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**Sneha Sree S**

Graduate, Saveetha Dental  
College, Saveetha Institute of  
Medical and Technical Science,  
Chennai, Tamil Nadu, India

**Shruthi M**

Graduate, Saveetha Dental  
College, Saveetha Institute of  
Medical and Technical Science,  
Chennai, Tamil Nadu, India

**Dr. MP Brundha**

Associate Professor,  
Department of General  
Pathology, Saveetha Dental  
College, Saveetha Institute of  
Medical and Technical  
Sciences, Chennai, Tamil  
Nadu, India

**Corresponding Author:**

**Dr. MP Brundha**

Associate Professor,  
Department of General  
Pathology, Saveetha Dental  
College, Saveetha Institute of  
Medical and Technical  
Sciences, Chennai, Tamil  
Nadu, India

## Awareness about chickenpox among parents and guardians of children attending pedodontic OPD: A survey

**Sneha Sree S, Shruthi M and Dr. MP Brundha**

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**Abstract**

**Aim:** The aim was to create awareness of chickenpox among parents and guardians of children attending pedodontic OPD.

**Objectives:** To create awareness of etiology, signs & symptoms, treatment and prevention about chickenpox among parents and guardians of children attending pedodontic OPD.

**Background:** Chickenpox is a common childhood illness especially in kids under age 12. Caused by the varicella-zoster virus (VZV), chickenpox is very contagious. Kids who do get it might have an itchy rash of spots all over the body and flu-like symptoms. An infected child should stay home and rest until the rash is gone. Varicella vaccine is given when kids are between 12 and 15 months old, followed by a booster shot at 4 to 6 years of age

**Reason:** Chickenpox is a rapidly spreading contagious disease among children which spreads both through air and direct contact, hence it is essential to beware of it.

**Methodology:** Data was collected among 50 parents or guardians of children attending pedodontic OPD, using a questionnaire that contained 25 questions.

**Conclusion:** Chickenpox is a contagious disease recognized by a characteristic and often pathognomonic maculopapular vesicular rash. Varicella may lead to serious complications, including secondary bacterial skin and soft-tissue infections, cerebellitis, encephalitis, pneumonia, and coagulopathy. Neonates, adolescents, and immunocompromised individuals are more susceptible to complications. The study concludes that majority of the people have general knowledge about treatment, prevention and specific knowledge about the chickenpox disease.

**Keywords:** Awareness, chickenpox, pedodontic OPD

**Introduction**

Chickenpox or varicella is a contagious disease caused by varicella-zoster virus (VZV). VZV belongs to herpes virus family. The main constraint of this disease is it is an air borne disease spreads human to human by cough or sneeze <sup>[1]</sup>. Human are the primary host during early infection. The main symptoms of this disease are fever, body aches, fatigue, skin rash, irritability etc <sup>[2]</sup>. The rash may spread to other internal parts of the body too in severe cases. Man is the main host for VZV. During the primary infection, VZV act on the upper respiratory tract and followed by reticuloendothelial system and finally caused viraemia, where both cell mediated immunity and humoral immunity fight against the virus <sup>[3]</sup>. The most common mode of transmission VZV is believed to be person to person from infected respiratory tract secretions. Transmission may also occur by respiratory contact with airborne droplets or by direct contact or inhalation of aerosols from vesicular fluid of skin lesion of acute varicella zoster. There are various factors that impact on human of this disease immunity, climate/environment, population density etc. In this condition various factors show their impact on human. Pregnant women and children are prone to this disease. This study mainly focuses on creating awareness among parents regarding spread of chickenpox among children.

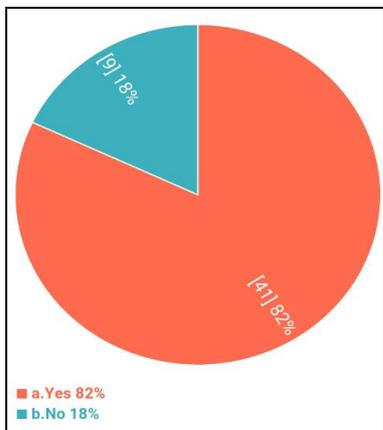
**Materials and Methods**

A cross sectional questionnaire to determine the knowledge about chickenpox among parents and guardians of patients was designed. Data were collected from 50 parents or guardians of patients of Saveetha dental college, Chennai. There are 25 direct questions regarding

