



Research Article

**KAP SURVEY AMONG DENTAL PRACTITIONERS ON THE ORAL  
MANIFESTATION OF MEASLES**

**Monica antony<sup>1</sup>, Dhanraj<sup>2</sup> and Suresh Bhat<sup>3</sup>**

<sup>1</sup>I BDS, Saveetha Dental College and Hospitals, Poonamallee High Road, Chennai-77

<sup>2,3</sup>Department of Prosthodontics, Saveetha Dental College and Hospitals,  
Poonamallee High Road, Chennai-77

**ARTICLE INFO**

**Article History:**

Received 18<sup>th</sup> November, 2016

Received in revised form 9<sup>th</sup> December, 2016

Accepted 4<sup>th</sup> January, 2017

Published online 28<sup>th</sup> February, 2017

**Key words:**

1. Measles
2. Dental practitioners
3. Knowledge
4. Awareness

**ABSTRACT**

**Background:** Measles is a highly contagious, viral infectious disease affecting mainly children and young adults. It is characterised by high fever, maculopapular rash, keratoconjunctivitis and pathognomic oral koplik spots. Complications with measles are relatively common, ranging from mild complications such as pneumonia. Children are immunised against measles at 12 months. The vaccination is generally not given before this age because such infants respond inadequately to the vaccine due to an immature immune system.

**Aim:** To view the various symptoms, signs, treatments and complications faced by the dental practitioners while treating patients affected with measles.

**Objective:** To view how the symptoms and signs may vary from patient to patient and how the dental practitioners overcome these situations.

**Methodology:** This was a survey based study, done using an online form, surveyPlanet. The survey was circulated among the oral practitioners of Bahrain and 100 of them filled the forms. The obtained results were tallied and evaluated.

**Results:** From the survey conducted it is evident that the dentists of Bahrain are not exposed to a lot of measles patients and are hence not very confident of the treatments and hence the complications.

**Conclusion:** Even though patients with measles approach a general physician usually there may be chances that a dentist recognises the symptoms at the initial stage. More campaigns and conferences can be held to give more knowledge to the dental practitioners. Clinical records of previous patients should be maintained so that they can be used as references. This will help spread awareness among the practitioners.

© Copy Right, Research Alert, 2017, Academic Journals. All rights reserved.

**INTRODUCTION**

Measles, or rubeola, is a viral infection of the respiratory system. Measles is a very contagious disease that can spread through contact with infected mucus and saliva. An infected person can release the infection into the air when they cough or sneeze.(1) Since there exists a vaccine against the disease, it is nowadays not as common as it used to be. However, vaccination compliance has decreased dramatically, and therefore measles still produces outbreaks and can become dangerous in various circumstances [1]. Not only for that reason is it important to recognise the clinical presentation in an early stage.(2) Measles, or rubeola, is a viral infection of the respiratory system. Measles is a very contagious disease that can spread through contact with infected mucus and saliva. An infected person can release the infection into the air when they cough or sneeze. The measles virus can live on surfaces for several hours. As the infected particles enter the air and settle on surfaces, anyone within close proximity can

become infected(8). Drinking from an infected person's glass, or sharing eating utensils with an infected person, increases your risk of infection. Measles is a leading cause of death in children. Of the 114,900 global deaths related to measles in 2014, the world health organisation reported that most of the victims were under the age of 5.(1) Overall, it was found that an increase in student knowledge was associated with increased apprehension related to treating these patients. However, the more apprehensive they were, the more they engaged in appropriate professional behaviour. Educating future health care providers about the treatment of patients with infectious and communicable diseases can potentially increase the students' apprehension/negative attitudes concerning providing care, while at the same time increasing appropriate professional behaviour during their education. Addressing students' apprehensions might be a crucial moderator that will determine whether they will provide the best possible care for these patients in their future professional lives.(5)

This study is aimed to determine knowledge, attitude and practice on oral manifestations among dental practitioners on measles(3)

