

Perception of parents towards COVID-19 Vaccination and testing for children in Bangalore

¹Dr. Aparna Krishnan, Post graduate, Vokkaligara Sangha Dental College and hospital, Bengaluru.

²Dr. Chandan G D, Professor, Vokkaligara Sangha Dental College and hospital, Bengaluru.

³Dr. Sanjana C R, Assistant Professor, KLE Society's Institute of dental college and hospital, Bengaluru.

Corresponding Author: Dr. Aparna Krishnan, Post graduate, Vokkaligara Sangha Dental College and hospital, Bengaluru.

Citation of this Article: Dr. Aparna Krishnan, Dr. Chandan G D, Dr. Sanjana C R, "Perception of parents towards COVID-19 Vaccination and testing for children in Bangalore", IJDSIR- April - 2022, Vol. – 5, Issue - 2, P. No. 527 – 540.

Copyright: © 2022, Dr. Aparna Krishnan, et al. This is an open access journal and article distributed under the terms of the creative commons attribution noncommercial License. Which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Type of Publication: Original Research Article

Conflicts of Interest: Nil

Abstract

Parents are skeptical when it comes to getting their children vaccinated for Covid-19. The aim of this study was to assess the perception of parents towards Covid-19 vaccine and testing for children in the Bangalore district of Karnataka. A pre-validated set of 12 questions were asked to 337 parents, after taking an informed consent and briefing them about the study. The result of this study indicates a high level of parental acceptance regarding Covid19 vaccination for their children. A total of 58.1% (n=196) parents were willing to get their child vaccinated. At the same time 2.3% (n=8) parents never got their child vaccinated anytime and 8% (n= 27) of the parents were not willing to get their child vaccinated and did not have any particular reason. Understanding the need of the hour, parents must be educated and made aware of the importance of vaccination and how it helps in saving themselves and others from the severe aftermath of Covid-19 Infection.

Keywords: COVID-19, Vaccination, Parents, Testing

Introduction

Coronavirus disease 2019 (COVID-19) is a communicable disease caused by severe acute respiratory coronavirus 2 (SARS-CoV-2). (1) The new infection was reported to have emerged from Wuhan City, Hubei Province, China, in December 2019. On March 11, 2020, the World Health Organization (WHO) declared COVID19 a pandemic. (2). Various vaccines have been developed and approved by different countries to halt the spread of COVID19 infection. In India, a mass vaccination drive is carried out. In the future, vaccines are expected to be available for the children of all age groups. The Government of India has extended the COVID-19 vaccination for children in the 15 to 18 age group on 3 January 2022. (3) The Government has only approved one vaccine for this age group. (3) Meanwhile, this is a concern for the pediatric dentists who are treating children of all age groups as children

are not vaccinated yet, increasing the chances of the spread of the infection. Thus, this study is an attempt to assess the perception among parents in Bangalore district of Karnataka state in India regarding covid-19 testing and willingness to get their children vaccinated in the future.

Materials and methods

A structured questionnaire with apparent validity was designed and is used to collect data from 337 parents of Pediatric dental patients visiting the Department of Pedodontics, Vokkaligara Sangha Dental College and Hospital, Bangalore

Questionnaire

Demographic data

Gender of the parent – male/female

Occupation – employed/unemployed

Place- urban/rural

Monthly income

1) <10,000

2) 11-25k

3) 26-50k

4) >50k

Parent's age

1) < 25 years

2) 26-35 years

3) 36-45 years

4) >45 years

Educational qualification

1) <or = 10th standard

2) 12/puc

3) under graduation

4) post-graduation

Age of the child

1) 0-6 years

2) 7-10 years

3) 11-16 years

Gender of the child: male/ female

Q1. Do you worry that your child would get covid 19 infection? Yes/no

Q2. Was your child tested covid-19 positive? Yes/no

Q3. Was anybody in the family tested covid 19 positive? Yes/no

If yes, answer Q4, Q5 Q6

Q4. What symptoms did they have?