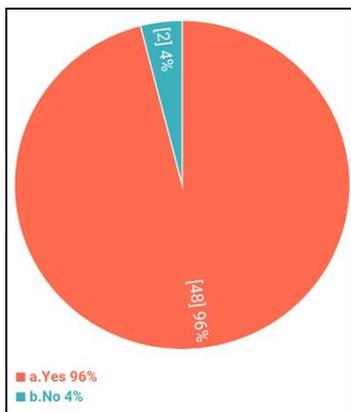
chickenpox. In this study the percentage of awareness has to be noted based on their knowledge and the statistical analysis was performed to analyze the study.

**Results**

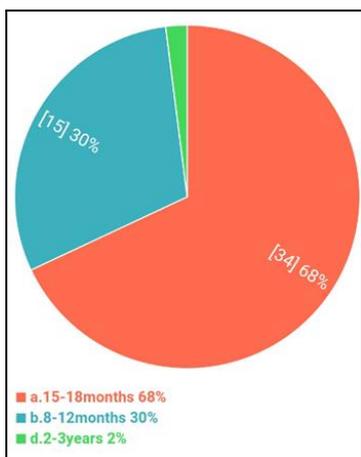
This study was done among the parents and guardians of children attending Pedodontics OPD in Saveetha Dental hospital. A questionnaire regarding chickenpox comprising of 25 questions were distributed to appropriately 50 people. Parents were asked to fill the questionnaire with consciousness. The data obtained from the questionnaire is depicted as follows for each question as pie chart.



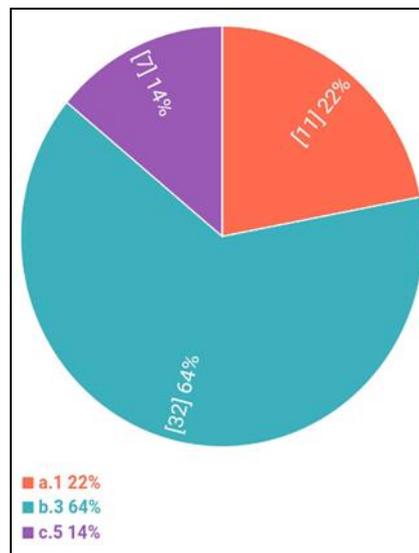
**Chart 1:** Chicken pox is contagious



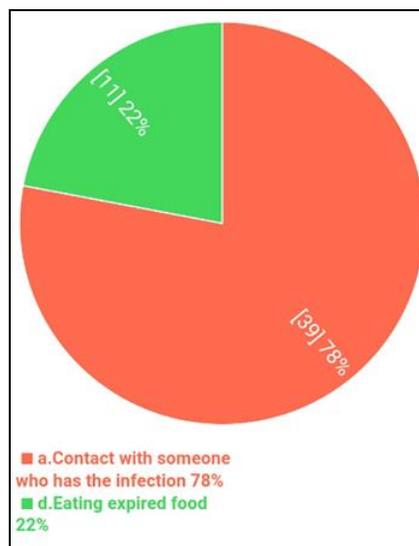
**Chart 2:** Chicken pox vaccine is available



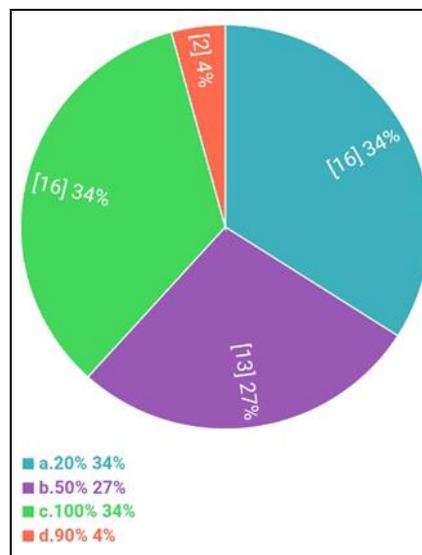
**Chart 3:** When should the chicken pox vaccine be provided to children?



