

Survey about awareness of chicken pox among biology students

Abstract

Objective of the present study was to judge awareness about chicken pox among students. Views of biology students about chicken pox were taken in Bahauddin Zakariya University. Chicken pox is a viral infection that can spread through interaction. This infection mostly occurs in people with weak immune system or having no vaccination against disease. Chicken pox vaccine is also available, but it has some effects in patients. Vaccinated people may develop redness, swelling or mild pain. During complications, fluid filled blebs and rash can cover the whole body. This is a mild disease but complications in it lead to death. It was concluded from survey about awareness of chicken pox that most of the subjects knew about chicken pox and its medication. But the subjects were unaware about the contagion of chicken pox that it can spread through touch.

Keywords: chicken pox, viral infection, varicella zoster virus, varicella vaccines, fluid filled blebs

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Introduction

Chicken pox, also called as varicella, is a viral infection that causes small, fluid filled blebs. This disease occurs due to virus named as Varicella zoster virus. Varicella virus is the smallest virus with the diameter of 180–200 nm approx. Varicella can be transmitted through direct touch, through inhalation of virus particles. Chicken pox is highly transmittable to those people who have not vaccine against it. Vaccine is the best way to keep safe from chicken pox and from serious complications.¹ There are two vaccines for varicella virus names as Varilrix and Varivax. Both these vaccines are highly safe and highly immunogenic against the viral infection. There are also adverse effects of vaccine but these were the rare cases. After 10 to 21 days, this infection appears and rash is the indication of this infection. The signs of chicken pox include loss of appetite, headache, and fever. There is a chance of rash, spots, and blisters, clouding and healing. During serious conditions, rash can cover the whole body and causes serious inflammation in eyes, throat and mucous membrane. Chicken pox spread through coughs or sneezes.² Chicken pox is an abnormal functioning of body but serious complications in it often lead to death. The complications in chicken pox include bacterial infection to skin, joints and soft tissues, pneumonia, shock syndrome and encephalitis. High risk of infection is in newborn babies, grown person, and people having weak immune system. Weak system of immunity may be due to medication, cancer, or chemotherapy. There is no cure for chicken pox but the only thing is vaccine against it. This vaccine prevents 98% people from infection. Objective of the present study was to judge awareness about chicken pox among students.

Materials and methods

Views of biology students about chicken pox were taken in Bahauddin Zakariya University. Feedback form was done to evaluate awareness of chicken pox. Different questions were asked in feedback form:

- Is chicken pox a viral, bacterial, fungal, genetic or a metabolic disease?
- Then occurrence rate of chicken pox was estimated. It was

asked that they, their family member, relative, neighbor or friend suffered from this infection or not?

- Later, we asked that either this infection spread through contact or blood transfusion or transmitted from parents to offspring?
- Views of subjects were estimated about retrieval of infection that either this infection may be remedied by medicines, surgery or there is no need of medication?

Results and discussion

Survey about awareness of chicken pox among biology students are given in Figures 1–4. We asked to subject about awareness of chicken pox. About 98% subjects answered that chicken pox was a viral disease and subjects were sure about that it was not a bacterial disease and not a disease due to fungi. Most of the subjects disagreed that it was not a genetic or metabolic disease. About 41% subjects got this disease and 50% of their family members, relatives, and friends were victim of chicken pox. We asked to subject about contagion of chicken pox. About 80% of the subjects disagreed with that it didn't spread through contact or blood transfusion and from parent to offspring because it was not a genetic disease. Genetic disease inherited from parents to offspring. We got views about cure for chicken pox. About 87% subjects agreed that it can be treated through proper dose of medicine. But 98% subjects disagreed that chicken pox couldn't be treated through surgery. The subjects were also disagreed with that there was no need of treatment for chicken pox. Questionnaire based studies have given an important advancement in recent researches.^{3–10} Chicken pox is an infection that occurs globally. Before vaccination, the birth rate and death rate were equal but immunization had decreased the %age of death rate in US. In 1990, the deaths due to this infection were 8900 globally but in 2015, it decreased to 6400. The death rate due to this infection is about 1 in 60,000 people. World Health Organization calculated in 2014 that approximately 4.2 million complications due to chickenpox leading to hospitals and 4200 deaths globally. Beth F. Kochin, Jingzhou Liu, Yonas I, did a model based on game theory epidemic that they applied to USA and Israel that had vaccination survey and treatment fee. They observed that by increase in age can increase the problems that can reverse the relation of Nash and utilitarian vaccine.¹¹