Loss of taste, loss of smell, cough, fever, cold, sore throat, headache, body pain, fatigue/ weakness, nasal congestion, running nose, Diarrhoea, constipation, breathlessness.

a) 1 of the above symptoms

b) 2 of the above symptoms

c) 3 of the above symptoms

d) 4 or more of the above symptoms without breathlessness

e) Symptoms including breathlessness

5. What test was conducted to confirm covid 19 infection? Rtpcr/ rapid antigen test

6. Did the child got tested as well? Yes/no

7. If not, why?

a) I believe children will not get infected by covid 19

b) My child did not show any symptoms

c) I did not want to get my child tested. There's no particular reason

8. Is the guardian vaccinated? Yes/no

9. Are all the family members vaccinated? Yes/no
10 if not, why?

a) I fear side effects

b) I don't think vaccine can prevent covid 19 infection

c) There is no particular reason. I don't want to get vaccinated

d) I am waiting for my vaccination slot

11. Do you wish to get your child vaccinated in the future once the vaccine becomes available? Yes/no

12. If not, why?

- a) I fear long term side effects
- b) I don't think vaccination will prevent covid-19 infection
- c) No particular reason. I don't want to get my child vaccinated
- d) I will consider getting my child vaccinated once he/she grows up.
- e) I never got my child vaccinated anytime.

Statistical analysis

The data obtained is compiled and organized systematically using Microsoft excel sheet. The data is subjected to statistical analysis using statistical software SPSS VERSION 19. Descriptive statistics derived is represented in the form of tables and graphs. Inferential statistics test applied is chi-square, the significance level of p = 0.05.

Results

Table 1a: Descriptive statistics for parent's attributes participating in the study

S No	Parents attributes	Categorization	n	%
1	Gender	Male	176	52.2
		Female	161	47.8
2	Occupation	Unemployed	95	28.2
		Employed	242	71.8
3	Rural /urban	Urban	307	91.1
		Rural	30	8.9
4	Income	<10 k	57	16.9
		11-25 k	119	35.3
		26-50 k	107	31.8
		>50k	54	16.0
5	Age of parents	<25 years	26	7.7
		26-35 years	162	48.1
		36-45 years	145	43.0

		>45 years	4	1.2
6	Education	< 10 std	61	18.1
		12 puc	131	38.9
		UG	103	30.6
		PG	42	12.5

Table 1a describes the descriptive statistics for gender, occupation, rural/urban stay, monthly income, age and educational qualification of the study participants.

Total males in the study were 52.2%(n=176) and females were 47.8%(n=161). The study population who are unemployed were 28.2%(n=95) and 71.8% (n= 242) were employed.

Study population residing in the urban area were 91.1% (n=307) and 8.9% (n=30) were living in the rural area.

Study participants were divided into 4 groups depending on their monthly income. Group 1 consisting of 16.9% (n=57) of the study population. Group 2 consisting of 35.3% (n= 119) and is the predominant group in the study. Group 3 consisting of 31.8% (n= 107) and group 4 comprising of 16% (n=54) of the study population respectively.

Age of the parent's participants in Group 1 is 7.7% (n=26). Group 2 is 48.1% (n=161), group 3 comprising of 43% (n=145) and group 4 comprising of 1.2% (n=4).

18.1% (n=61) parents holding an educational qualification less than or equal to 10th standard. 38.9% (n= 131) having a 12th standard or PUC qualification. 30.6% (n=103) having an undergraduate degree and 12.5% (n=42) holding a post graduate degree respectively.

S No	Child's attributes	Categorization	n	%
1.	Age	0-6 years	116	34.4
		7-10 years	173	51.3
		11-16 years	48	14.2
2.	Gender	Male	173	51.3
		Female	164	48.7

Table 1b: describes the descriptive statistics for child attributes participating in the study. Total of 51.3% (n=173) male children and 48.7% (n=164) female patients aged between 0-16 years divided into 3 groups were considered for the study.

Table 2: gender wise attitude of parents towards various responses among the questionnaire

Gender Categorization	Question	Responses				Chi-value	p-value
		0		1			
		N	%	N	%		
Male	Q1	47	26.7%	129	73.3%	1.87	0.17 (n. s)
Female		54	33.5%	107	66.5%		
Male	Q2	172	97.7%	4	2.3%	3.7	0.05 (s)
Female		161	100.0%	0	0		
Male	Q3	156	88.6%	20	11.4%	0.003	0.95 (n. s)
Female		143	88.8%	18	11.2%		

Gender Categorization	Question	1		2		3		4		Chi-value	p-value
		N	%	N	%	N	%	N	%		
		Male	Q4	2	1.1%	2	1.1%	6	3.4%		
Female	1	.6%		1	.6%	5	3.1%	11	6.8%		