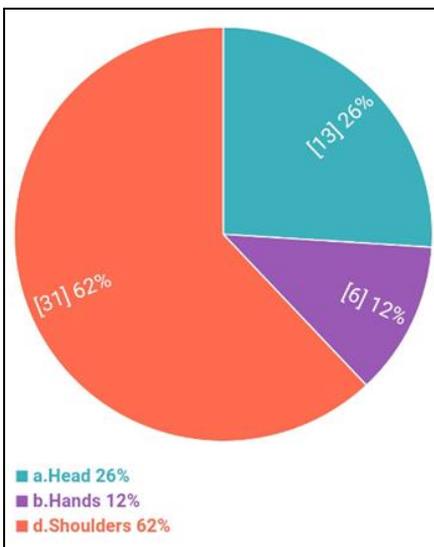
**Chart 4:** Once exposed to infection, a person can develop the infection as little as days



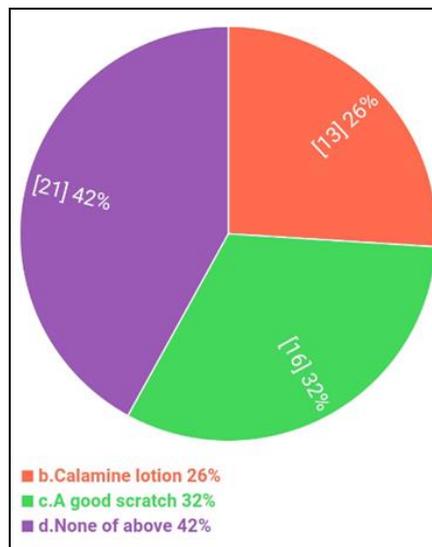
**Chart 5:** Chicken pox can spread through



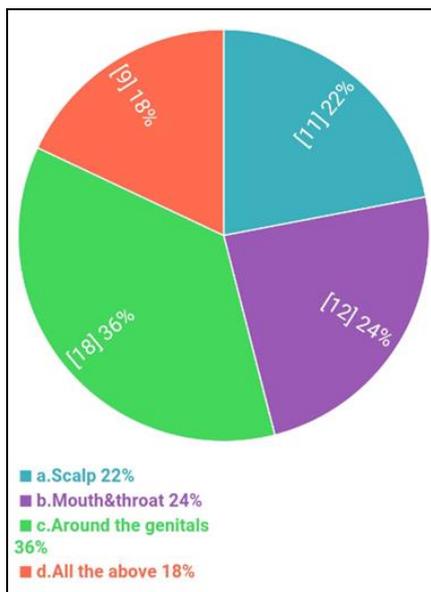
**Chart 6:** If your child has chickenpox and you are unvaccinated. What are the chances of getting it?



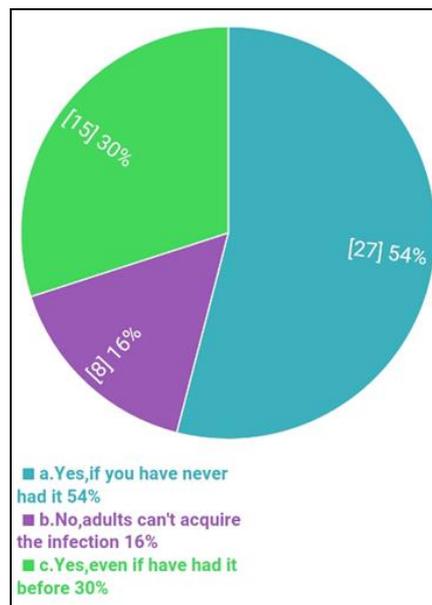
**Chart 7:** Where will you probably find the rash first?



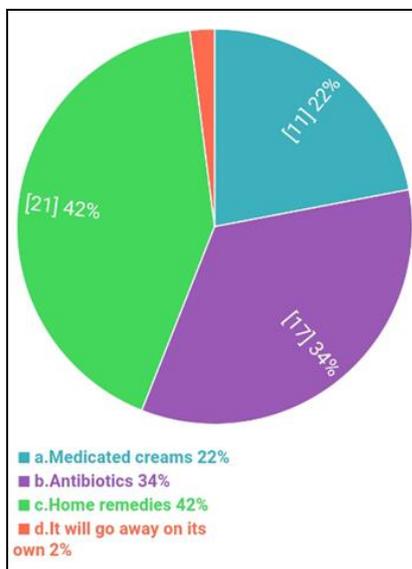
**Chart 10:** What can help to soothe the itchy rash?



