LOGICS OF NATURAL BODY SYSTEMIC DEFENSE MECHANISM TO APPROACH AND OVERCOME DISEASES FROM PHILOSOPHICAL STANDPOINT

Nwachukwu Francis Chukwuedozie*

Department of Biochemistry/Forensic Science, Faculty of Science, Nigeria Police, Kano-wudil Kano State, Nigeria.

ABSTRACT

The research rationale, advocates for harmonious relationship of treatment with body natural healing mechanism. This will serve as added advantage in recovering, after pathogenic attack. Hypothesis on common treatment option were highlighted with questions raised on the theoretic of treatments. Body natural systemic defense mechanisms to approach and overcome diseases and the associated symptom produced and due to the presence of pathogens were addressed. Inflammation, fever, pain, appetite, commensal flora, cough and sneezing were used to express logics from philosophical standpoint. Some treatments address the marker of symptoms for the presence of disease thus masking the disease, which may be consequential, inconsequence or non consequential. Symptom treatment is a wide spread treatment misconception, meant for comfort thereby entertaining the causative agent. Additionally, allergic reactions and drug resistance are adverse effect associated with palliative medication. But where palliative medication is a last treatment option, it should be based on a careful evaluation by clinician.

KEYWORDS: logics, natural immune defense, mechanism, pathogens, symptoms and signs.

INTRODUCTIONS

The human body constantly faces attack from foreign invaders that can cause infections and diseases of diverse nature. The invaders range from microbes to non living toxin. Pathogens can rapidly evolve and adapt in its effect to subdue the human body fighting capacity, in the process avoiding neutralization by the immune system. In parallel with, multiple
sophisticated defense mechanisms by human have evolved to recognize and to neutralize pathogens,[1] including the ability to adapt over time to recognize specific pathogens more efficiently.

Adaptive or acquired immunity creates immunological memory after initial response to specific pathogens, leading to an enhanced response to subsequent encounters with that same pathogen. The immune system protects human from infection with layered defenses of increasing specificity. Physical barrier prevents pathogens from entering the human body, if a pathogen breaches these barriers; the innate immune system provides an immediate but nonspecific response.[2] This innate immunity is a characteristic feature in human.[3] If pathogens successfully evade the innate response, the adaptive response which is activated by innate immunity will follow. Here the immune system adapts its response during an infection to improve its recognition of the pathogens. This improved response is kept in memory and it allows the adaptive response to mount fast and stronger attacks each time this pathogens is encountered.[4] Disorder of the immune system can result in autoimmune disease, inflammatory disease and cancer.[5][6]

In the course of the immune defensive mechanism, trying to balance out any imbalance of function as a result of pathogenic and toxic inversion, there may be several manifestations, grouped as signs and symptoms. This will subsequently cause some feeling of discomforts which in some cases may not warrant treatment of the symptoms. But may be necessary, to treat in the way that enhances the natural response. Contrarily the symptom may be treated, and subsequently masking the presence of such ill health. This situation is worrisome and calls for a better deceive decision making.

Research hypothesis
Most prescribed medications only treat the symptom: they do not help strengthen the immune system, heart, joints, intestine, liver and kidney among others.

Research questions
➢ Is cholesterol lowering drugs and blood pressure medications helping the heart? Or are they just lowering the markers that signal that the cardiovascular system is in jeopardy?
➢ Are the acid blockers and antacids fixing the digestive system, or is it just reducing the pain in the tummy?
Are the pain medications for arthritis, joint pain, or fibromyalgia fixing the problem, or are they disrupting the pain signal that the body is sending?

Are the medications for diarrhea treating the causative agent or is it mere absorbing water from the colon and leaving the microbes unaffected?

Are hormone replacement drugs balancing out the imbalance by adding hormones, or addressing what is causing the imbalance?

This question are born out the high cost involved in treating symptom and the fact that drugs have side effects too. Some can cause serious problems, not limited to skin reaction.

**Justification of the study**

Symptoms like fatigue, indigestion, craving headache, elevated blood cholesterol, blood sugar and blood pressure are nothing more than signals- letting us know that something is not functioning right. It is the duty of health care giver to address what is causing those problems. This may hopefully assist in reducing drug abuse which is on the increase.

**Significance**

This article is designed to give health and wellness tips to readers about how they body mechanism work when there is imbalance in any part of the body and the consequences in applying palliative medication inappropriately. Drug abuse is the leading cause of adverse drug reactions. Part of the cause is treatment of symptoms rather than the cause. Paracetamol is among the top abused over-the-counter drugs. The fact that if we keeping treating only symptoms, the little imbalance may grow and be of at the root of the major health complaint. The research stimulates for a more holistic and logic approach in management of health as some treatment showed a marked preference for comfort and in the process only signs and symptoms are in view.

**Delimitations of the research work**

The research did not address the importance of palliative medications and the advantages as it may apply to non curable diseases. Equally drug resistance as a result of nosophogia was not considered. Ideas were more of conception and not empirical.

