

First of all, I would like to introduce myself, explain why I participated in this conference, and explain why I decided to write this article.

My name is Firdous El Marjani, I am 16 years old, and I recently reached this age. I am a high school student, and my parents are financially comfortable. As you know, when a person has a relatively comfortable financial situation, they may be able to see the suffering of other people, not only their poverty but also their illnesses.

My goal in life is to become a medical scientist and an inventor of medicines. I participated in this conference not because I wanted a certificate proving that I attended, but because there is a spark inside me that moves me whenever I see people suffering and unable to find medicines for diseases such as tuberculosis, cancer and its different types, HIV/AIDS, diabetes, and other diseases that can lead to death.

Especially in the later part of this twenty-first century, I noticed that the number of deaths seemed to have increased among children, young people, and older people. I asked myself: Why? I found an answer based on my own thoughts. It may not be completely correct, but I began to wonder whether serious diseases could also be affected by our emotions.

So, are emotions really connected to disease? How can emotions be related to a serious illness? How can emotions influence the risk of developing certain diseases and, in some cases, the outcome of an illness?

Without further introduction, let us define what emotions are. Emotions are a concept that we have encountered in Greek philosophy, but today I would like to explain them more precisely.

Emotions are **deep internal and psychological responses** that we experience toward ourselves, other people, or events around us. They are an essential part of human nature and one of the most important ways through which we interact with the world.

Dimensions of the Concept of Emotions

- **An internal and temporary experience:** Unlike mood, which can last for days, emotions are usually shorter-term and connected to a particular situation or event, such as feeling happy after hearing good news or becoming angry because of an upsetting situation.
- **Guiding signals:** Emotions act like an internal compass that tells us what we like and dislike and what makes us feel safe or threatened.
- **A physical component:** Emotions are not limited to the mind. They are closely connected to the body, such as an increased heart rate when we are afraid or a feeling of warmth and comfort when we experience love.

Basic Types of Emotions

Human emotions can be divided into several main categories, including:

1. **Positive emotions:** such as happiness, gratitude, love, hope, and reassurance.

2. **Negative or painful emotions:** such as sadness, fear, anger, anxiety, and jealousy.
(Note: These emotions are “painful,” not necessarily bad. They are natural and very important for understanding and protecting ourselves.)

But an important question arises: how can these emotions increase the risk of disease?

I will share my experience with you and explain it using scientific concepts.

I will begin with the scientific perspective because it can help us understand the issue more clearly. The relationship between emotions, especially chronic negative emotions such as severe stress, persistent anxiety, deep sadness, and emotional suppression, and physical health is a broad and important field studied by a discipline called **Psychoneuroimmunology**.

Scientifically, negative emotions do not directly and independently cause serious diseases such as cancer. However, chronic stress and psychological pressure can affect the body through multiple biological mechanisms and may be associated with changes in the immune system, hormones, and inflammation. They can also influence health-related behaviors.

How Can Negative Emotions Affect the Body?

1. Effects on the Immune System:

When a person experiences chronic negative emotions, such as persistent stress or long-term depression, changes can occur in the body's response to stress hormones such as cortisol and adrenaline. Chronic psychological stress can affect immune function, but this does not mean that emotions alone cause a serious disease such as cancer.

2. Chronic Inflammation:

Chronic stress can be associated with changes in inflammatory processes in the body. Chronic inflammation is related to several diseases, and researchers are also studying its relationship with the development of certain types of cancer.

3. Hormonal and Cellular Changes:

Researchers study how stress-related hormones, such as norepinephrine, may affect certain cellular processes. Some laboratory and animal studies have shown that these pathways may influence tumor growth and spread, but this does not mean that the same mechanism has been proven to occur in all humans.

4. Unhealthy Behaviors:

Acute negative emotions or depression can sometimes lead people to adopt harmful behaviors as a way of coping, such as smoking, eating unhealthy food excessively, lack of physical activity or sleep, or neglecting regular medical check-ups. These are known risk factors for many chronic and serious diseases.

Now I would like to tell you about my experience.

At the beginning of this month, unfortunately, we received shocking news that my mother's cousin's daughter had been diagnosed with cancer. It was heartbreaking news.

She had been living a peaceful life despite having a serious illness. She used to laugh and enjoy her life, without knowing that a serious disease was already present in her body.

But one day, by coincidence, she underwent medical tests because she had been coughing a lot. When she received the results, she was shocked and even fainted.

She went from being a woman who loved life to becoming unhappy and depressed, and from a woman who loved laughter to becoming withdrawn. Her life changed completely because of fear, sadness, and distress.

Her experience made me wonder about the influence of psychological state on a person's ability to face illness. However, I cannot claim that her emotions caused the cancer to spread quickly, because that would require specific medical and scientific evidence about her case.

Despite chemotherapy, she unfortunately passed away, and with her were buried her joys, her sadness, and everything she had experienced.

This was a real experience that made me think: if she had never seen the test results, perhaps she would still have been beside us, laughing, even though the disease was already present in her body. This made me realize that medicines are extremely important for treating the human body, but medical treatment is not the only thing that matters. Psychological well-being and human support also deserve attention and study.

From here, my question became even bigger:

Could emotions be part of the way the human body responds to illness? And could caring for a patient's mental health help them alongside medical treatment?

Thank you very much for reading my article. I hope you will consider sharing it on the main page of the website so that I can introduce people to my thoughts, observations, and conclusions.

Thank you, and with my warmest regards,

Firdous El Marjani
Morocco