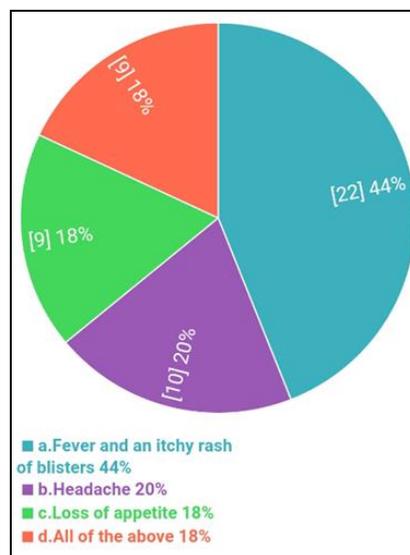
**Chart 8:** Where are the spots likely to be most sore?



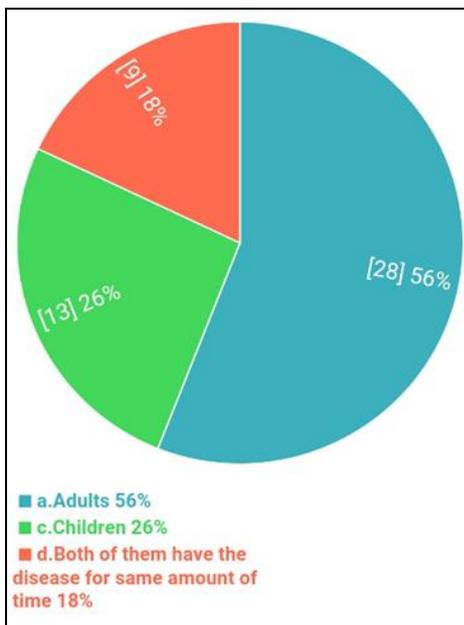
**Chart 11:** Can you get chickenpox from your child?



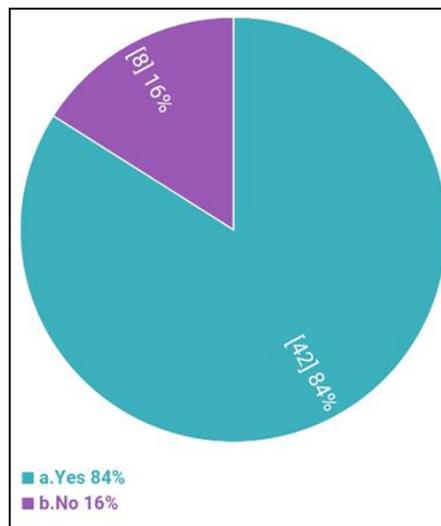
**Chart 9:** How will you treat chicken pox?



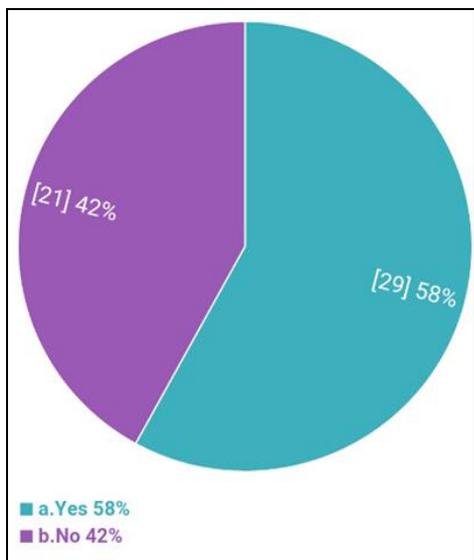
**Chart 12:** Which of these is a symptom of chicken pox?



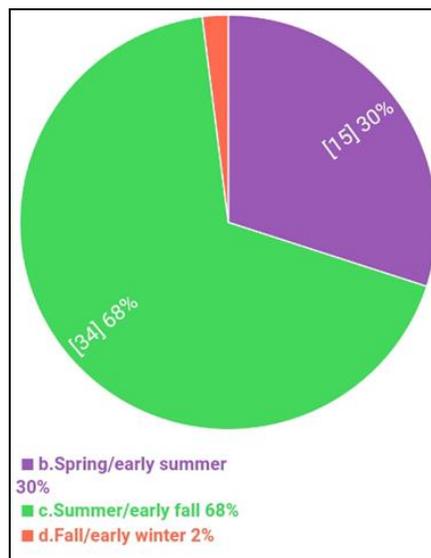
**Chart 13:** Does chickenpox has longer in adults or children?



