

The Impact of Knowledge and Attitude on Parents' Anxiety Regarding the Covid-19 Antigen Swab Test in Children

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ABSTRACT

Background: The government has designated the antigen rapid diagnostic test as one of the methods for COVID-19 screening, contact tracing, and diagnosis under certain conditions. While the antigen swab test is used for initial screening, some parents (8 individuals) have reported feeling anxious.

Objective: This study aimed to analyze the relationship between parents' knowledge and attitudes and their anxiety about the COVID-19 antigen swab examination for children.

Methods: This research is a quantitative research with a cross-sectional approach. The population was 98 parents of pediatric patients at the Emergency Installation of RSU Aminah Blitar, with 46 respondents selected through Accidental Sampling. The variables in the research were the level of knowledge and attitudes measured using a questionnaire developed by researchers, while the level of anxiety was calculated using the STAI questionnaire. Analysts use the Spearman rank test.

Results: The results showed that 45.7% had good knowledge, 50% had a good attitude, and 56.5% had good anxiety levels. Statistical analysis using the Spearman rank test revealed a significant correlation between the levels of knowledge, attitude, and anxiety ($p = 0.000$), with correlation coefficients of $r = 0.537$ and $r = -0.789$, respectively.

Conclusion: Knowledge plays a crucial role in determining behaviour, as it forms beliefs that influence perception, decision-making, and behaviour. People with less knowledge about COVID-19 may experience increased anxiety. This research is expected to support nurses' role as educators by providing counselling about antigen swab tests to improve patients' and families' knowledge and attitudes, which may reduce anxiety levels.

Keywords: level of knowledge; attitude; anxiety; swab antigen; covid-19

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INTRODUCTION

The World Health Organization (WHO) declared a public health emergency of international concern on January 30, emphasizing the need for collaborative global efforts to combat the spread of COVID-19. In Indonesia, as COVID-19 cases surged, the government mandated the use of antigen rapid diagnostic tests for screening, contact tracing, and diagnosis under specific conditions (Ministry of Health, 2021). Locally, the Indonesian Pediatrician Association (IDAI) reported a rising number of pediatric cases with COVID-19-like symptoms, causing significant concern among parents in Blitar, East Java.

With the implementation of this decision, the hospital has determined that the antigen swab test is one of the requirements for patients hospitalized at the hospital. Antigen Swab or the Rapid Antigen Test. The COVID-19 rapid diagnostic test is carried out to detect the presence of the COVID-19 virus. In samples originating from the respiratory tract (through the nose). Antigen will be detected when the virus is actively replicating.

Based on the statement by the Indonesian Pediatrician Association IDAI (2020), there are 3,324 children with the patient under supervision (PDP) status; 129 PDP died, and 584 children tested positive (14 of whom died). The number of deaths is

increasing in Indonesia; 160 children died with PDP status. IDAI said this figure shows the highest child mortality rate due to COVID-19 compared to Southeast Asian countries. This increase has created new anxiety for some parents (KPAI, 2020). While previous studies have examined general anxiety in parents during the COVID-19 pandemic, limited research has specifically explored the relationship between parental knowledge and anxiety in the context of antigen swab tests for children. This study aims to address this gap by analyzing how knowledge and attitudes influence parental anxiety during pediatric COVID-19 testing in a local Indonesian setting.

According to data from the Indonesian Ministry of Health, the number of cases in Indonesia as of March 12 2022, was 5.9 million confirmed cases, and 152 thousand people died. Based on Kompas (2022) data as of February 07 2022, the distribution of COVID-19 cases among school-age children reached 7,190 of all confirmed positive cases in Indonesia. In Indonesia, from 22-28 December 2021, every day, an average of 378 children aged 17 years and under were hospitalized. This data continued to increase until December 27, 2021-January 2, 2022, when the number of children being treated in the hospital reached 672 per day (Kompas, 2022).