Gender Categorization	Question	Responses				Chi-value	p-value
		0		1			
		N	%	N	%		
Male	Q5	156	88.6%	20	11.4%	0.003	0.95 (n. s)
Female		143	88.8%	18	11.2%		
Male	Q6	161	91.5%	15	8.5%	0.130	0.71 (n. s)
Female		149	92.5%	12	7.5%		
Male	Q7	4	2.3%	1	0.6%	0.452	0.78 (n. s)
Female		4	2.5%	2	1.2%		
Male	Q8	37	21.0%	139	79.0%	1.51	0.22 (n. s)

Female		43	26.7%	118	73.3%		
Male	Q9	66	37.5%	110	62.5%	0.002	0.965 (n. s)
Female		60	37.3%	101	62.7%		

Male	Q10	1		2		3		4		3.661	0.45 (n.s)
		N	%	N	%	N	%	N	%		
11		6.2%	17	9.7%	3	1.7%	37	21.0%			
Female		10	6.2%	24	14.9%	3	1.9%	24	14.9%		

Male	Q11	70	39.8%	106	60.2%	0.647	0.558 (n. s)
Female		71	44.1%	90	55.9%		

Male	Q12	1		2		3		4		5		3.45	0.62 (n.s)
		N	%	N	%	N	%	N	%	N	%		
35		19.9%	10	5.7%	3	1.7%	17	9.7%	5	2.8%			
Female		30	18.6%	17	10.6%	4	2.5%	17	10.6%	3	1.9%		

Table 2 describes gender wise attitude of parents towards various responses among the questionnaire. The response to the question whether the child was ever tested COVID19 positive was found to be 2.3% (n=4) of the children were tested positive for the infection. (p = 0.05) was found to be statistically significant.

Table 3: area wise attitude of parents towards various responses among the questionnaire

Area Categorization	Question	Responses				Chi-value	p-value
		0		1			
		N	%	N	%		
1	Q1	91	29.6%	216	70.4%	0.17	0.674 (n. s)
2		10	33.3%	20	66.7%		
1	Q2	303	98.7%	4	1.3%	0.369	0.529 (n. s)
2		30	100.0%	0	.0%		
1	Q3	273	88.9%	34	11.1%	0.139	0.709 (n. s)
2		26	86.7%	4	13.3%		

1	Q4	1		2		3		4		4.32	0.36 (n.s)
		N	%	N	%	N	%	N	%		

		3	1.0%	2	.7%	11	3.6%	18	5.9%		
2		0	.0%	1	3.3%	0	.0%	3	10.0%		
Area Categorization	Question	Responses				Chi-value	p-value				
		0		1							
		N	%	N	%						
1	Q5	273	88.9%	34	11.1%	0.139	0.709 (n.s)				
2		26	86.7%	4	13.3%						
1	Q6	281	91.5%	26	8.5%	0.97	0.323 (n.s)				
2		29	96.7%	1	3.3%						

1	Q7	0		1		2		8.51	0.01 (s)
		N	%	N	%	N	%		
		299	97.4%	5	1.6%	3	1.0%		
2		27	90.0%	3	10.0%	0	.0%		
1	Q8	69	22.5%	238	77.5%	3.04	0.08 (n. s)		
2		11	36.7%	19	63.3%				
1	Q9	112	36.5%	195	63.5%	1.21	0.71 (n. s)		
2		14	46.7%	16	53.3%				

1	Q10	1		2		3		4		5.37	0.09 (n. s)		
		N	%	N	%	N	%	N	%				
		19	6.2%	36	11.7%	4	1.3%	56	18.2%				
2		2	6.7%	5	16.7%	2	6.7%	5	16.7%				
1	Q11	125	40.7%	182	59.3%	1.78	0.18 (n. s)						
2		16	53.3%	14	46.7%								
1	Q12	1		2		3		4		5		10.69	0.02 (s)
		N	%	N	%	N	%	N	%	N	%		
		62	20.2%	23	7.5%	5	1.6%	29	9.4%	6	2.0%		
2		3	10.0%	4	13.3%	2	6.7%	5	16.7%	2	6.7%		

Table 3 describes the area wise attitude of parents towards various responses among the questionnaire in

which the response to the if the child got tested for covid 19 infect in when a family member turned positive and if

they haven't, why? Had a response where 90% (n=27) of the study population residing in rural area and 97.4% (n=299) residing in urban area believed that their children will not get infected by Covid-19 infection. 1.6% (n=5) participants in urban areas and 10.3% (n= 3) in rural area stated that their children did not show any symptoms and 1% (n=3) residing in urban area stated that they did not want to get their children tested. (p<0.05)

