

Hantavirus pulmonary syndrome essay sample



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Since more than a decade, an infectious disease has threatened and caused deaths to hundreds of lives in United States alone that poses severe potentials of progressing rapidly while beginning from usual influenza symptoms and resulting in mortality. (Chin, 2000) In the year 1993, residents of southwestern United States confronted occurrence of a series of mysterious illnesses that resulted in the identification of Hantavirus Pulmonary Syndrome. (Nichol, 2001)

During this confrontation, shortness of breath and usual respiratory issues were some of the problems confronted by a number of residents that ended up with their deaths. In the result, healthcare organizations carried out investigations to identify the causes and risk factors related to such syndrome. Until now, no significant treatment is available for Hantavirus Pulmonary Syndrome, and thus, a vital role is played by healthcare and nursing to diagnose the syndrome and prevent it from occurrence in the future as well. In specific, this paper will discuss the role of nursing that has been played in the treatment, diagnosis, and factors related with Hantavirus Pulmonary Syndrome.

Deer mouse and some other types of rodents are considered the major carriers that cause Hantaviruses in humans. Rodent urine and waste material infect air with virus that is the primary cause of Hantavirus infection in humans. Studies have noted that residents of rural areas of the United States are more likely to confront such syndrome, as compared with urban areas. As earlier mentioned that very limited options are available for treating HPS, a vital role is played by nursing and healthcare in carrying out different tests available for identification of this syndrome. Specifically,

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current medical advancements are unable to find any cure for HPS; however, it is indicated that early recognition of this syndrome may allow patients in recovering from the disease.

In this regard, supportive therapy is one of the limited options that have been very significant in treating HPS with its early recognition. As earlier mentioned, breathing problems are usually experienced by patients, and thus, immediate treatment in ICU is considered the most effective way to provide breathing to patients through different medical ventilation methods. One of the innovative methods of providing ventilation is through intubation that allows a patient to breathe after placement of breathing tube through nose or mouth. Blood oxygenation is another available option that has facilitated significantly in treating HPS in severe cases. (Stanhope, 2006)

During such process, an adequate amount of oxygen is supplied to the body through extracorporeal membrane oxygenation method that involves a machine for the removal of carbon dioxide and blood pumping in a continuous manner. These two options have been very significant in treating HPS in absence of any cure for such syndrome. In addition, HPS is mostly diagnosed by a series of blood tests to identify specific antibodies that are necessary to defend against pathogens. Moreover, due to a number of symptoms similar to other diseases, an effective and continuous nursing assessment plays a vital role in treating the syndrome.

Until now, the paper has discussed some of the healthcare options that are available to treat patients infected with Hantavirus Pulmonary Syndrome. Now the paper will endeavor to discuss some of the steps that can be taken

to prevent occurrence of such infectious disease in other parts of the globe, as Canada and some countries of South America has already reported of similar occurrences. (Durham, 2002) Rodents are the primary cause of HPS. Although specific category of rodents are responsible for this syndrome; however, experts have advised to take every possible step that can be taken to prevent contact with any rodents. In specific, New World rodents of family Muridae are considered the basic host of HPS that are found in more than 400 species in northern and southern rural parts of American continent. (Stanhope, 2006)

Another major cause of HPS is deer mouse that is found in a number of rural areas of the United States. It is indicated by studies that a number of other parts of the globe might have been carrying these rodents, and thus, it is essential that steps should be taken to minimize human exposure with infected rodents as much as possible. A number of cases of HPS have been related with recreational exposure to rodents, and thus, pest-control employees, tourists, laboratory workers are more likely to be infected by such syndrome. In this regard, contaminated areas should be cleaned up with disinfecting solutions that may help in preventing such diseases.

In other words, similar precautions should be taken by residents of other parts of the globe, in order to prevent occurrence of Hantavirus Pulmonary Syndrome in global population that may result in serious consequences. Conclusively, the paper has discussed some of the causes and risk factors associated with occurrence of Hantavirus Pulmonary Syndrome. Until now, no cure or vaccines are available to treat this infectious disease, and thus, a healthcare facility or physician should be contacted immediately in case of

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mentioned symptoms. Steps are being taken and studies are being carried out to eliminate any causes of such disease; however, it is better to prevent factors that may cause infection. Lastly, it is hoped that the paper will be beneficial for students, teachers, and experts in better understanding of the topic.

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