



Awareness on rabies among dental students

Subaraman, Dhanraj Ganapathy*, Keerthi Sasanka

Department of Prosthodontics, Saveetha Dental College and Hospitals, Saveetha Institute of Medical and Technical Sciences, Chennai, Tamil Nadu, India

Article History:

Received on: 10 Jul 2020
Revised on: 05 Aug 2020
Accepted on: 17 Aug 2020

Keywords:

Rabies,
awareness,
dental students

ABSTRACT

Rabies awareness in dental students is very important and is very important in creating effective preventive measures in public. Rabies is a fatal viral disease that can infect all the mammals, but dogs are the main source of human infections. To evaluate the knowledge and awareness of rabies among dental students. This was a questionnaire-based observational cross sectional type of study. The study population consisted of dental students from Saveetha Dental College. A self-designed questionnaire of 10 questions was framed based on the knowledge and awareness of rabies given the dental students using an online survey mode. The survey contained a set of 10 questions eliciting awareness about rabies. The responses were collected and analysed. 83% of students were aware that the rabies is fatal once the symptoms appeared. 74% of students were aware that the rabies is a viral disease. 68% of students were aware that the rabies is primarily transmitted through saliva. 69% of students were aware that rabies is more common in dogs. 41% of students were aware of the incubation time. 73% of students were aware of the symptoms of rabies. The study concluded that the knowledge on the awareness of rabies among dental students is moderately adequate.



*Corresponding Author

Name: Dhanraj Ganapathy
Phone: 9841504523
Email: dhanrajmganapathy@yahoo.co.in

ISSN: 0975-7538

DOI: <https://doi.org/10.26452/ijrps.v11iSPL3.3037>

Production and Hosted by

IJRPS | <https://ijrps.com>

© 2020 | All rights reserved.

INTRODUCTION

Rabies awareness in dental students is very important and is very important in creating effective preventive measures in public. Rabies is a deadly sickness that can contaminate all the warm-blooded creatures, yet hounds are the principle wellspring of over 99% of human diseases (Sudarshan et al., 2007). Rabies is recorded as a disregarded tropical disease which has a yearly death rate of 59,000

people annually, mainly in Asia and Africa. Once the manifestations show up, death is inevitable (Sudarshan et al., 2007).

Rabies virus is a zoonotic virus, which means it very well may be spread from creatures to people, most generally spread by a nibble wound. When the contaminated creature's spit enters the body, the virus starts to taint nerve endings and afterwards spread to the focal sensory system (Parviz et al., 2004; Sudarshan et al., 2007).

The virus that causes rabies is a solitary abandoned RNA virus having a place with class Lyssavirus of the family Rhabdoviridae. This sort of virus causes intense viral encephalitis, which is consistently fatal (Sudarshan et al., 2006). Immediate twisted cleaning with cleanser and water after contact with rabies tainted creature can spare lives. Anti-Rabies Vaccine ought to be directed to all Category II and Category III pooch chomp cases intramuscularly at 0, 3, 7, 14, 28 days following canine nibble (Dean et al., 1963). India is additionally a

rabies endemic nation, an expected 17.4 million animal bites happen yearly. Around 20,000 human rabies deaths happen in India each year (Wilde, 2007).

In a few regions, mindfulness about rabies among human services laborers and open has been reported to be deficient and learns about mindfulness and treatment looking for conduct are recorded broadly and not many have been started and directed to know the information about the inoculation plan among hound nibble cases in India. Hence this study was done with the aim to evaluate the knowledge and awareness of rabies among dental students.

MATERIALS AND METHODS

This was a questionnaire-based observational cross sectional type of study. The study population consisted of dental students from SaveethaDental College. A self-designed questionnaire of 10 questions was framed based on the knowledge and awareness of rabies given the dental students using an online survey mode. The survey contained a set of 10 questions eliciting awareness about rabies. The responses were collected and analysed.