It was also found that 20.2% (n=62) residing in urban area and 10% (n=3) residing in rural area were not ready to get their child vaccinated fearing the long-term side

effects. 7.5% (n=23) study population living in urban areas and 13.3% (n=4) in rural areas believed that vaccination will not prevent COVID19 infection. 1.6% (n=5) residing in urban areas and 6.7% (n=2) in rural areas did not have any particular reason not to get their child vaccinated. 9.4% (n=29) residing in urban areas and 16.7% (n= 5) considered getting their child vaccinated once the child grows up. 2% (n=6) and 6.7% (n=2) residing in urban and rural area respectively stated that they got any vaccinations done for their children. (p < 0.05)

Table 4: occupation wise attitude of parents towards various responses among the questionnaire

Occupation Categorization	Question	Responses				Chi-value	p-value
		0		1			
		N	%	N	%		
0	Q1	34	35.8%	61	64.2%	2.12	0.144 (n.s)
1		67	27.7%	175	72.3%		
0	Q2	95	100.0%	0	.0%	1.58	0.207 (n.s)
1		238	98.3%	4	1.7%		
0	Q3	80	84.2%	15	15.8%	2.64	0.101 (n.s)
1		219	90.5%	23	9.5%		

Occupation Categorization	Question	Responses								Chi-value	p-value
		1		2		3		4			
		N	%	N	%	N	%	N	%		
0	Q4	2	2.1%	1	1.1%	3	3.2%	9	9.5%	4.77	0.311 (n.s)
1		1	.4%	2	.8%	8	3.3%	12	5.0%		

Occupation Categorization	Question	Responses				Chi-value	p-value
		0		1			
		N	%	N	%		
0	Q5	80	84.2%	15	15.8%	2.69	0.101 (n.s)
1		219	90.5%	23	9.5%		
0	Q6	84	88.4%	11	11.6%	2.28	0.131 (n.s)

1		226	93.4%	16	6.6%				
0	Q7	0		1		2		3.07	0.215 (n.s)
		N	%	N	%	N	%		
		91	95.8%	4	4.2%	0	.0%		
1		235	97.1%	4	1.7%	3	1.2%		
0	Q8	28	29.5%	67	70.5%	2.40	0.12 (n.s)		
1		52	21.5%	190	78.5%				
0	Q9	39	41.1%	56	58.9%	0.75	0.38 (n.s)		
1		87	36.0%	155	64.0%				

0	Q10	1		2		3		4		2.44	0.65 (n.s)
		N	%	N	%	N	%	N	%		
		6	6.3%	14	14.7%	3	3.2%	17	17.9%		
1		15	6.2%	27	11.2%	3	1.2%	44	18.2%		

0	Q11	45	47.4%	50	52.6%	1.662	0.197 (n.s)						
1		96	39.7%	146	60.3%								
0	Q12	1		2		3		4		5		7.003	0.220 (n.s)
		N	%	N	%	N	%	N	%	N	%		
		22	23.2%	10	10.5%	4	4.2%	8	8.4%	1	1.1%		
1		43	17.8%	17	7.0%	3	1.2%	26	10.7%	7	2.9%		

Table 4: describes the occupation wise attitude of parents towards various responses among the questionnaire and no data was found to be statistically significant.

Education Categorization	Question	Responses				Chi-value	p-value
		0		1			
		N	%	N	%		
1	Q1	13	21.3%	48	78.7%	8.01	0.04 (s)
2		49	37.4%	82	62.6%		
3		31	30.1%	72	69.9%		
4		8	19.0%	34	81.0%		
1	Q2	59	96.7%	2	3.3%	3.02	0.57 (n.s)
2		130	99.2%	1	.8%		

3		102	99.0%	1	1.0%		
4		42	100.0%	0	.0%		
1	Q3	52	85.2%	9	14.8%	1.63	0.987 (n,s)
2		119	90.8%	12	9.2%		
3		90	87.4%	13	12.6%		
4		38	90.5%	4	9.5%		

