

LESSON 4

SICK OF POVERTY

- STUDIES WORLDWIDE HAVE SHOWN THAT HEALTH AND INCOME ARE HIGHLY CORRELATED: THE POOR ARE LESS HEALTHY THAN THE RICH. POVERTY CAN LEAD TO ILL HEALTH BECAUSE IT FORCES PEOPLE TO LIVE IN SURROUNDINGS THAT DON'T HAVE ADEQUATE SANITATION, CLEAN WATER AND SUITABLE SHELTER.

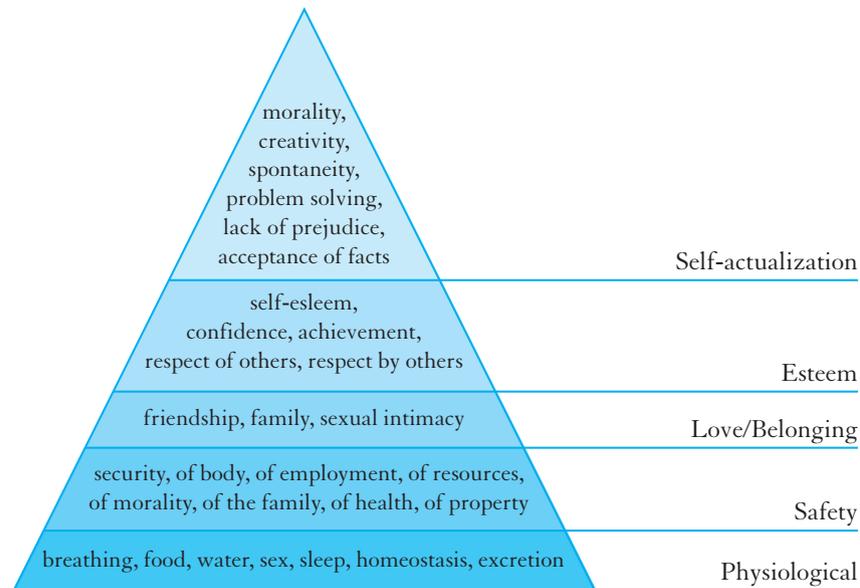
Before You Read

Make a Poverty Stress Scale list. List some possible stressful situations that poor people might encounter.

	The Poverty Stress Scale
✓	Stressful Events

Discuss the following questions with your partner.

1. The picture below shows Maslow's Hierarchy of Needs. Which levels most represent(s) the lives of those living in poverty?



2. Which level represents your current situation according to Maslow's Hierarchy of Needs?
3. Based on Maslow's theory, what future goals would enhance your self-value and life quality?

Work in pairs and answer the questions below.

1. What's your impression of the word "sanitation"? Can you explain the difference between "sanitation" and "hygiene"?

Answer: _____

2. Under-developed countries generally have poor sanitation. Name at least six underdeveloped countries.

Answer: _____

3. Have you ever visited any of the countries you mentioned in question two? If so, did they or do they still have poor sanitation?

Answer: _____

4. Aside from sanitation, what are some other reasons why poverty and ill health may be related?

Answer: _____

5. Based on your reply to question four, how do you think this relationship between poverty and health can be improved?

Answer: _____

Dialog

Read the conversation. Infer the meaning of the underlined words without using a dictionary. The conversation took place in a seminar that talked about poverty and health.

L: Lecturer, **S:** Student

L: Well, let's continue our topic "Poverty and Health." A very famous Chinese epigram says "Life is extremely difficult for a couple in poverty." What do you think about this saying?

S: That's true, because poverty can cause many problems. The rich usually subjugate the poor, so the poor are becoming weaker and weaker, both physically and financially.

L: Indeed, scientists in this field have also found that poverty correlates highly with poor health. For example, an appalling living environment and an insufficient food supply make people sick.

S: So underprivileged people face a lot of stress?

L: Yes. This leads to a disproportionate number of physical stressors.

S: Because their bodies cannot maintain homeostasis, their vital human functions are not staying within the optimal ranges. Am I right?

L: That's right. This lack of balance can suppress many major bodily functions. For example, tissue reproduction may become problematic, so that damaged tissue can't grow back.

S: It could also cause psychological problems, right?

L: Yes. The poor usually have a continuous sense of impending difficulties, which is pathogenic and makes them physically and psychologically sick. In psychology, we use the socioeconomic status/health gradient as the criteria to assess an individual's poverty and health.

S: So when the gradient falls a lot, it represents lower socioeconomic status together with poor health. What can we do to stop the situation from worsening?