### MATERIALS AND METHODS

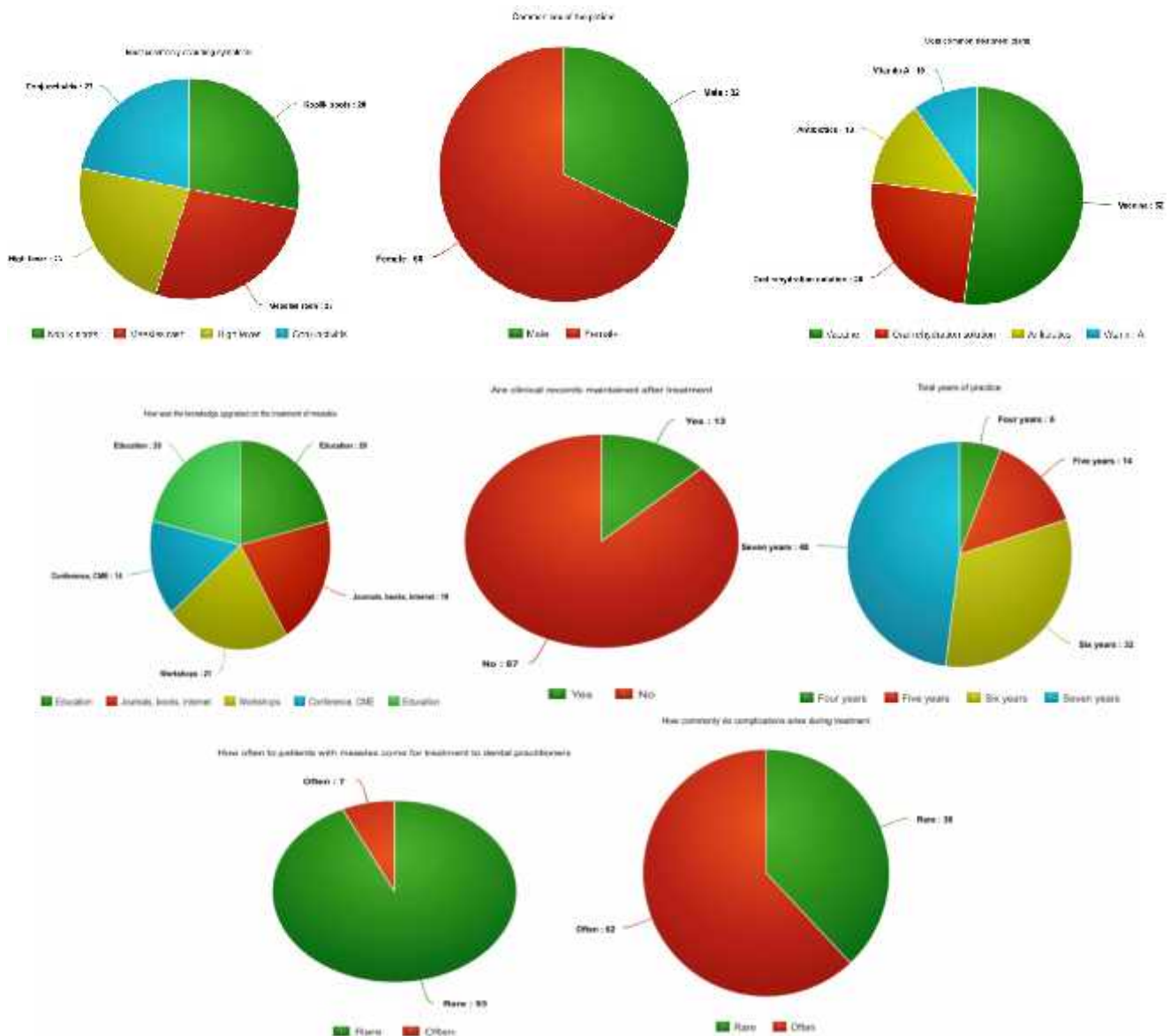
The survey was taken among dental practitioners of amh hosp ital and smile dental clinic, kingdom of bahrain. Thesurvey in volved 100 dental practitioners and their knowledge and attitu de towards the disease was asked.

The questions were asked to test their knowledge on the disease, their awareness on the consequences of the disease and other problems and treatment plans as well as their attitude towards the disease. The questions were answered online.

### RESULTS AND DISCUSSION

From the questionnaire it is evident that dental graduates know proper way of treating a measles patient and also know the proper infection control but that they are not confident with their experience because of the fact that patients with measles have become rare and in developed countries like Bahrain they are controlled at an early stage by the help of vaccinations. Most of the residents do regular dental checkups and the initial symptoms of measles appears in the oral cavity and hence the airborne disease can be identified at an early stage and the required treatments can be brought about.

It is evident that 70% of the doctors are comfortable in treating such patients. Interpretations have shown that many of the doctors usually avoid such cases due to the attitude towards risk.(7)



From the above data we have the following results From the 10 questions answered by the dental graduates it is evident that the dental graduates have a pretty good knowledge about measles.

There has been increase in the internet access and usage among dental professionals to receive information about infection control. Moreover, now a day's internet is widely available and utilised to gain knowledge on evolving disease by many health care professionals including DHPs.