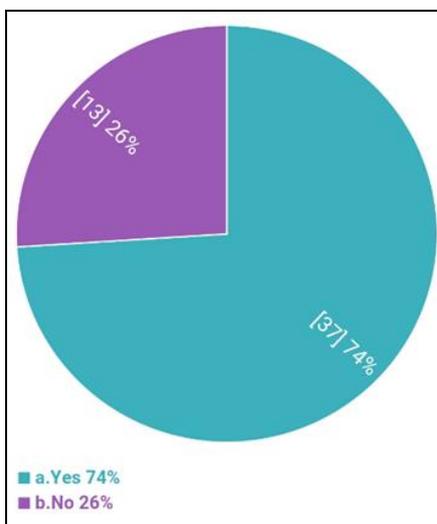
**Chart 16:** Small pox is related to chickenpox?



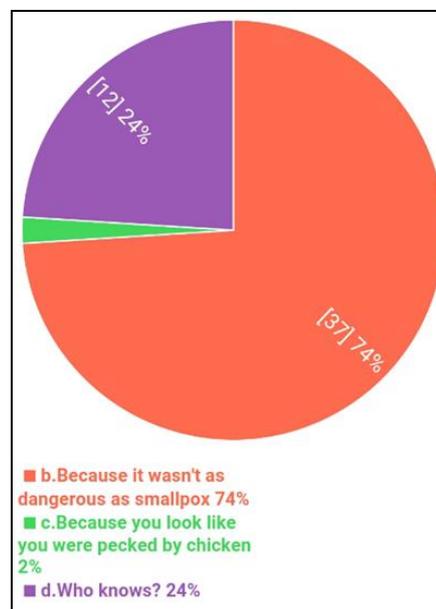
**Chart 14:** Is shingles related to chicken pox?



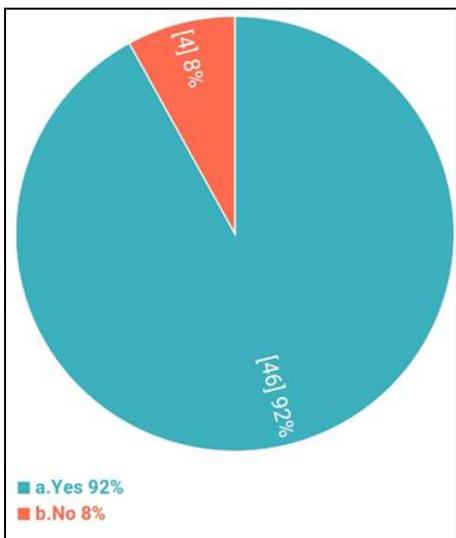
**Chart 17:** In what time of the year do most children get chickenpox?



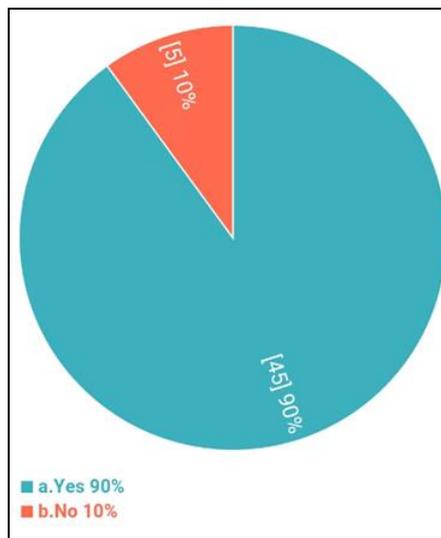
**Chart 15:** If you've had chicken pox, is it true that you don't need to worry about contracting shingles later in life?



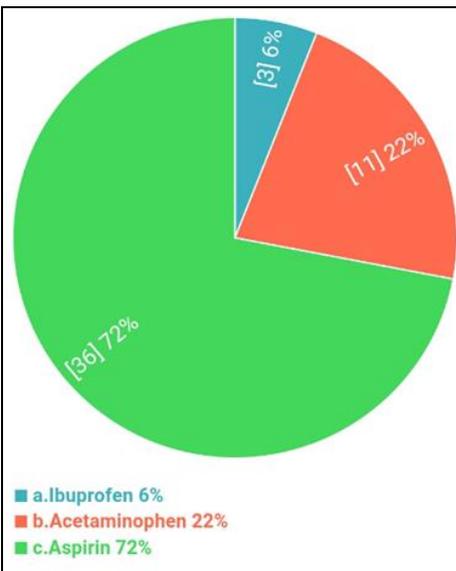
**Chart 18:** Why is it called chickenpox?