RESULTS AND DISCUSSION

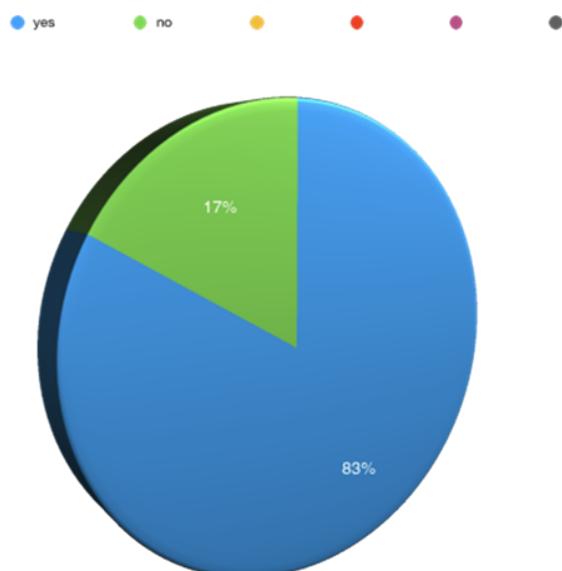


Figure 1: Opinion on fatality

83% of students were aware that the rabies is fatal once the symptoms appeared (Figure 1).74% of students were aware that the rabies is a viral disease and 26%were not aware about this (Figure 2).68% of students were aware that the rabies is primarily transmitted through saliva and 32%were not aware about this (Figure 3).69% of students were aware

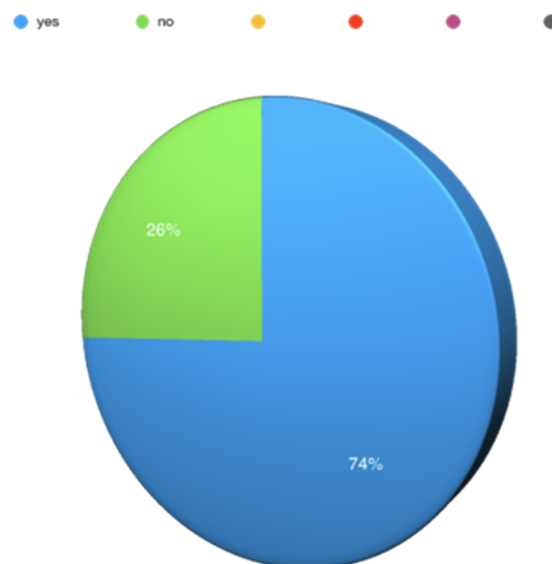


Figure 2: Opinion on etiology of virus

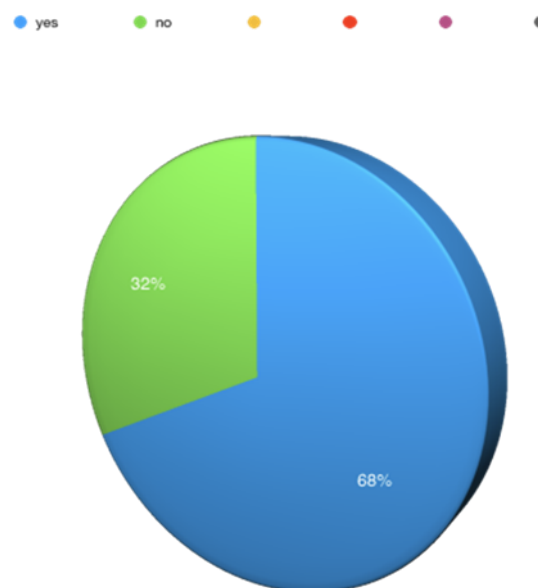


Figure 3: Opinion on virus transmission through saliva

that rabies is more common in dogs and 31%were not aware about this (Figure 4). 41% of students were aware about the incubation time remaining and were not aware about this (Figure 5).73% of students were aware about the symptoms of rabies remaining were not aware about this (Figure 6).69% of students were aware that rabies causes inflammation of the brain and 31%were not aware about this (Figure 7). 75% of students were aware that the rabies is prevented if the vaccine is given earlier and 25%were not aware about this (Figure 8).