L: More social and financial support can ease the situation and lead to a robust balance. When charities and governments provide social and financial support, the poor can sense that their physical needs are satisfied. Then, they are able to pursue higher goals and focus on

education and careers. Education is one way to enhance socioeconomic status. Many people say that the problem of poverty is irreversible, but I don't think this is true. I think that good government policies and support from organizations can help the poor to lead better quality lives.

Exercise

Match the meanings below with the words from the conversation for which you have inferred the meanings. Four are done for you.

ESP Vocabulary

This vocabulary is commonly used in the field of health and medical care.

_____	<i>adj</i>	refers to the body's ability or tendency to regulate the stability of its own inner environment
_____	<i>n</i>	the process of making a copy of something
_____	<i>adj</i>	disease usually caused by bacteria or a virus

General Vocabulary

This vocabulary is used for general purposes.

_____	<i>v</i>	to really shock or offend someone
_____	<i>v</i>	to defeat a place or a group of people and force them to obey you
_____	<i>n</i>	a short poem or sentence expressing something, such as a feeling or idea, in a clever or funny way
_____	<i>adj</i>	not having as many advantages or opportunities as most other people
_____	<i>n</i>	a situation in which someone does not have enough money to pay for their basic needs
_____	<i>v</i>	two things are connected and influence each other
_____	<i>adj</i>	best or most suitable within a range of possibilities
_____	<i>v</i>	a physical process is stopped from happening or developing
realm	<i>n</i>	a particular area of knowledge, experience or interest
_____	<i>adj</i>	indicating that an unpleasant event or situation will happen very soon
duress	<i>n</i>	force or threat that makes someone do something they do not want to do

_____	<i>adj</i>	bigger or smaller than it should be in comparison to something else
promulgate	<i>v</i>	to make an idea or belief known to as many people as possible
salutary	<i>adj</i>	having a good effect on someone or something although it is often unpleasant
_____	<i>adj</i>	strong and successful

Reading

Sick of Poverty

New studies suggest that the stress of being poor has an adverse influence on health. Rudolph Virchow, the 19th-century German neuroscientist, physician and political activist, came of age during two dramatic events—the **typhoid** outbreak of 1847 and the failed revolutions of 1848. Out of those experiences two insights came to him: first, that

5 the spread of disease has a lot to do with **appalling** living conditions, and second, that those in power have enormous means to **subjugate** the powerless. Virchow captures these thoughts in his famous **epigram**, “Physicians are the natural attorneys of the poor.”

Physicians (and biomedical scientists) are advocates of the **underprivileged** because poverty and poor health tend to go hand in hand. **Poverty** means bad or insufficient

10 food, unhealthy living conditions and endless other factors that lead to illness. Yet it is not merely that poor people tend to be unhealthy while everyone else is well. When you examine socioeconomic status (SES), a composite measure that includes income, occupation, education and housing conditions, it becomes clear that, starting with the wealthiest stratum of society, every step downward in SES **correlates** with poorer health.

15 Ideally, the body is in **homeostasis**, a state in which the vital measures of human function—heart rate, blood pressure, blood sugar levels and so on—are maintained in their **optimal** ranges. A stressor is anything that threatens to disrupt homeostasis. For most organisms, a stressor is an acute physical challenge—for example, the need for an injured **gazelle** to sprint for its life or for a hungry predator to chase down a meal. The

20 body is superbly adapted to dealing with short-term physical challenges to homeostasis. Stores of energy, including sugar glucose, are released, and cardiovascular tone increases to facilitate the delivery of fuel to exercising muscles throughout the body. Digestion, growth, tissue repair, **reproduction** and other physiological processes not needed to survive the crisis are **suppressed**. The immune system steps up to thwart opportunistic

25 pathogens. Memory and the senses **transiently** sharpen.

But cognitively and socially sophisticated species, such as we **primates**, routinely inhabit a different **realm** of stress. For us, most stressors concern interactions with our own species, and few physically disrupt homeostasis. Instead these psychosocial stressors involve the **anticipation** (accurate or otherwise) of an impending challenge. And the striking
30 characteristic of such psychological and social stress is its chronicity. For most mammals, a stressor lasts only a few minutes. In contrast, we humans can worry chronically over a 30-year mortgage.

Unfortunately, our body's response, though adaptive for an acute physical stressor, is **pathogenic** for prolonged psychosocial stress. Chronic increase in cardiovascular tone
35 brings stress-induced hypertension. The constant mobilization of energy increases the risk or severity of diseases such as type 2 (adult-onset) diabetes. The prolonged inhibition of digestion, growth, tissue repair and reproduction increases the risks of various gastrointestinal disorders, impaired growth in children, failure to ovulate in females and erectile dysfunction in males. An over-extended immune stress response ultimately
40 suppresses immunity and impairs disease defenses. And chronic activation of the stress response impairs cognition, as well as the health, functioning and even survival of some types of neurons.