**Aim:** The research is aimed at major but common mechanism of natural body defense. The objectives considered are via such mechanisms as: Inflammation, Fever, Appetite, Commensal flora and Sneezing and Coughing.
Research design

Literature search were made and information on the natural body defense mechanism following imbalance in period of inversion were collated. The distinctive feature of pattern implored by body natural defense mechanism was considered in theories and the logics of development. The mechanisms are grouped as:

Inflammation

During inflammation, the blood supply increases. A conceptualized process is that an infected area near the surface of the body becomes red and warmth. The walls of the blood vessels become more porous, allowing fluid and white blood cells to pass into the affected tissue. The increase in fluid causes the inflamed tissue to swell. The white blood cells attack the invading microorganisms and release substances that continue the process of inflammation. Other substances trigger clotting in the tiny vessels (capillary) in the inflamed area which delays the spread of the infecting microorganisms and their toxins. Many of the substance produced during inflammation stimulate the nerves, causing pains. Reactions to substances released during inflammation include the chills, fevers and muscle aches that commonly accompany infection. These symptoms in most cases attract attention and receive treatment.

Fever

Fever is another way the body uses to balance up the microorganisms. The body produces heat to deter the multiplication of harmful bacteria.[7] The body reset the internal temperature to create a less hospitable environment for pathogens to grow. Body temperature increases as a protective response to infection and injury. An elevated body temperature (fever) enhances the body’s defense mechanism, although it can cause discomfort.

The mechanism is that, brain Hypothalamus controls body temperature, fever results from an actual resetting of the hypothalamus’s thermostat. The body raises the temperature to a higher level by moving blood from the skin surface to the interior of the body, thus reducing heat loss. In theory shivering and chills occur to increase heat production through muscles contraction. The efforts to conserve and produce heat continue until blood reaches the hypothalamus at the new temperature. The new higher temperature is then maintained. Later, when the thermostat is reset to its normal level, the body eliminates excess heat through sweating and shunting of blood to the skin. Treatment geared at lowering the temperature, will annul the natural attempt of the immune system.
When antipyretic medication is given, the body temperature drops and is usually to a level suitable for pathogens to multiple. There are situation when antipyretic could be given for high fever. Fever may be a positive evidence of an active immune system, revved up and helping an array of immunological processes work more effective.

**Competing actions of commensal Flora**

Living things have within their bodies millions of microorganisms. The human body alone has over 150 trillion microorganisms. Some of these microorganisms are harmful, some harmless while others are helpful to the body. Our immune system is able to coordinate, control and direct these organisms in such a way that there is a balance between the good, healthy organisms and the harmful ones.[7] The beneficial microbes of natural flora of the body by logic may show more adaptability with better acquaintance than the pathogen. The merit in theory is to outgrow and defy the actions of the pathogens and subsequent out-and-out competition. Under normal ideal nutrition, the expectations from the natural flora are a thorough, uncompromising or unapologetic crushing force on the invaders (pathogens). The immune system does not need antibiotic to do this. So long as we eat good, nourishing which means fruit and vegetables, and allow proper detoxification of the body, with adequate rest, we remain healthy.

**Appetite**

When there is imbalance between body microorganisms, the system begins to reorganize itself, the body loses appetite. Lack of appetite is simply the body’s device to hasten recovering. The microorganisms in our body need iron to survive. When these harmful bacteria multiply in the body, immune system immediately makes adjustments to reduce the supply of iron to these bacteria. This is done by reducing the intake of food so as to starve out the pathogens that have invaded. If a sick person keeps eating, any iron in the food also feeds the microorganisms. Lack of appetite is therefore the body’s way of re-activating itself to ward off infections.[7] It is therefore wrong to force sick persons to eat. Sick persons should stay off food for a while to enhance recover from the ill-health. Eating is by this reason controlled.

**Sneezing and Coughing**

Coughing or sneezing is an automatic reflex that can rid the body of irritant. Cough is an explosive reflex that protects the lungs and respiratory passage from foreign bodies. These irritants may be potentially harmful to the body system.
Sneezing involves involuntary expulsion of air containing irritants from nose. Sneezes protect the body by clearing the nose of bacteria and viruses. It may be caused by some stimuli within the environment so as to signal the individual on the presence of possible allergen.

Cough is essentially a symptom of all forms of asthma.[8][9] Asthma in itself is an allergic reaction that is implicative of the environmental cause. Cough may be the symptom for certain infections.[10]

DISCUSSION

Body defense mechanism is a collective and systematic approach towards correcting an imbalance in any part of the body. For every foreign aggression, the human body by its evolutionary standpoint has an array of antidote to check mate the undeserving effect of the pathogens and toxins. The mechanism of organized natural body defense action against invaders and the presence of imbalance produce signs and symptoms.

Once there is imbalance in the body, the body sends signals by generating heat, shivering, vomiting, diarrhea and sweating. All these are not sickness but signals that the body is battling against toxins.[7] The most natural reaction then is to stop moving about, take a rest, stay off food and allow the process of rejuvenation to complete. With the growth of civilization, there arose new views about the human body. The human body came to be seen as a machine, which was meant to be used. If the machine is not working well, medicines are given to put it back to normal. Gradually, there came a sharp division between food and medicine.[7] Food was now regarded as a separate entity from medicine. Symptoms like fevers and diarrhea were now seen as illness, which were attacked with synthetic drugs. Modern science begins to invent more drugs to fight bacteria and infections. The emphasis shifted from prevention to cure, from pro biotic to anti biotic.

