. Name two potential dangers of self-medicating for a serious condition.
5. What is a counterfeit medication?
6. Why are counterfeit medications dangerous?
7. Which of the following would NOT be a reason not to buy a medication from an online pharmacy?
 - A. The online pharmacy offers to write prescriptions for you
 - B. The online pharmacy sells medications without prescriptions
 - C. The online pharmacy is not licensed
 - D. The online pharmacy offers two-day shipping
8. What are two reasons that might explain why South Africa has a higher rate of self-medication for common illnesses than other countries?
9. What are three advantages of using herbal medicines?
10. What are three disadvantages of using herbal medicines?

RESOURCE / REFERENCES:

Mastering Social Studies for Senior High Schools by Isaac Ayertey (pages 165-167)

“Pharmaceutical Medicine.” The Faculty of Pharmaceutical Medicine of the Royal Colleges of Physicians of the United Kingdom, 2011. <https://www.fpm.org.uk/aboutus/aboutpharmamed/whatispharmamed>

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“General Information on Counterfeit Medicines.” World Health Organization, 2014. <http://www.who.int/medicines/services/counterfeit/overview/en/>

“A Serious Threat to Patient Safety: Counterfeit Medications.” Pfizer Inc., 2007. <http://www.pfizer.com/sites/default/files/products/CounterfeitBrochure.pdf>

PAN AFRICAN GLOBAL ACADEMY
WEEKLY LESSON PLAN
UNIT 4

INSTRUCTOR:
David Lamptey

WEEK: 23rd
Ending: XX – XX – XX

SUBJECT: Public Health

SPECIFIC TOPIC: *Visit from a Local Pharmacist*

LEARNING OBJECTIVES

Students will be able to:

- Understand what a pharmacy looks like and how it operates
- Understand how medications are stored safely and why different medications are stored in different ways
- Understand a little about the business of pharmaceuticals in Ghana and around the world
- Understand how the forces of supply and demand work in Ghana
- Understand the dangers of counterfeit medications
- Contrast imported and locally produced pharmaceuticals

LESSON CONTENT

Have a pharmacist or pharmacy manager come to visit the school. If this is not possible or not preferable, try to have the class go to visit a pharmacy or a pharmacist's office. Some talking points for the pharmacist or pharmacy manager to discuss:

- Counterfeit medications
- Supply and demand in pharmaceuticals
- Quality control (expiration dates, refrigeration, etc.)
- The business of pharmaceuticals
- Imported versus locally produced pharmaceuticals

MATERIALS AND AIDS

- Pharmacist as a guest lecturer

TEACHING AND LEARNING ACTIVITIES:

The guest pharmacist will:

- Demonstrate what a pharmacy looks like and how it operates
- Explain how medications are stored safely and why different medications are stored in different ways
- Talk a little about the business of pharmaceuticals in Ghana and around the world
- Discuss with the students how the forces of supply and demand work in Ghana
- Emphasize the dangers of counterfeit medications
- Contrast with the class the imported and locally produced pharmaceuticals

EVALUATION PROCEDURES

Sample homework

1. What are ten things you learned from the pharmacist or while visiting the pharmacy?

RESOURCE / REFERENCES:

Mastering Social Studies for Senior High Schools by Isaac Ayertey (pages 165-167)

PAN AFRICAN GLOBAL ACADEMY
WEEKLY LESSON PLAN
UNIT 4

INSTRUCTOR:
David Lamptey

WEEK: 24th
Ending: XX – XX – XX

SUBJECT: Public Health

SPECIFIC TOPIC: *Unit 4 Test*

LEARNING OBJECTIVES

Teacher will:

- Administer the test to the students

Students will be able to:

- After the test has been completed and graded, go over the questions of the examination after it has been completed and graded with the instructor
- Understand and be able to explain why students missed questions that they missed on the exam in order to gain a better understanding of the course material of Unit 4

LESSON CONTENT

Unit 4 test questions

MATERIALS AND AIDS

- Test questions
- Answer sheets

TEACHING AND LEARNING ACTIVITIES:

- Class engages in an interactive discussion of the Unit 4 test questions after having taken the exam and the answer sheets have been scored

EVALUATION PROCEDURES

Unit 4 exam questions

RESOURCES/REFERENCES

Mastering Social Studies for Senior High Schools by Isaac Ayertey (pages 266-275)

UNICEF: *An Introduction to Malaria*

The Economic Costs of Malaria in Children in Three Sub-Saharan Countries: Ghana, Tanzania and Kenya by Elisa Sicuri et al as published in *Malaria Journal*

Russell, Steven. "The Economic Burden of Illness for Households in Developing Countries: A Review of Studies Focusing on Malaria, Tuberculosis, and Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome." Breman JG, Alilio MS, Mills A, editors. *The Intolerable Burden of Malaria II: What's New, What's Needed: Supplement to Volume 71(2) of the American Journal of Tropical Medicine and Hygiene.*

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<http://www.ncbi.nlm.nih.gov/books/NBK3768/>

"Guide to Identifying the Economic Consequences of Disease and Injury." World Health Organization.

http://www.who.int/choice/publications/d_economic_impact_guide.pdf

"Chapter 1: Economic Consequences of Drug Abuse." International Narcotics Control Board. 2013.
http://www.incb.org/documents/Publications/AnnualReports/AR2013/English/AR_2013_E_Chapter_1.pdf

"Youth Initiative: Discussion Guide." United Nations Office on Drugs and Crime. New York: United Nations, 2012.

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<http://www.popcouncil.org/uploads/pdfs/wp/180.pdf>

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http://www.wsmi.org/pdf/storyofselfcare_bdpape.pdf

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"A Serious Threat to Patient Safety: Counterfeit Medications." Pfizer Inc., 2007.
<http://www.pfizer.com/sites/default/files/products/CounterfeitBrochure.pdf>