An extensive biomedical literature has established that individuals are more likely to activate a stress response and are more at risk for a stress-sensitive disease if they (a)
45 feel as if they have minimal control over stressors, (b) feel as if they have no predictive information about the duration and intensity of the stressor, (c) have few outlets for the frustration caused by the stressor, (d) interpret the stressor as evidence of circumstances worsening, and (e) lack social support for the **duress** caused by the stressors.

Psychosocial stressors are not evenly distributed across society. Just as the poor have
50 a **disproportionate** share of physical stressors (hunger, manual labor, chronic sleep deprivation with a second job, the bad mattress that can't be replaced), they have a disproportionate share of psychosocial ones. Numbing assembly-line work and an occupational lifetime spent taking orders erode workers' sense of control. Unreliable cars that may not start in the morning and paychecks that may not last the month
55 inflict unpredictability. Poverty rarely allows stress-relieving options such as health club memberships, costly but relaxing hobbies, or sabbaticals for rethinking priorities. And despite the heartwarming stereotype of the "poor but loving community," the working poor typically have less social support than the middle and upper classes, thanks to the extra jobs, the long commutes on public transit, and other burdens.

60 The importance of psychosocial factors in explaining the SES/health **gradient** generates a critical conclusion: when it comes to health, there is far more to poverty than simply not having enough money. (As Evans once stated, "Most graduate students have had

the experience of having very little money, but not of poverty. They are very different things.”) The psychosocial school has occasionally been accused of **promulgating** an antiprogressive message: don’t bother with universal health care, affordable medicines and other **salutary** measures, because there will still be a **robust** SES/health gradient after all the reforms. But the lesson of this research is to not abandon such societal change—so much more is needed.

By Robert M. Sapolsky

<http://demo1.wordpress.com/SA/read.asp?docsn=2006012612&readtype=en&blockset=stress>

After You Read

I Skim each paragraph of the text “Sick of Poverty.” Match each paragraph with its main idea. (Note: Two paragraphs have the same main idea.)

	Main Point
_____ 1. Paragraph 1	a. Our body can maintain its inner balance perfectly, especially when dealing with short-term physical challenges.
_____ 2. Paragraph 2	b. There are five situations in which individuals can more easily feel stress and so have a higher risk of getting stress-induced diseases.
_____ 3. Paragraph 3	c. Being poor induces far more psychosocial stress than simply not having enough money.
_____ 4. Paragraph 4	d. The close relationship between SES and health causes physicians and biomedical scientists to argue in favor of helping the poor.
_____ 5. Paragraph 5	e. The chronic activation of stress response has negative effects on the body, both physically and psychologically.
_____ 6. Paragraph 6	f. The poor not only have a disproportionate share of physical stressors but also psychosocial ones.
_____ 7. Paragraph 7	g. Humans experience psychosocial that can last for several decades.
_____ 8. Paragraph 8	

II Scan the reading to answer the questions.

Questions	Answers
1. What are the two insights Rudolph Virchow drew from the dramatic events that he experienced in 1847 and 1848?	
2. What are the four measurements when we examine an individual's SES?	
3. What does it mean when we say the body is in homeostatic balance?	
4. What are the five things that are suppressed when our body is dealing with an acute physical challenge?	
5. How long does a stressor last in most mammals?	
6. What adverse health conditions can be induced from prolonged psychosocial stress? (Please give at least five examples.)	
7. What psychosocial stressors do the poor have? (Please give at least two examples.)	
8. Why is the psychosocial school criticized by some?	

Language Focus

Corpus Application (TIME)

Adapt

- In health education or biology, you will often see that the body makes certain changes to fit in with its surroundings. You will sometimes see scientists or experts write sentences such as “The body/cell is adapted to certain conditions.” You can also add an adverb before **adapted** to be more specific, as follows:

to	be	(adverb) superbly well badly reluctantly quickly promptly slowly gradually	adapted	to	sth
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- The active form of this is:

to	adapt	sth	for from	sth
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Example:

The body **is** superbly **adapted** to dealing with short-term physical challenges to homeostasis. (Paragraph 3)

Accuse

- When we want to say that someone has done something wrong or is guilty of something, we can use the word **accuse**. The active form of this is:

to	accuse	sb.	of	sth
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- The passive form is:

sb	be	accused	of	sth
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Examples:

The psychosocial school has occasionally **been accused of** promulgating an antiprogressive

message: don't bother with universal health care, affordable medicines and other salutary measures, because there will still be a robust SES/health gradient after all the reforms. (Paragraph 8)

The patient **accused** the doctor of misdiagnosis.