Anxiety is called an unsettling feeling that is vaguely remembered because of discomfort or fear accompanied by an answer. Anxiety can be interpreted as a feeling of fear of something caused by anticipation of danger and is a sign that helps people prepare steps to face danger (Sutejo, 2018). Belsky (1984) said that the cause of anxiety can be because of a person's knowledge of a situation that they feel, whether the situation is threatening or not threatening, as well as knowledge about the ability to control oneself (emotions and focus on problems). Therefore, the amount of information that is diverse and sometimes not the same and changes can cause anxiety. Primarily, suppose this anxiety is related to the possibility of exposure to family members, especially children, Covid-19. In that case, many have expressed that it is difficult for children to implement health protocols consistently, such as wearing masks, washing their hands frequently and minimizing playing outside the home. This could add to the anxiety of parents (Herliana & Lestari, 2021).

Freud in Feist et al. (2012) explains that anxiety is a practical situation that is felt to be unpleasant, which is followed by a physical sensation that warns someone of imminent danger. Knowledge, attitudes and behaviour influence public anxiety in preventing the spread of Covid-19. Without knowledge, a person has no basis for making decisions and determining actions regarding the problems faced (Notoadmodjo, 2014). Notoadmodjo (2014) explains that attitude is the opinion or assessment of people or respondents regarding health, health and illness, and factors related to health risk factors. Based on the results of

interviews conducted by researchers in the second week of November, eight parents who came to the emergency room at RSUD Aminah Blitar to have their children checked admitted that they were worried about the antigen swab process that was carried out because it was related to their child who was sick but was still sick. Also, what makes you anxious are the symptoms similar to those of COVID-19. The research results of Suwandi and Malinti (2020) show that good knowledge about COVID-19 does not guarantee that the level of anxiety experienced will be mild or, conversely, insufficient knowledge will result in severe anxiety. The causes of anxiety include factors such as age, environment, knowledge and experience in resolving psychological problems, including anxiety, and the role of the family, which is less supportive.

The rapid antigen test sample is taken by wiping the nasal cavity (nasopharynx) or oral cavity (oropharynx) using a tool such as a special coronavirus cotton swab. The process for finding out the results of this test is very fast; it can only take 10 to 20 minutes. The equipment is affordable, which is one of the advantages of the rapid test, which allows it to be used to examine many people at once.

Based on the results of interviews conducted by researchers in November 2022, 8 parents who came to the ER at RSUD Aminah Blitar to have their children checked admitted that they were worried about the antigen swab process carried out on children who were going to be hospitalized. This is related to children who are already sick and have symptoms similar to COVID-19, so it does not rule out the possibility that children will be positively infected with the COVID-19 virus. From the results of these interviews, researchers want to research "the relationship between the level of knowledge and attitudes and parental anxiety regarding the Covid-19 antigen swab examination process in children."

METHOD

This type of research is quantitative and uses a cross-sectional approach. The population of this research is the parents of pediatric patients who will be hospitalized in November 2022 in the first and second weeks, namely 98 patients. The sample that will be used is 46, taken based on accidental sampling. The dependent variable in this research is the level of knowledge and attitude, while the independent variable is the level of anxiety. The instrument uses a knowledge and attitude questionnaire prepared by researchers, while anxiety uses the STAI questionnaire. The questionnaires were validated with a Cronbach's alpha of 0.85 for knowledge and 0.88 for anxiety. Data analysis used the Spearman rank test with $\alpha = 5\%$ (0.05). This study received ethical approval from the Patria Husada Blitar Health Sciences Ethics Committee, with ethics approval number: 06/PHB/KEPK/146/03.23.

RESULTS

Demographic data or characteristics of respondents in the study are as follows:

Tabel 1. Respondent Characteristics (n=46)

Characteristics of Respondents	Category	N	%
Gender	Male	20	43.5%
	Female	26	56.5%
Age	Late Teen (17-25 years)	24	52.2%
	Early Adult (26-35 years)	20	43.5%
	Late Adult (36-45 years)	2	4.3%
Last Education	High School	27	58.7%
	Higher Education/Diploma	19	41.3%

Distribution of respondents based on level of knowledge and Attitude

Tabel 2: Categories of Knowledge and Attitudes Levels of Respondents (N=46)

Variabel	Category	N	%
Knowledge Level	Good	23	50%
	Adequate	17	37%
	Poor	6	13%
Attitude	Good	23	50%
	Adequate	17	37%
	Poor	6	13%

In [Table 1](#), the majority of respondents, 21 people (56.5%) were female, 24 people (52.5%) were in their late teens (17-25 years old), and 27 people (58.7%) had the highest education level of high school. In