1	Q4	1		2		3		4		7.26	0.84 (n.s)
		N	%	N	%	N	%	N	%		
1		1	1.6%	1	1.6%	3	4.9%	4	6.6%		
2		0	.0%	1	.8%	2	1.5%	9	6.9%		
3		2	1.9%	1	1.0%	5	4.9%	5	4.9%		
4		0	.0%	0	.0%	1	2.4%	3	7.1%		

Education Categorization	Question	Responses				Chi-value	p-value	
		0		1				
		N	%	N	%			
1	Q5	52	85.2%	9	14.8%	1.63	0.65 (n.s)	
2		119	90.8%	12	9.2%			
3		90	87.4%	13	12.6%			
4		38	90.5%	4	9.5%			
1	Q6	53	86.9%	8	13.1%	4.45	0.21 (n.s)	
2		125	95.4%	6	4.6%			
3		94	91.3%	9	8.7%			
4		38	90.5%	4	9.5%			
1	Q7	0		1		2	4.67	0.56 (n.s)

		N	%	N	%	N	%		
		60	98.4%	1	1.6%	0	.0%		
2		125	95.4%	5	3.8%	1	.8%		
3		99	96.1%	2	1.9%	2	1.9%		
4		42	100.0%	0	.0%	0	.0%		
Education Categorization	Question	Responses				Chi-value	p-value		
		0		1					
		N	%	N	%				
1	Q8	13	21.3%	48	78.7%	0.49	0.72 (n.s)		
2		33	25.2%	98	74.8%				
3		25	24.3%	78	75.7%				
4		9	21.4%	33	78.6%				
1	Q9	20	32.8%	41	67.2%	2.12	0.54 (n.s)		
2		54	41.2%	77	58.8%				
3		39	37.9%	64	62.1%				
4		13	31.0%	29	69.0%				
Education Categorization	Question	Responses				Chi-value	p-value		
		0		1					
		N	%	N	%				
1	Q8	13	21.3%	48	78.7%	0.49	0.72 (n.s)		
2		33	25.2%	98	74.8%				
3		25	24.3%	78	75.7%				
4		9	21.4%	33	78.6%				
1	Q9	20	32.8%	41	67.2%	2.12	0.54 (n.s)		
2		54	41.2%	77	58.8%				

3		39	37.9%	64	62.1%		
4		13	31.0%	29	69.0%		

1	Q10	1		2		3		4		10.96	0.52 (n.s)
		N	%	N	%	N	%	N	%		
		5	8.2%	5	8.2%	0	.0%	10	16.4%		
2		9	6.9%	14	10.7%	5	3.8%	28	21.4%		
3		5	4.9%	17	16.5%	1	1.0%	16	15.5%		
4		2	4.8%	5	11.9%	0	.0%	7	16.7%		

1	Q11	22		36.1%		39		63.9%		8.21	0.04 (s)
		67		51.1%		64		48.9%			
2		39		37.9%		64		62.1%			
3		13		31.0%		29		69.0%			

1	Q12	1		2		3		4		5		13.48	0.56 (n.s)
		N	%	N	%	N	%	N	%	N	%		
		11	18.0%	3	4.9%	1	1.6%	6	9.8%	1	1.6%		
2		30	22.9%	12	9.2%	5	3.8%	16	12.2%	4	3.1%		
3		19	18.4%	9	8.7%	1	1.0%	9	8.7%	1	1.0%		
4		5	11.9%	3	7.1%	0	.0%	3	7.1%	2	4.8%		

Table 5 describes the education wise attitude of parents towards various responses among the questionnaire. Parents holding an educational qualification of post-graduation 81.1% (n=34) worried that their children would get COVID19 infection. (p< 0.05). similarly the parents holding same educational qualification 69% (n=29) were ready to get their child vaccinated once the vaccination becomes available to the children specific age groups. (p<0.05)

Discussion

The result of this study indicate a high level of parental acceptance regarding COVID19 vaccination for their children. A total of 58.1% (n=196) parents were willing to get their child vaccinated. At the same time 2.3% (n=8) parents never got their child vaccinated anytime

and 8% (n= 27) of the parents were not willing to get their child vaccinated and did not have any particular reason. Whereas in the survey by Babicki et. al conducted in Poland indicated a low level of parental acceptance regarding COVID-19 vaccination. Only 44% of parents wanted their child to be vaccinated as soon as possible, while 5.8% wanted to wait at least a few months (3).