Exercise

Use both the active and passive forms of the collocations introduced above to make sentences.

	My Sentences
to be (adverb) adapted to	
to adapt sb. to sth.	
to accuse sb. of sth.	
sb. be accused of sth.	

Academic Skills: Paraphrasing

In the last lesson, we learned the essential techniques of paraphrasing and practiced distinguishing between good and bad paraphrases. Before we move on to the next step, paraphrasing sentences on your own, take one minute to remember the three do's and don'ts and the four tips for paraphrasing.

Write them in the following blanks. You may refer to the last lesson to check your answer:

Your Answer
When you paraphrase:
1. _____
2. _____
3. _____
How to paraphrase:
1. _____
2. _____
3. _____
4. _____

Exercise 1

Read the paraphrases of some of the sentences in the reading. Find the original sentences in the reading and write them on the lines.

1. Doctors and the scientists studying biomedicine tend to speak for the poor, because of the close relationship between poverty and being unhealthy. (Paragraph 2)

Answer: _____

2. Our body maintains a good balance inside and functions optimally when the heart rate, blood pressure, blood sugar levels, and other health indexes are within their most appropriate ranges. (Paragraph 3)

Answer: _____

3. Chronic stress that lasts too long can eventually cause major damage to our immune system. (Paragraph 5)

Answer: _____

Exercise 2

Work with a partner to paraphrase the following sentences from “Sick of Poverty.” Make sure that you do not change the meaning and that you use your own words.

1. An extensive biomedical literature has established that individuals are more likely to activate a stress response and are more at risk for a stress-sensitive disease if they feel as if they have minimal control over stressors. (Paragraph 6)

Answer: _____

2. Despite the heartwarming stereotype of the “poor but loving community,” the working poor typically have less social support than the middle and upper classes, thanks to the extra jobs, the long commutes on public transit, and other burdens. (Paragraph 7)

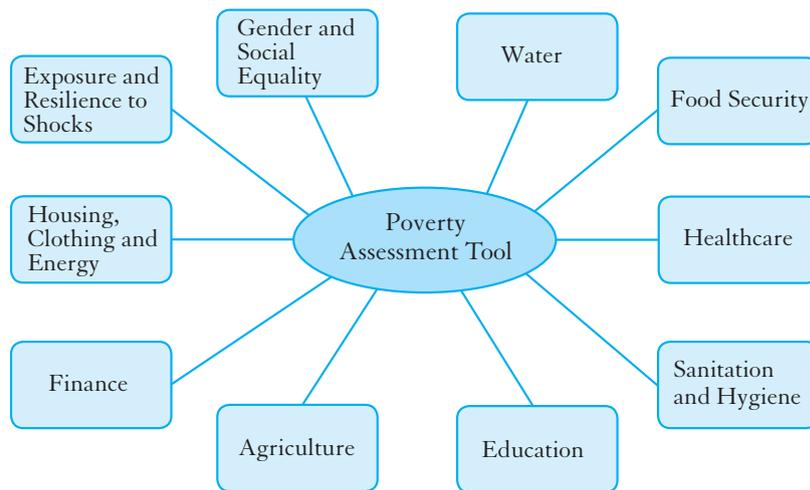
Answer: _____

3. The importance of psychosocial factors in explaining the SES/health gradient generates a critical conclusion: when it comes to health, there is far more to poverty than simply not having enough money. (Paragraph 8)

Answer: _____

Tasks

According to the World Health Organization (WHO), approximately 1.2 billion people worldwide live on less than one US dollar a day. However, poverty leading to ill health does not only occur in under-developed countries. In many developed and developing countries an increasing amount of poverty is causing a growing number of health related problems. The following figure is based on the poverty assessment tool (PAT) which is widely applied to judge whether individuals live below the poverty line. Now, let us review the categories within the PAT. Discuss with your group how these categories have connections with health.



Categories:	Problems:
Water	<ul style="list-style-type: none"> ◆ If water is scarce, many illnesses will break out, such as cholera and diarrhea. ◆ Everyday many children may need to walk several hours for water. This need results in less educational opportunities, and their socioeconomic status will not improve.
Food security	
Healthcare; sanitation and hygiene	
Education	
Agriculture	
Finance	
Housing, clothing and energy	
Gender and social equality	