Although modern medicine has successfully battled with infectious diseases over the last fifty years through the use of powerful antibiotics, the human body seems to be worst-off for it. Many of the infections and bacteria we thought were defeated are now coming back in a more aggressive form, nowadays, infectious bacteria, such as streptococcus, staphylococcus, pseudomonas and enterococcus have become resistant to modern antibiotics. The use of antibiotics is based on the theory that microorganisms are the cause of all diseases. Science then declared war on microorganisms and invented antibiotics to fight against them. What a mistake.
Some effect of unguided treatment may cause metamorphosis of beneficial harmless microbes to harmful once. Some microbe is necessary in some synthesis of vitamin and long treatment with antibiotic may show indiscriminate effect and kill this useful once.

Inflammation, or swelling caused by an increase in fluid in the infected area, is a sign that white blood cells are on the attack and releasing substances involved in the immune response. This inflammation may also cause a fever. The increase in body heat can help kill bacteria or viruses at the site of the infection.

Fever is a common response to infection, may cause a higher body temperature that can heighten the immune response and provide a hostile environment for pathogens. A fever is the body’s way of mounting an immune response to an invading pathogen. The body has an innate nature of what needs to be done in order to heal itself. Fever is a mechanism of healing and a process mounted as a defense. By using medications to suppress fever, we may prevent the development of immunity and risk the possible complications that can arise from incorrect dosing. In my own opinion, mounting of an immune response, onset of a fever and fighting of a pathogen, leads to longer-term immunity and health. By suppressing a fever, we are suppressing the inherent ability to heat from within.

The body contains very large number of bacteria and many of those in the intestine are essential for our wellbeing. Some unnecessary antimicrobial treatment may kill some beneficial microbes in the body, and this may result in imbalance. An imbalance of the microflora in the gut can lead to disease symptoms such as diarrhea and malabsorption of nutrients. Some drug reaction can cause imbalance. Boil may occur following antibiotic use due to the development of resistance to the antibiotic used.[11]

Of pain, medication on overuse headache drug may occur in those using excessive painkiller for headache, paradoxically causing worsening pain.[12] Some headache may be as a result of withdrawal syndrome e.g. sudden stoppage in caffeine intake, may cause headache as a common side effect. This withdrawal symptom may receive treatment for comfort. But I wish to say symptoms treatments are not a necessity and in fact may be outright dangerous. This in my own opinion may mask the presence of an underlying etiology which will then be forgotten or treated with great delay.
A case in point is that of low-grade fever for 15 days or more, sometimes is the only symptom of bacterium by staphylococcus bacteria. Suppressing it by symptomatic treatment will hide the disease from effective diagnosis and treatment with antibiotics. The consequence may be severe. Again symptomatic treatment may not be exempted of adverse effect and may be the cause of iatrogenic consequence like allergic reaction, stomach bleeding nausea and dizziness.

Furthermore, Symptoms like bloating gas, reflux, and heart burnt are telling us our digestive system is not functioning properly. This can lead to poor absorption of nutrients and even deficiencies. If fatigue is the problem, could be the hormone out of whack that causes detrimental effect on the metabolism. We spend much in health care addressing symptoms. Treating the marker of disease is not in synonym with treating the disease.

As the presence of disease and body’s organized reaction towards the presence of disease and ill health produces symptom, the unilateral treatment of symptom may produce unacceptable yet unpleasant realistic effects.

Treating symptom a times may be a recipe for disaster because treatment does not translate to healthiness. Symptoms are clue to imbalance, once we find those imbalances and correct them, the symptoms will go away.

CONCLUSION

The best medicine is that which would not tamper with the immune system’s work but would allow it to do its work. But alas we take medicines to suppress a fever and to improve appetite when sick. The result is that the infection will linger on for a longer time. One of the greatest mistakes of modern medicine is the creation of a dichotomy between food and medicine. While antibiotics fight against harmful bacteria, they also destroy the good ones, leaving the immune system weaker than before. It is no wonder that the most deadly diseases of today are those that arose due to the weakening of the immune system. Such illness is cancer, HIV/AIDS, Gonorrhea, syphilis and general ill health. The time has come for us to re-examine the so-called scientific theories, we accepted without questioning and learn to tap from the abundant wisdom available in nature. What we need to correct is imbalance. The way convectional medication is practiced today is like trying to fix a car by listening to the noises it makes instead of looking under the hood. We need functional medicine. Bringing balance is paramount and not treating symptoms.
REFERENCES


4. Meyer Gene Immunology – Chapter One Innate (non specific) Immunity” Microbiology and Immunology On-Line Textbook. USC School of Medicine, 2006.


10. Irwin R. S. Introduction to the diagnosis and management of cough: ACCP evidence-based clinical practices guidelines chest, 2006; 129(suppl 1): 2ssa -27s.
