

Report about pneumonia

[Business](#), [Management](#)



Pneumonia Name: Course: Institution: Instructor: Date: Pneumonia

Introduction Pneumonia is known to be a disease, which infects the lungs and be caused a number of microorganisms including viruses, bacteria, fungi and parasites.

According to Micaela (2011), pneumonia occurs because of viruses such as influenza viruses, adenoviruses, rhinovirus and respiratory syncytail virus. A person may be affected by pneumonia through the bacteria and viruses living in body parts such as nose, sinuses, or mouth and may spread to the lungs. In addition, breathing in some of the germs directly to the lungs may cause pneumonia in a person. A human's immune system in most cases prevents bacteria from harming or infecting the lungs. This thus implies that in pneumonia, bacteria multiply in the lungs as the body attempts to fight off the disease (Rello, 2008). Hence, this reaction to bacteria is always referred to as inflammation. When such a reaction happens, the lungs become less elastic and hence not able to take in oxygen throughout the blood or even worse still remove the carbon dioxide from the blood, as it is required since the air sacs are filled with liquid. Because the alveoli is not able to function properly, an individual's lungs do not extract oxygen form the air hence leading to breathing difficulties which is noted to be among the common symptoms of the pneumonia.

Other common symptoms of pneumonia include coughing which leads to chest pain, mild or high fever, headache, confusion particularly in old age, sweating excessively, clammy skin, fatigue, low energy and loss of appetite, and vomiting among others (Yamaya, 2001). The incubation period of pneumonia depends on the type of virus or bacteria leading to the infection.

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For instance, influenza is likely to occur after two to three days of a cold or even a sore throat.

However, within two to three weeks, any type of bacterial pneumonia is likely to be cured with appropriate treatment. Pneumonia is a secondary infection because some individuals are able to contract it after inhaling a virus or bacteria. This could be possible when the infected people cough or sneeze thus when a person inhales such air, he or she gets the disease. However, in case a person has suffered from flu or cold, he or she may contract the disease as a secondary infection without being exposed to other infected organisms.

Three layers of defense the body possesses to fight pneumonia. Skin as the first body defense layer. According to Hoare ((2006), a person's body encounters attack from foreign invaders that leads to disease and other infections. Lucky enough, the body has various defenses both externally and internally that helps keep away harmful invaders from entering and causing danger. The first layer of defense the body possesses to fight pneumonia includes skin which is the largest organ in human body. Research reveals that the skin has the potential of providing both the physical and chemical defense against the external world. This is achieved by the skin creating a protective layer that wraps around the body, protecting blood vessels, muscles, nerves, organs and bones.

A certain enzyme that helps in killing the bacteria is produced anytime there is a cut or tears in the surface of the skin to avoid entrance for any infectious agents. Skin can help fight pneumonia by regulating body temperature and

preventing the disease agents of bacteria and virus from entering the body. Phagocyte as a second layer of body defense A second layer of defense that bodies possess to fight pneumonia includes phagocyte, which according to Hoare (2006) is an immune system defense function. Phagocyte is a cell that ingests and kills invaders.

The white cells are known to move through out the blood stream awaiting chemical signals of invasion and inflammation. Therefore, the phagocytes move to area of infection once the signal has been send. With this defense, the body is able to fight pneumonia because the bacteria causing the disease are always dealt with immediately through the process of phagocytosis. It is also noted that the temperature in a person is likely to increase as a way of providing protection to the infection through fever. Fever elevates the temperature of the body raising its defense mechanism to work. For instance, fever leads to production of heat through contraction of muscles.

Inflammation tends to direct the body's defense to attack and destroy the invaders and start the process of repair. Antimicrobial helps in killing or inhibiting the growth of the microorganisms such as bacteria and viruses that causes pneumonia. Therefore, by using antimicrobial drugs, microbes are destroyed or prevented from growing. Lymphocytes Lymphocytes are type of white blood cells and are of two types inclusive of type B and T cells. B and T cells act as the killers of any invaders (Yamaya, 2001). This is the third layer the body possesses in fighting pneumonia.

For instance, T cells provide proteins that stimulate the B cells and the death of the body cells to prevent any infections such as pneumonia. According to research, T cells releases chemical that cause specialized B cells referred to as phagocytes that provide responses in the body that creates environment inhospitable for any infection. Fever being a response to phagocytes of the body, increased temperatures fights infections by destroying invaders.

Treatment Research shows that if the right treatment is taken, various types of pneumonia could be cured in almost two to four weeks hence this implies that its mortality rate is very low.

Sometimes viral pneumonia may take long time to be cured whereas mycoplasmal pneumonia may last for four to weeks to be cured completely (Godfrey, 1996). For the most pneumonia, antibiotics are used in treating the disease especially if it is caused by bacteria. Antibiotics are prescribed according to the age of the person, disease symptoms and there severity. Research shows that, a good number of patients suffering from pneumonia need not to be hospitalized because they can be treated safely at home, whereas those who are hospitalized take the shortest time possible before they could be released.

Patients with pneumonia are always advised to take plenty of liquids to avoid dehydration. They are also not supposed to use cough medicines because by coughing, a person is able to loosen mucus and get rid of extra sputum but incase the doctor advises, then a small amount should be taken with plenty of rest in order to relieve the cough (Douglas et al., 2004). Chest therapy is done as part of the treatment. In treating viral pneumonia, antiviral

medication is always recommended. Pneumonia could be treated or even prevented through vaccinations especially of young children. For instance, young children are always immunized against haemophilus influenza and whooping cough especially at the age of two months. Currently, vaccines are provided against the pneumococcus organism, which is known to be the common cause of bacterial pneumonia.

Status of pneumonia in Australia today The major cause of morbidity and mortality today in Australia is caused by community-acquired pneumonia. In Australia, influenza has decreased and the statistics are showing that the infection continues to reduce daily compared to the third world countries, which continue to experience high rates of pneumonia. For instance, the recent data shows that there were about one thousand five hundred pneumonia related deaths per 1, 000, 000 people; below the previous data, which was about one thousand seven hundred deaths in every million people (Bartlett, 2000). Therefore, the statistics shows that the rate of pneumonia is decreasing in Australia compared to the third world countries. In order to maintain this trend, there has to be awareness creation, which will help in educating people on this issue.

Impacts of pneumonia in Australia Pneumonia is known to have negative impacts such as deaths. Pneumonia is known to be the major cause of deaths among all age groups but is noted to be high to children under the age of five years. The current prescription of the infection has brought extra responsibility. For instance, treatment of infections especially in the respiratory tract is one of the major indicators of the use of antibiotics in

Australia (Australian Medical Association, 2010). However, the rate of antibiotics resistance in the people is on the increase at a very high rate even though there is release of new drugs which are likely to provide temporary relief, every person has the duty or is accountable for the ever growing progression towards an age where it will be hard to treat the infection. However, this progression rates can be reduced if people become adherent to antibiotics.

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