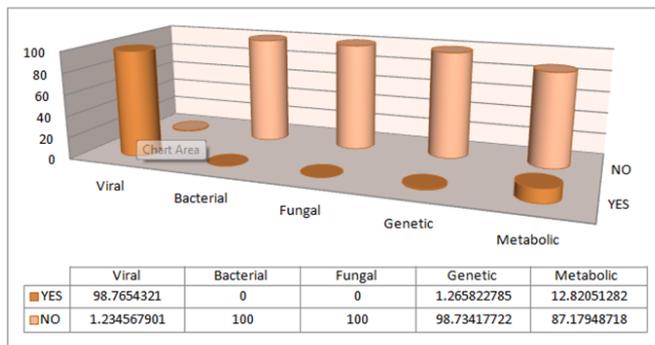


Figure 1 Questionnaire to estimate understanding about etiology of Chicken pox.

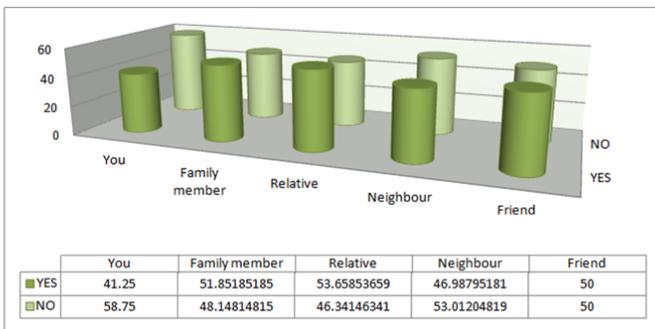


Figure 2 Questionnaire to estimate views about occurrence of Chicken pox.

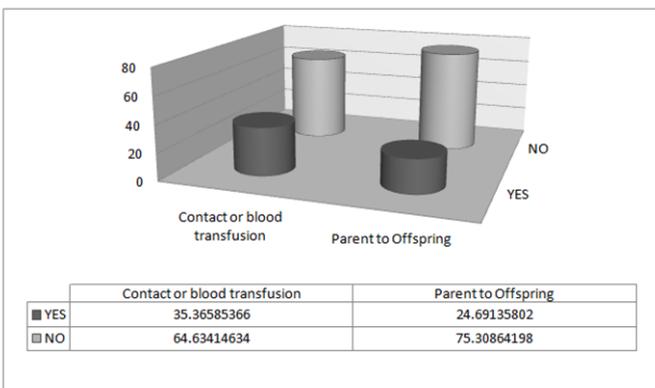


Figure 3 Questionnaire to estimate views about spread of Chicken pox.

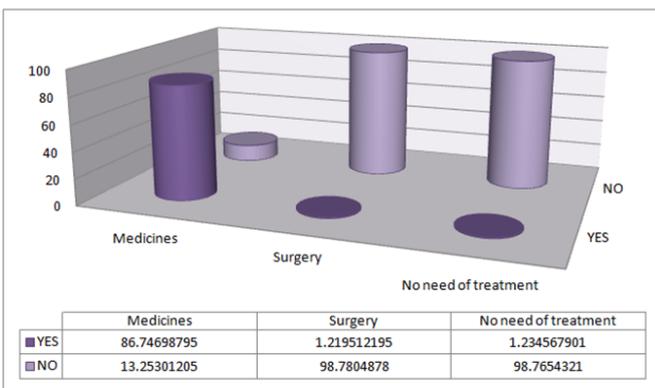


Figure 4 Questionnaire to estimate views about retrieval for Chicken pox.

Conclusion

It was concluded from survey about awareness of chicken pox that most of the subjects knew about chicken pox and its medication. But the subjects were unaware about the contagion of chicken pox that it can spread through touch.

Acknowledgment

None.

Conflicts of interest

The author declares there is no conflict of interest.

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