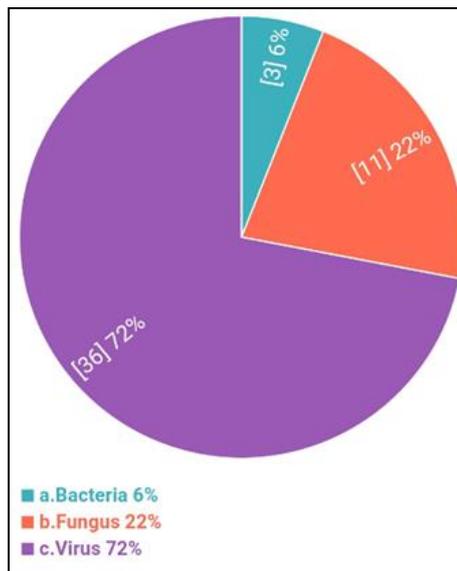
**Chart 19:** Is it true that your no longer contagious when the chickenpox blisters scab over?



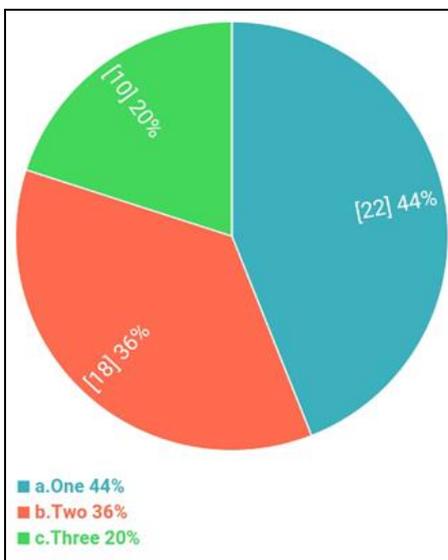
**Chart 22:** Is it true that once you had chickenpox, you develop a life-long immunity



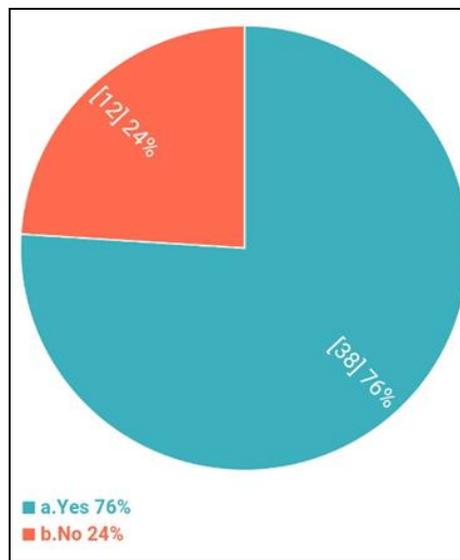
**Chart 20:** If your child has chickenpox, what kind of painkiller should you avoid giving him/her?



