

Nipah Virus Infection: Preventive and Control Measures in Children

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Abstract

Nipah virus is a newly emerging zoonosis of paramyxoviridae family which causes severe disease in both humans and animals. The natural reservoirs are the fruit bats of Pteropus genus and pigs in different outbreaks. The virus can spread from animals to humans through either close contact or eating contaminated fruits and or from humans to humans through close contact or respiratory droplets from an affected person. An individual can show symptoms after exposure within 5-14 days with fever, headache initially to severe encephalitis leading to coma and death. Bacteremia, kidney damage and other complications are possible in severely ill patients. There is no vaccine available at present but the treatment should be focussed upon managing fever and other neurological symptoms, standard safety measures such as regular hand hygiene, using personal protective equipment and healthy eating habits to fight against infection. An overall death rate of 40 to 75% is approximated. This article throws emphasis on the prevention and control measures of Nipah virus in children.

Keywords: Nipah Virus; Encephalitis; Transmission; Fruit Bats.

Introduction

In recent past, Nipah virus caught the attention of the medical world due to outburst in southern India in 2018 [1]. It is an emerging paramyxovirus which causes severe encephalitis in humans [2]. Nipah Virus is a contagious disease which was first seen in domestic pigs during the period of 1998-1999 in Malaysia and Singapore. There is also a mark of Nipah infection in dogs, cats, goats, horses and sheep [3]. The disease was named after a Malaysian village, Kampung Sungai Nipah, where the first viral isolate was obtained [4]. According to WHO list of Blueprint diseases stated in 2018 review, there is an urgent need for fast-tracked research and development of the Nipah virus [5].

Chronology of Past Outbreaks

Numerous cases of the Nipah Virus in humans were diagnosed as Japanese encephalitis (JE) before the sequestration and identification of the newly revealed Nipah Virus. A large Malaysian farms were affected due to deforestation. As a result fruit bearing trees were reduced enormously. So the bats were attracted to the trees near the pig

farms. This resulted in the contact of the pigs to bat excretions containing the virus [4].

Outbreak in Malaysia and Singapore

There was an occurrence of the first NiV recorded in Malaysia during 1998-1999 in both humans and pigs. Out of 265 infected cases, 105 were dead. This tragedy happened in the pig farmers near Ipoh in the Kinta District of Perak, 200 km north of Kuala Lumpur. It didn't confine to the same area but also spread to the other three other major pig-rearing areas in Negeri Sembilan and Sungei Buloh in Selangor and they were the largest in South-east Asia.

The number of subclinical infections fluctuated from 8 to 15 per cent. Pigs were the main cause of infection for farm and slaughter house workers those who got direct contact with live pigs, resulting in severe encephalitis among those people. There was also an outbreak of infectious respiratory and neurologic disease in domestic pigs, outwardly after spill over of virus from Malaysian bats. The calamity not only affected Malaysia but also Singapore and 11 abattoir workers were affected with one death due to direct handling of pigs from infected farms during March, 1999. Majority of the

satisfying career. The student needs relationships, both inside and outside of the organization and relationships across diversity, such as gender, race, age and social class. Building a diverse network of relationships will make students feel empowered and confident. Counselor can be a powerful ally for students by helping them build their network of contacts which includes the counselor, other faculty acquaintances, and off-campus people met through internships, or meetings of professional societies. One way to increase counselor awareness of important student issues and develop rapport is to work with student organizations and initiatives. This will also increase counselor accessibility to students. Referrals can also be made to community resources regarding personal issues, financial assistance or specialized treatment programs, etc.

Conclusion

Counselors work in areas that involve personal and interpersonal issues, which include concerns related to finding meaning, adjustment, and fulfillment in mental and physical health and the achievement of goals in the college. Thus the role of counselors is indispensable in the rapidly advancing world of technology. Teacher counselor and the student can be mutually beneficial, but counseling process requires time, energy and commitment. Counseling offers numerous resources with the purpose of enhancing students' personal, academic and career development. Counselors who utilize different techniques, effect definite behavioural changes and modifications in the students.

References

1. Allan, J. F., McKenna, J., & Dominey, S. Degrees of resilience: profiling psychological resilience and prospective academic achievement in university inductees. *British Journal of Guidance & Counselling*, 2003;42(1):9-25.
2. Cohen, G.E.; Kerr, B.A. Computer-mediated counseling: An empirical study of a new mental health treatment. *Computers in Human Services*. 1998;15(4):13-26. doi:10.1300/J407v15n04_02(https://doi.org/10.1300%2FJ407v15n04_0).
3. Corey G. *Theory and Practice of Counselling and Psychotherapy*, (2nd edition) Montercycal Nigeria: Brooks Co. 1990.
4. Corey, C. *Theory and practice of counselling and psychotherapy*. (7th Ed.) Belmont, CA. 2005.
5. Etzel E. F., A. P. Ferrante, Pinkney, W.J. Allan, J. F., McKenna, J., & Dominey, S. *Counseling College Student-Athletes: Issues and Interventions*, Better World Books: West Reno, NV, U.S.A. 2013.
6. Gordon, W. Miller. 1968 Students' needs and counseling. *University of London Institute of Education Wiley online Library Higher Education Quarterly*, Volume 22, Issue 4 online 2007 August Pages 456-465 <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1468-2273.1968.tb00300.x>.
7. Joshua C. Watson *Overcoming the Challenges of Counseling College Student Athletes* 2003 EDO-CG-03-01 ERIC Digest ERIC/CASS, School of Education, University of North Carolina at Greensboro, Greensboro, NC 27402.
8. Karen McKenzie, Kara R. Murray, Aja L. Murray & Marc Richelieu 2015, *British Association for Counselling and Psychotherapy Research*, 2015;15(4):284-88, doi: 10.1002/capr.12034.
9. Kolo F.D. *Conditions, Techniques and Skills for an Effective Counselling Process*. JOS: Jofegan Associates. 1997.
10. Nwadinigwe I.P. and Anumonye F.O. *Guidance and Counselling for the Expectational Counselee: A Descriptive and Developmental Approach*. Lagos, Charow and Sons. 1999.
11. Thompson, R.J. *Developing fully rounded individuals*. *University and College Counselling*, 2014 May.pp.11-13. First published: 21 April 2015 <https://doi.org/10.1002/capr.12034>.