[Table 2](#), the level of knowledge and attitude of each respondent was categorically good, namely 23 people (50%). The results of the analysis between variables in this study are as follows:

Analysis of the Relationship Between Knowledge Level and Anxiety Level

Table 3. Analysis of the Relationship Between Knowledge Level and Anxiety Level in the Antigen Swab Process for Children (n=46)

Knowledge Level	Anxiety Level						Total respondents	
	Mild anxiety		Moderate anxiety		Severe anxiety			
	F	%	F	%	F	%	F	%
Good	14	30.4	7	15.2	0	0	21	45.7
Adequate	0	0	19	41.3	2	4.3	21	45.7
Poor	0	0	0	0	4	8.6	4	8,6
Total respondents	14	30.4	26	56.5	6	12.9	46	100
Spearman's Rho test $\rho=0.000$ $\alpha<0.05$; <i>Correlation coefficient</i> = -0.789								

Analysis of the Relationship Between Attitude and Anxiety Level

Table 4. Analysis of the Relationship Between Attitude and Anxiety Level in the Antigen Swab Process for Children (n=46)

Attitude	Anxiety Level						Total respondents	
	Mild anxiety		Moderate anxiety		Severe anxiety			
	F	%	F	%	F	%	F	%
Good	10	21.7	13	28.3	0	0	23	50
Adequate	4	8.7	13	28.3	0	0	17	37
Poor	0	0	0	0	6	13	6	13
Total respondents	14	30.4	26	56.5	6	13	46	100
Spearman's Rho test $\rho=0.000$ $\alpha<0.05$; <i>Correlation coefficient</i> = -0.542								

Based on [Table 3](#), it is known that the significance value (p) is 0.000, namely < 0.05 . So, the results show that there is a significant relationship between the

variable level of knowledge and the level of anxiety. The correlation strength value is -0.789, which means the correlation strength between the two variables is

strong. Meanwhile, the direction of the correlation between the two variables is negative, where the higher the level of knowledge, the lower the respondent's level of anxiety regarding the antigen swab examination process for children. This indicates that respondents with high knowledge are less likely to experience anxiety, as demonstrated by the strong negative correlation (-0.789).

Based on Table 4, it is known that the significance value (p) is 0.000, namely <0.05 . So, the results show that there is a significant relationship between the attitude variable and the level of anxiety. The correlation strength value is -0.542, which means the correlation strength between the two variables is strong. Meanwhile, the direction of the correlation between the two variables is negative, where the higher the attitude, the lighter the respondent's level of anxiety regarding the antigen swab examination process in children.

DISCUSSION

Knowledge Level

The research results found that respondents with good and sufficient levels of knowledge had the same number, namely 21 respondents (45.7%), and 4 respondents (8.6%) had poor knowledge. According to Notoadmodjo (2014), knowledge is the result of knowing, and this occurs after people sense a particular object. According to Mubarak (2011), several factors influence knowledge, namely education and age.

This study found that of the 21 respondents with good knowledge, 15 (78.9%) had a university/diploma education. The level of education is one factor that influences a person's knowledge and actions because knowledge will directly influence behaviour (Dharmawati & Wirata, 2016). Notoadmodjo (2014) states that the factor that has the most significant influence on expertise is education because people with higher education can provide a more rational response to the information they receive and will think about the extent of the benefits a person gives to the development of others in achieving their goals. Certain. This theory is in line with research where the excellent knowledge of respondents in this study is proven by the respondents' insight or understanding regarding the meaning, function, symptoms, accuracy and length of the COVID-19 antigen swab examination process. Respondents' knowledge was generally good due to the large amount of information about the COVID-19 antigen swab examination obtained from mass media such as television, newspapers, billboards, posters and banners. Apart from that, social media allows people to get various information quickly and easily about Covid-19. This was acknowledged by several respondents when researchers interviewed them.

The research found that four respondents (8.6%) with insufficient knowledge were all in their late teens. According to Monintja (2015), as age increases, the level of expertise will develop according to the previously obtained knowledge and the respondent's experience. According to Nursalam (2008), age can influence a person's knowledge; the older they are, the more mature their maturity and strength will be in thinking and working. This theory aligns with research where the older the respondent, the better the level of knowledge. This is because the older you get, the wiser you get, the more information and knowledge you have. Researchers argue that age influences a person's ability to perceive and think patterns. As a person gets older, his understanding and thinking patterns will also develop, improving the knowledge he acquires.