From that study, we came to know that almost 70%of the dental students were aware about rabies.

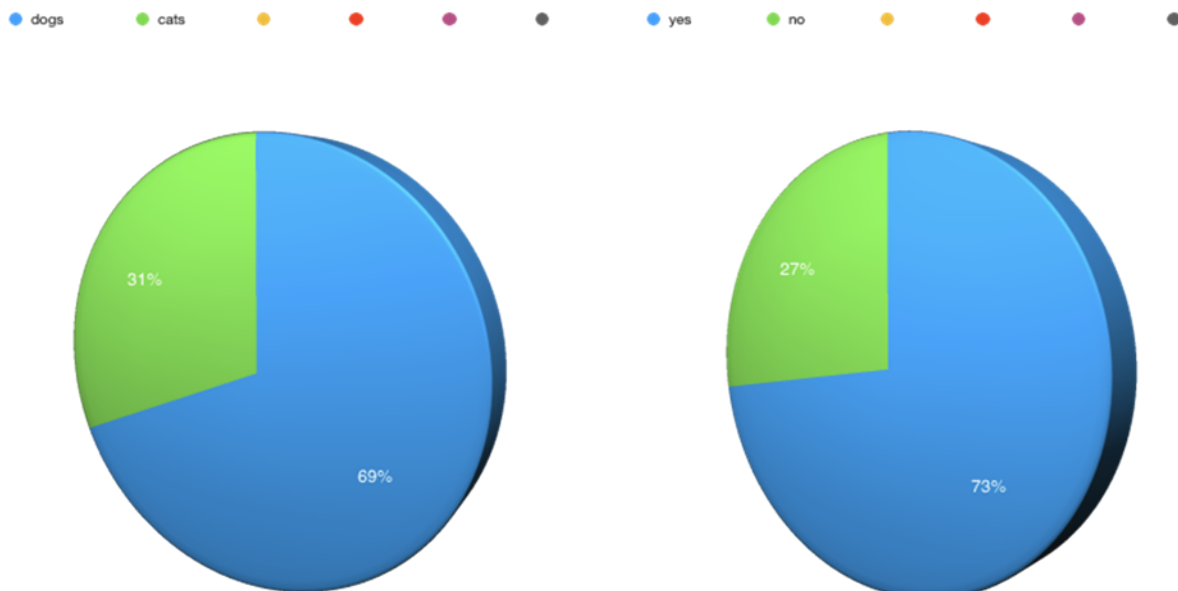


Figure 4: Opinion on animal vector for rabies

Figure 6: Opinion on symptoms of rabies

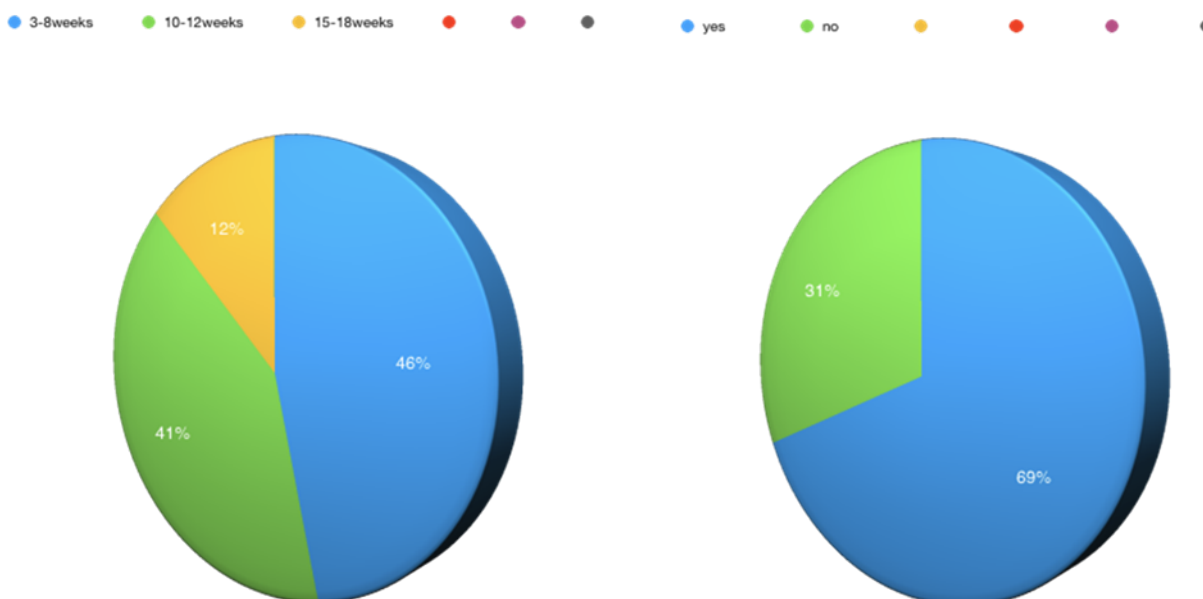


Figure 5: Opinion on the incubation period of rabies

Figure 7: Opinion on inflammation of the brain

But they are not serious about rabies. Rabies keeps on being a significant medical issue regardless of being preventable with appropriate rabies biologicals. Such nations like India, which is endemic to rabies, should look for right on time and right precautionary measures to forestall rabies. In such a manner, the investigation was completed with insignificant information and however, it is critical to do this examination in a bigger populace particularly country zones to know their insight and to sum up the outcomes.

Some referenced that meat, milk utilization and contact with the blood as a method of transmis-

sion. contact with tainted salivation through a nibble of out of control creatures seem, by all accounts, to be a typical method of rabies transmission (Wilde *et al.*, 1996). Contact of tainted salivation with a wound or mucous film can transmit the sickness and milk or meat from an out of control creature is additionally sullied and it can likewise transmit the disease (Hemachudha *et al.*, 1999). The illness isn't transmitted through blood (Dodet, 2006).