Meltem Yılmaz et al. found that 36.3 percent of parents were willing to have their children receive the COVID-19 vaccine, and 59.9% were willing to receive it themselves in a cross-sectional study using a self-administered online survey. In addition, 83.9 percent of parents said they would have their children vaccinated with the COVID-19 vaccination if the COVID-19

vaccine's mortality rates in children increased as a result of a mutation. (4)

In a study conducted by Kishore et al, 329 out of 467 volunteers (70.44 percent) expressed a readiness to be vaccinated against COVID-19, while 138 (29.55 percent) expressed reluctance. Only 49.4 percent believed the vaccination could protect adults, but 63.1 percent were willing to get their children vaccinated.(5)

Using a questionnaire survey, Soo-Han Choi et found the possible acceptance of COVID-19 immunization for children in 226 parents and 117 children/ adolescents .Regarding COVID-19 immunisation for children, 59.2 percent (64.2 percent of parents and 49.6 percent of children/ adolescents) responded "acceptable."(6)In a study conducted in England by Sadie Bell et al, The most common worries about a COVID-19 vaccine stated by survey participants revolved around vaccine safety, which was mostly spurred by the vaccine's newness and rapid development.(7)One of the main findings of Gabriella et al' s study conducted in Italy is that more than two-thirds of parents (68.5 percent) reported their willingness to vaccinate their children against COVID-19, with parents of adolescents (74.5 percent) having a higher willingness than parents of younger children (65.5 percent).(8)

The parent's gender is undoubtedly one of the elements that influences views concerning COVID-19 vaccines. In the study, 60.2% (n=106) of men showed more favorable attitudes towards getting their children vaccinated of COVID-19 vaccination whereas women showed more favorable attitudes towards getting their children vaccinated in the survey by Babicki et.al (3)

In this study, parental anxiety about potential difficulties, as well as previous experience with vaccines, particularly regarding the occurrence of adverse events after the preparations employed, were

found to be one of the biggest predictors of reluctance to COVID-19 immunization. According to a study conducted by Babicki et al., another major predictor of parental concern is the judgement of the efficiency of the preparation utilised (3)

Those who were employed and had a better degree of education were more inclined to accept their children's vaccines. Previous research has linked similar factors to parental desire to vaccinate their children with the COVID-19 vaccine ((5,10,11,12)

In the study, parents holding postgraduate level of educational qualification 69% (n=29) were ready to get their child vaccinated once the vaccination becomes available to the children specific age groups. It was also found that 20.2% (n=62) residing in urban area and 10% (n=3) residing in rural area were not ready to get their child vaccinated fearing the long-term side effects. 7.5% (n=23) study population living in urban areas and 13.3% (n=4) in rural areas believed that vaccination will not prevent COVID19 infection. Therefore, numerable factors attributes to the acceptance and hesitance towards COVID 19 Vaccine in children of which parents being the decision makers must be well educated and informed about the pros and cons of vaccination and how it can help in reducing the spread of the infection.

2.3% (n=8) of the study population never got their children vaccinated. The significance of early childhood immunisation is an important global public health strategy that saves two to three million lives each year, many children do not receive all of the vaccines that are recommended. Vaccination programmes rely on people's awareness and acceptance of vaccines to attain and maintain optimal coverage rates. (13) moreover, To acquire herd immunity, children must be vaccinated against COVID-19 as the virus has the potential to

mutate further over the time causing severe infections. (14)

The response to the question if the child got tested for covid 19 infectin when a family member turned positive and if they haven't, why? Had a response where 90% (n=27) of the study population residing in rural area and 97.4% (n=299) residing in urban area believed that their children will not get infected by Covid-19 infection. 1.6% (n=5) participants in urban areas and 10.3% (n= 3) in rural area stated that their children did not show any symptoms and 1% (n=3) residing in urban area stated that they did not want to get their children tested. Though 226 out of 337 participants worried that their child would get infected with covid 19 infection; out of the covid19 infected 38 households only 27 participants got their children screened for the infection. This indicates a lack of awareness towards the contagious nature of the COVID19 infection and hence Awareness must be created to enhance testing in children in a household when a family member is infected with the COVID19 infection.

