








SHORT COMMUNICATION

Care management and relapse prevention for people with dengue fever

Gestión del cuidado y prevención de recaída en las personas con dengue

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ABSTRACT

We understand care management as the care of the welfare of patients in practice, the objective aims to improve the hospital management of patient care where in a group of infectologists participate, a multidisciplinary team that are responsible for the treatment, monitoring and diagnosis of the disease. Apply the risks of relapses, such as using repellents, not collecting water, throwing away stagnant water, staying away from places with plants. Although there is no evidence and application of exact measures to prevent relapses of dengue virus, care interventions will depend on each patient.

Keywords: Health Management; Dengue; Nursing; Care and Prevention; Relapses.

RESUMEN

Comprendemos la gestión de cuidado como el cuidado del bienestar de los pacientes en la práctica, el objetivo pretende mejorar la gestión hospitalaria del cuidado de paciente donde en un grupo de infectólogos participa, un equipo multidisciplinario que son responsables del tratamiento seguimiento y diagnóstico de la enfermedad. Aplicar los riesgos de recaídas, como usar repelentes no recolectar agua, botar el agua estancada, mantenerse lejos de lugares de plantas. A pesar de no existir evidencias y aplicación de medidas exactas de prevención de las recaídas del virus del dengue, las intervenciones del cuidado dependerán de cada paciente.

Palabras claves: Gestión de Salud; Dengue; Enfermería; Cuidados y Prevención; Caídas.

INTRODUCTION

Care management can help reduce relapse in individuals by complementing it with appropriate control and surveillance measures.⁽¹⁾ However, most South American countries have not implemented this strategy.⁽²⁾ Relapse is a consequence of weaknesses in the immune health system and inadequate attention to the virus, which can be lethal within seven days of retransmission.^(3,4,5)

Every year in Peru, there is a need for hospital care due to severe relapse of the disease, with a mortality rate of 2,5 %. It is known to be an epidemiological warning disease.⁽⁶⁾ Furthermore, during the recent outbreak of relapses in the northern region of Peru, there was an incidence rate of 13,48 per 100 000 people with dengue infection (National Center for Epidemiology). This increase was caused by heavy rainfall and rising rivers, which created favorable conditions for the epidemiological surge of dengue. Peru also experienced the first cases of dengue serotype 1 reinfection.^(7,8,9,10)

DEVELOPMENT

Nursing care management for dengue involves the science of caring. Nurses have observed that the development of the virus in dengue patients is characterized by increased body temperature, joint pain, general discomfort, and headache.^(11,12,13) Therefore, an infectious disease unit, consisting of a multidisciplinary team of specialists in infectious diseases, is responsible for diagnosis and treatment.⁽¹⁴⁾

Mismanagement of patient care, as reported in cases of relapse with the same infection, shows a dengue picture with worsening leukopenia and thrombocytopenia, bleeding gums or nose, bleeding under the skin, and blood in the urine during critical phases. This is because of relapses caused by the prevalence of serotypes in endemic areas, which can lead to fatal consequences.⁽¹²⁾

In Peru, the management of dengue virus transmission in hospitals has become a necessity for strategic epidemiological health intervention, although its impact on health is still unclear.^(9,10) The etiological agent of dengue is an arbovirus that causes four serotypes. The main vector of dengue is the *Aedes aegypti* mosquito, which also transmits other arboviruses. Dengue is classified into dengue and severe dengue, which include dengue hemorrhagic fever, dengue shock syndrome, and other severe forms. The most common presentation includes mild symptoms, such as fever, headache, general discomfort, nausea, abdominal pain, and skin manifestations. However, up to 80% of cases are asymptomatic. The recommended measures to prevent relapse include patient entomological isolation and, in some cases, household fumigation in areas that are breeding grounds for mosquitoes.⁽¹¹⁾

Although dengue does not share the etiological agent or viral mode of transmission, it has early stages similar to those of the disease. In a large proportion of infected individuals, the virus causes no symptoms, mild symptoms, or severe symptoms, such as fever, muscle pain, general discomfort, or bleeding. Furthermore, it has a mortality rate of over 80 % in individuals over 65 years of age with chronic conditions.⁽⁷⁾

On the other hand, the impact of dengue has a negative effect on healthcare-seeking behavior, as it delays assistance to healthcare centers due to the alert generated in society about the risks of contagion and the saturation of the healthcare system. Additionally, *Aedes aegypti* mosquitoes have peri-domestic habits, leading to reinfection, which primarily occurs within the home. Another factor is the flow of healthcare and economic resources, which can affect the informative campaigns and environmental sanitation required to control dengue outbreaks.⁽¹⁵⁾

The management of patients with dengue relapse is more complex; however, there is no conclusive evidence of additional risks. In one study, it was reported that relapses do not worsen the patient's condition; however, another study described a strong association between reinfections and decreased white blood cells, neutrophils, lymphocytes, and platelets, along with an increase in mortality. The number of cases studied was low, so it cannot be ruled out that this is a serious problem.⁽¹³⁾

However, evidence has shown that implementing and utilizing relapse risk prevention is not the only important element in providing care. Other measures are necessary to reduce hospital relapses, such as using repellents, preventing water collection, disposing stagnant water, and staying away from plant areas.⁽⁸⁾

CONCLUSION

In the context of hospital healthcare, relapse can lead to mortality or chronic health damage. Despite these facts, there is no effective evidence for the prevention of relapse or reinfection. Additionally, cases involving individuals with a history of reinfection can contribute to better patient health management. Continuity of personnel based on virus care and the identification of patient causes will allow for the improvement and implementation of preventive measures.

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