Subsequently, transmission through blood isn't possible. but in certain conditions, the transmission is through aerosols (Dietze, 2011). Washing the contaminated regions with cleanser and water can support up the endurance by 50% (Fooks and Jackson,

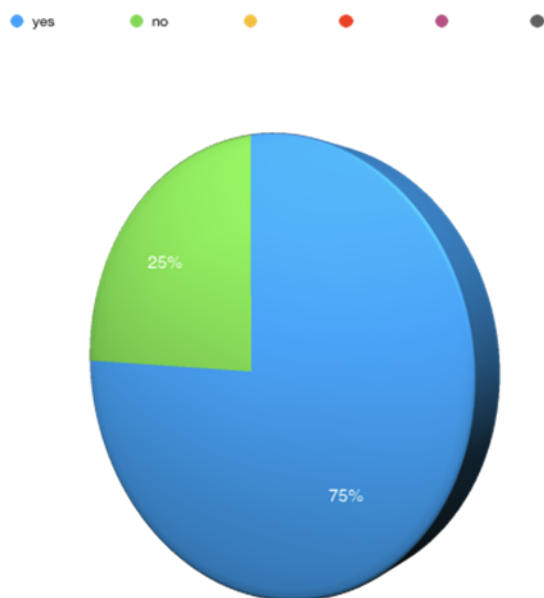


Figure 8: Opinion on vaccination

2020; Hampson *et al.*, 2015). The infection is lethal once the indications show up.

World Health Organization (WHO) suggests wound purging and inoculation inside a couple of hours after contact with a presume frenzied creature can forestall the beginning of rabies and death. Singh and Choudhary noticed that 98.6% realized that rabies is transmitted by crazy pooch chomp. This information changes as per their instructive status (Singh and Choudhary, 2005).

Cleaveland *et al.* referenced that 70% of the pooch populace ought to be immunized to accomplish crowd invulnerability and adequate inoculation inclusion to forestall transmission of rabies virus. They found that 31% of study members washed their injuries with either cleanser and water or just water and 15% followed offbeat practices (Cleaveland, 2003).