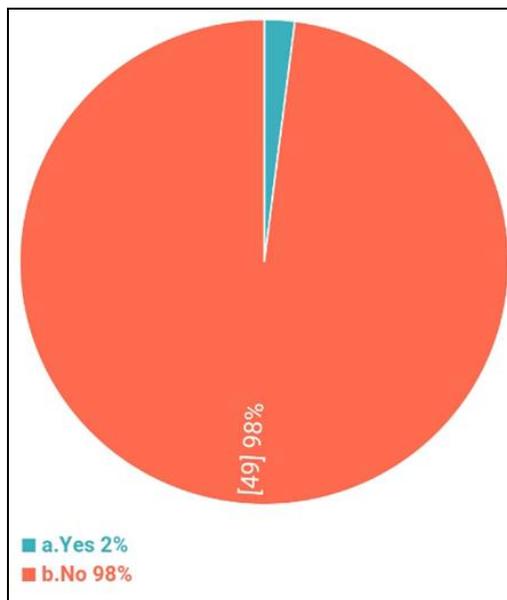
**Chart 23:** Chickenpox is caused by



**Chart 21:** How many doses of chicken pox vaccine do you need to be immune?



**Chart 24:** Is it possible for pregnant mothers to transmit chickenpox to their babies?



**Chart 25:** Should your child go to school when he has chickenpox?

### Discussion

The study was conducted based on a self-prepared questionnaire circulated among 50 parents and guardians of patients of Saveetha dental college, Chennai. The participants included both males and females. They belong to 18-60 years of age group. There 25 direct questions with a maximum of four options. There are no negative marks for wrong responses. The data obtained was categorized into positive and negative responses individually for all 25 questions and the resulting correct responses were considered to determine the knowledge among patients. The socio-demographic factors like age and gender did not influence the participants' knowledge on chickenpox. According to the chart 1, 82% that is 41 out of 50 participants know that chicken pox is contagious disease. Remaining 18% did not know about that. 98% knows that they should not send the children to the school when they are infected with chicken pox as shown in chart 25. The chart 2 shows that 96% of the participants know that a vaccine is available for chickenpox and 4% are not aware [4]. As the chart 21 shows the exact doses of the chickenpox vaccination is two doses, which is correctly answered by 36% of the study population. 72% knows that chickenpox is a viral infection and remaining are not.

Chart 3 shows around 68% of the responders know that when should the vaccine for chicken pox should be given to their kids and remaining participants are not know about that. The chart 4 is about the incubation time of the chicken pox which indicates that once exposed to infection, when a person can develop the infection. 64% of the participants answered for 3 days, 14% answered for 5 days and 22% answered for 1 day. Actually, the incubation time for chicken pox is 5 days. The chart 5 shows that the route of spread known by the majority (78%) of the participants are direct contact with the infectious person. In chart 24, the 76% answered correctly that the chickenpox is transmitted form mother to the foetus in utero [5].

Chart 6 and 11 indicated that the percentage possibility of an unvaccinated person to get a disease. The participants answered for 100% is around 34%, 50% is around 27% and

correctly answered for 90% is only around 4%. Majority know that a person can get infection, if there is no previous history of chicken pox. In chart 22, we can see that 90% of the participants are aware that the chicken pox gives lifelong immunity [6].

The charts 9 and 10 are considered on the treatment of the chicken pox. About 42% of the participants answered that there are only home remedies available as treatment for chicken pox, 34% are aware that antibiotics are available, 22% goes for medicated creams and 2% answered that the chicken pox is self-limited disease. If a patient with chicken pox, normally it is not advisable to go for analgesic treatment, especially Aspirin. This is known by 72% of the participants, which is shown in chart 20 [7].

About the clinical features the chart 7 and 8 show that majority (62%) know about the first site the occurrence of the lesion and many are not known about the exact site of spread of the lesions. The chart 12 also deals with symptoms, and that shows only around 44% of the participants know that the fever and rashes are the major clinical symptom of the chicken pox. Chart 13 show the awareness about the duration of the disease among children and adults. 56% of the sample population correctly answered that adults have longer duration of the disease, but 26% said that children have longer duration and 18% of participants highlighted that both the age group have same duration of the disease process [8].

Shingles, a localised area of vesicular lesions seen in chicken pox. The question about the shingles is corrected answered by 58% of the participants. This is shown in chart 14. 42% are not know what the shingles are. In chart 15 shows that 74% answered positively for chart 14 knows that the shingles are not a serious lesion if a person had already affected by chicken pox. 84% knows that the small pox is different from chicken pox (Chart 16) and 74% knows that chicken pox is not as dangerous as small pox (Chart 18).

The seasonal affection of chicken pox is shown in chart 17. Majority (68%) of the participants correctly answered that the chicken pox mostly occurs in summer season. The contagiousness of the chickenpox has been reduced when once scab is formed. This is known to 92% of the participants, which is shown in chart 19 [9].

According to the above descriptive values the majority of the participants are known about the symptom and signs, spread of the disease and preventive measures. But majority are not known about the treatment options available for chicken pox.

### Conclusion

Chickenpox is a contagious disease recognized by a characteristic and often pathognomonic maculopapular vesicular rash. Varicella may lead to serious complications, including secondary bacterial skin and soft-tissue infections, cerebellitis, encephalitis, pneumonia, and coagulopathy. Neonates, adolescents, and immunocompromised individuals are more susceptible to complications. The study concludes that majority of the people have general knowledge about spread, prevention and specific knowledge about the chickenpox disease. But they lack the treatment

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