Conclusion

This study sheds light on how Bangalore parents feel about the COVID-19 immunisation and testing for their children. Based on our findings, we noticed that the majority of parents plan to vaccinate their children. Vaccinating children against COVID-19 causes many emotions and uncertainties in parents, and it is also a topic of controversy among specialists. The decision to vaccinate should be made by the parents of the child. Individual benefits from COVID-19 protection as well as population benefits from pandemic control must be evaluated. There is a need for continued monitoring of the safety of delivering COVID-19 immunizations to children, as well as analysing their effectiveness and benefits in lowering individual risk of severe COVID-19

disease and consequences, and evaluating the population benefits of vaccines in children. parents must be made aware of the contagious nature of the infection and the significance of screening tests for their children when they come in contact with an infected individual. Mass media, as the most widely used source of information, can be a safe and effective approach to reach as many people as possible with accurate information in a short amount of time. However, developing efficient techniques to prevent infodemia and misleading news is the most difficult task facing awareness initiatives.

References

1. Altulaihi B A, Alaboodi T, Alharbi K G, et al. Perception of Parents Towards COVID-19 Vaccine for Children in Saudi Population. Cureus 13(9): e18342.
2. Mohamed NA, Solehan HM, Mohd Rani MD, Ithnin M, Che Isahak CI (2021) Knowledge, acceptance and perception on COVID-19 vaccine among Malaysians: A web-based survey. PLoS ONE 16(8): e0256110.
3. <https://www.unicef.org/india/stories/should-you-get-your-children-vaccinated-against-covid-19>
4. Babicki, Mateusz, Dagmara Pokorna-Kałowak, Zbigniew Doniec, and Agnieszka Mastalerz-Migas. 2021. "Attitudes of Parents with Regard to Vaccination of Children against COVID-19 in Poland. A Nationwide Online Survey" *Vaccines* 9, no. 10: 1192.
5. Yılmaz M, Sahin MK. Parents' willingness and attitudes concerning the COVID-19 vaccine: A cross-sectional study. *Int J Clin Pract.* 2021 Sep;75(9): e14364
6. Kishore, Jugal¹; U, Venkatesh¹; Ghai, Glory¹; Heena, ¹; Kumar, Prem² Perception and attitude towards COVID-19 vaccination, *Journal of Family Medicine and Primary Care*: August 27, 2021 - Volume 10 - Issue 8 - p 3116-3121

7. Bell, S.; Clarke, R.; Mounier-Jack, S.; Walker, J.L.; Paterson, P. Parents' and guardians' views on the acceptability of a future COVID-19 vaccine: A multi-methods study in England. *Vaccine* 2020, 38, 7789–7798.
8. Gabriella Di Giuseppe, Concetta Paola Pelullo, Andrea Salvatore Volgare, Francesco Napolitano, Maria Pavia, Parents' Willingness to Vaccinate Their Children With COVID-19 Vaccine: Results of a Survey in Italy, *Journal of Adolescent Health*, Volume 70, Issue 4, 2022, Pages 550-558
9. Choi SH, Jo YH, Jo KJ, Park SE. Pediatric and Parents' Attitudes Towards COVID-19 Vaccines and Intention to Vaccinate for Children. *J Korean Med Sci*. 2021 Aug;36(31):e227.
10. Zhang, K.C.; Fang, Y.; Cao, H.; Chen, H.; Hu, T.; Chen, Y.Q.; Zhou, X.; Wang, Z. Parental Acceptability of COVID-19 Vaccination for Children Under the Age of 18 Years: Cross-Sectional Online Survey. *JMIR Pediatr. Parent* 2020, 3, 1–13.
11. Goldman, R.D.; Yan, T.D.; Seiler, M.; Cotanda, C.P.; Brown, J.C.; Klein, E.J.; Hoeffe, J.; Gelernter, R.; Hall, J.E.; Davis, A.L.; et al. Caregiver willingness to vaccinate their children against COVID-19: Cross sectional survey. *Vaccine* 2020, 38, 7668–7673.
12. Ennaceur S, Al-Mohaithef M. Parents' Willingness to Vaccinate Children against COVID-19 in Saudi Arabia: A Cross-Sectional Study. *Vaccines (Basel)*. 2022 Jan 21;10(2):156.
13. Kaufman J, Ryan R, Walsh L, Horey D, Leask J, Robinson P, Hill S. Face-to-face interventions for informing or educating parents about early childhood vaccination. *Cochrane Database Syst Rev*. 2018 May 8;5(5):CD010038
14. Chen F, He Y, Shi Y. Parents' and Guardians' Willingness to Vaccinate Their Children against COVID-19: A Systematic Review and Meta-Analysis. *Vaccines (Basel)*. 2022 Jan 24;10(2):179.