Our study shows that there was a significant level of awareness regarding the clinical symptoms of rabies. Aggression was one of the clinical signs responded by the majority of people which prove that the furious form of rabies is the most common type of rabies in animals.

CONCLUSION

The study concluded that the knowledge on the awareness of rabies among dental students is moderately adequate. Awareness about rabies can be increased by undertaking educational activities in print and electronic media and by undertaking targeted awareness campaigns. This is achievable by initiatives both by the government and non-

government organizations.

Funding Support

The authors declare that they have no funding support for this study.

Conflict of Interest

The authors declare that they have no conflict of interest for this study.

REFERENCES

- Cleaveland, S. 2003. A dog rabies vaccination campaign in rural Africa: impact on the incidence of dog rabies and human dog-bite injuries. *Vaccine*, 21(17-18):1965–1973.
- Dean, D. J., Baer, G. M., Thompson, W. R. 1963. Studies on the local treatment of rabies-infected wounds. *Bulletin of the World Health Organization*, 28(4):477–486.
- Dietze, K. 2011. Pigs for Prosperity. FAO Diversification Booklets.
- Dodet, B. 2006. Preventing the incurable: Asian rabies experts advocate rabies control. *Vaccine*, 24(16):3045–3049.
- Fooks, A. R., Jackson, A. C. 2020. Rabies: Scientific Basis of the Disease and Its Management. Academic Press.
- Hampson, K., Coudeville, L., Lembo, T., Sambo, M., Kieffer, A., Atflan, M., Barrat, J., Blanton, J. D., Briggs, D. J., Cleaveland, S., Costa, P., Freuling, C. M., Hiby, E., Knopf, L., Leanes, F., Meslin, F. X., Metlin, A., Miranda, M. E., Müller, T. 2015. ... Global Alliance for Rabies Control Partners for Rabies Prevention. *PLOS Neglected Tropical Diseases*, 9:3786.
- Hemachudha, T., Mitrabhakdi, E., Wilde, H., Vejabhuti, A., Siripataravanit, S., Kingnate, D. 1999. Additional Reports of Failure to Respond to Treatment After Rabies Exposure in Thailand. *Clinical Infectious Diseases*, 28(1):143–144.
- Parviz, S., Chotani, R., McCormick, J., Fisher-Hoch, S., Luby, S. 2004. Rabies deaths in Pakistan: results of ineffective post-exposure treatment. *International Journal of Infectious Diseases*, 8(6):346–352.
- Singh, U. S., Choudhary, S. K. 2005. Knowledge, Attitude, Behavior and Practice Study on Dog-Bites and Its Management in the Context of Prevention of Rabies in a Rural Community of Gujarat. *Indian Journal of Community Medicine*, 30(3):81.
- Sudarshan, M. K., Madhusudana, S. N., Mahendra, B. J., Rao, N. S. N., Narayana, D. A., Rahman, S. A., Meslin, F. X., Lobo, D., Ravikumar, K. 2007. Assessing the burden of human rabies in India: results

- of a national multi-center epidemiological survey. *International Journal of Infectious Diseases*, 11(1):29–35.
- Sudarshan, M. K., Mahendra, B. J., Madhusudana, S. N., Narayana, D. H., Rahman, A., Rao, N. S. N., X-Meslin, F., Lobo, D., Ravikumar, K. 2006. An epidemiological study of animal bites in India: results of a WHO sponsored national multi-centric rabies survey. *The Journal of Communicable Diseases*, 38(1):32–39.
- Wilde, H. 2007. Failures of post-exposure rabies prophylaxis. *Vaccine*, 25(44):7605–7609.
- Wilde, H., Sirikawin, S., Sabcharoen, A., Kingnate, D., Tantawichien, T., Harischandra, P. A. L., Chaiyabutr, N., de Silva, D. G. H., Fernando, L., Liyanage, J. B., Sitprija, V. 1996. Failure of Post-exposure Treatment of Rabies in Children. *Clinical Infectious Diseases*, 22(2):228–232.