Educational materials posted on the website of the ministry of health could be one of the major sources of knowledge among health professionals including DHPs. Moreover, individualised text messages sent by the relevant professional agencies to their registered health professionals could be the source of this knowledge. In addition, seminar, symposium and research articles could be the source of knowledge about isolation precautions among dental health professionals. All above mentioned factors could have played role in increasing knowledge of isolation precautions among DHPs. Even though some knowledge gaps have been identified in the present study such as; distance at which mask should be worn while approaching the patient under droplet precautionary care and wearing mask while entering room of patients with measles requiring further information. A very high percentage (87.9%) of respondents knew that the patients with a droplet spread disease should be isolated in a private room (3)

Symptoms of measles generally appear within 14 days of exposure to the virus. Symptoms include: Cough, fever, red eyes, light sensitivity, muscle aches, runny nose, sore throat, white spots inside the mouth. A widespread skin rash is a classic sign of measles. This rash can last up to seven days and generally appears within the first three to five days of exposure to the virus.

A measles rash, which appears as red, itchy bumps, commonly develops on the head and slowly spreads to other parts of the body. This is the reason regular check ups of at least once in a year is recommended.

Measles has a low death rate in healthy children and adults, and most people who contract the measles virus recover fully. The risk of complications is higher in children and adults with a weak immune system. You cannot get measles more than once. After you've had the virus, you are immune for life. (1).

## **CONCLUSION**

Dental health professionals considered in the present study showed good knowledge, positive attitude and good practice towards droplet and airborne isolation precautions on measles.(3) The results of the present review showed that the knowledge and awareness level of the subjects was inadequate, with considerably low attitude and practice scores. The respondents had little knowledge about the treatment plans.(4). It is also important to understand that even though the treatments may be risky there are good protocols to control the risk.(6) Although the possibility of transmission of blood-borne infections from dental health care workers to patients is considered to be small, precise risks have not been quantified by carefully designed epidemiological studies. Emphasis should be placed on consistent adherence to recommended infection control strategies, including the use of protective barriers and appropriate methods of sterilisation or disinfection. Each dental facility should develop a written protocol for instrument reprocessing, operatory cleanup, and management of injuries.

Such efforts may lead to the development of safer and more effective medical devices, work practices, and personal protective equipment.(9). It is important for any hospital or a dental clinic to set up CDC protocols to prevent the spread of infectious and transmissible diseases. For this purpose, it is important that the dental health care professionals be aware of the risks and the seriousness of infections (10).

## **References**

1. Valencia Higuera, measles, health-line, Medically Reviewed by Judith, MD on July 21, 2016
2. Battegay R.<sup>a</sup> · Itin C.<sup>b</sup> · Itin P.<sup>a</sup> Dermatological Signs and Symptoms of Measles: A Prospective Case Series and Comparison with the Literature, *Dermatology* 2012;224:1-4
3. Baseer, M. A., Ansari, S. H., AlShamrani, S. S., Alakras, A. R., Mahrous, R., & Alenazi, A. M. (2016). Awareness of droplet and airborne isolation precautions among dental health professionals during the outbreak of corona virus infection in Riyadh city, Saudi Arabia. *Journal of Clinical and Experimental Dentistry*, 8(4), e379.
4. Gambhir, R. S., Singh, G., Talwar, P. S., Gambhir, J., & Munjal, V. (2016). Knowledge and awareness of forensic odontology among dentists in India: A systematic review. *Journal of forensic dental sciences*, 8(1), 2.
5. Kanjirath, P. P., Peters, M. C., & Inglehart, M. R. (2007). Treating patients with herpes simplex virus infections: dental and dental hygiene students' knowledge, attitudes, and professional behavior. *Journal of dental education*, 71(9), 1133-1144.
6. Browning, W. D., & McCarthy, J. P. (2012). A case series: herpes simplex virus as an occupational hazard. *Journal of Esthetic and Restorative Dentistry*, 24(1), 61-66.
7. Crossley, M. L. (2004). An investigation of dentists' knowledge, attitudes and practices towards HIV+ and patients with other blood-borne viruses in South Cheshire, UK. *British dental journal*, 196(12), 749-754.
8. Zaki, A. M., Van Boheemen, S., Bestebroer, T. M., Osterhaus, A. D., & Fouchier, R. A. (2012). Isolation of a novel coronavirus from a man with pneumonia in Saudi Arabia. *New England Journal of Medicine*, 367(19), 1814-1820.
9. Araujo, M. W., & Andreana, S. (2002). Risk and prevention of transmission of infectious diseases in dentistry. *Quintessence international*, 33(5).
10. Shitoot, A. D., Motwani, M., Chamele, D. P., Shitoot, A. P., Chamele, J., & Ghosh, A. (2016). Hepatitis B awareness and attitudes among dental professionals in Central India. *Journal of Indian Academy of Oral Medicine and Radiology*, 28(3), 270.

\*\*\*\*\*