Attitude

From the research results, it was found that the majority of respondents had a good attitude towards the antigen swab examination process in children, namely 23 respondents (50%), 17 respondents (37%) had a fair attitude towards the antigen swab examination process, and six respondents (13%) have less attitude. Attitude is a syndrome or collection of symptoms in response to a stimulus or object, so attitude involves thoughts, feelings, attention, and other psychological symptoms (Notoadmodjo, 2014). According to Azwar (2013), education is one factor that influences attitudes. Meanwhile, according to Hurrock (2008), age is one factor influencing attitude.

This study found that the six respondents (13%) with poor attitudes were all in their late teens. Age is related to the maturity of the mind in accepting, appreciating and responding to something. As a person gets older, the maturity of the mind also grows more robust, thus fostering a better attitude in a person (Muliadi, 2008). The results of Afrianti, N., & Rahmiati (2021) prove that age is related to people's compliance with the Covid-19 health protocol. This is because compliance with health protocols is more significant in the adult age category than in teenagers (Afrianti et al., 2021). The research results support the theory that the older a person is, the more life experience they have and the easier it is to accept behaviour changes, especially in health activities. As age increases, the level of thinking in action becomes more mature (Stuart & Sundeen, 2007). This theory aligns with research, where a person's age influences thinking patterns and comprehension ability in studying an object. The older you get, the more your mindset and ability to learn things will increase, so your attitudes and behaviour will improve.

This study found that six respondents (13%) had less than a high school/vocational education. According to Notoadmodjo, a person's education regarding health will influence their health

behaviour; this is because it will be easier to gain knowledge and create efforts to prevent disease (Notoadmodjo, 2014). Suppose the level of education and knowledge is good. In that case, the behaviour formed will also be good (Gannika et al., 2020), according to the results of research by Gannika, L., & Sembiring (2020), which shows that there is a relationship between the level of education and Covid-19 prevention behaviour in the people of North Sulawesi. The researcher has the opinion or opinion that this theory is in line with the research I conducted, where a person with a high level of education will make that person have good knowledge and will have an impact on that person's attitudes and behaviour

Anxiety Level

From the research results, it was found that the majority of respondents had a moderate level of anxiety regarding the antigen swab examination process in children, namely 26 respondents (56.5%), 14 respondents (30.4%) had a mild level of anxiety, and six respondents (13.1%) have a severe level of anxiety. Anxiety is described as an unpleasant mood condition accompanied by a subjective feeling of uncertainty and threat in the future. Anxiety includes the main symptoms of fear and worry (Stahl, 2013). According to Stuart & Sundeen (2008); Putri, (2019), factors that influence anxiety are education, age and gender.

In this study, it was found that all six respondents (13.1%) with severe levels of anxiety were in the late teens age category. Stuart G.W & Laraia M.T (2007) stated that an individual's maturity or maturity will influence a person's ability to cope with mechanisms so that more mature individuals find it challenging to experience anxiety because individuals have a more remarkable ability to adapt to anxiety compared to immature people. This theory is in line with research; it has been proven in research that mature ages, namely adults, have a lower prevalence of anxiety levels compared to teenagers. This proves that mature people have sufficient coping abilities to overcome anxiety.

From the research results, it was found that the majority of respondents had a moderate level of anxiety regarding the antigen swab examination process in children, namely 26 respondents (56.5%), 14 respondents (30.4%) had a mild level of anxiety, and six respondents (13.1%) have a severe level of anxiety. Anxiety is described in this study; there were six respondents (13.1%) with high levels of anxiety who had high school/vocational education. Kaplan and Sadock (1997) and Kurniawan (2008) stated that a person's low level of education will cause that person to experience anxiety more quickly than those who have a high educational status. According to researchers, the higher a person's level of education, the lower their level of anxiety. A person's high level of education will form an adaptive pattern of anxiety

because they have a better coping pattern for something.

From the research results, it was found that six respondents had severe levels of anxiety, 5 of whom were female. A study conducted by Maryam and Kurniawan A (2008) stated that gender factors can significantly influence the patient's anxiety level. In this study, it was also stated that women are more at risk of experiencing anxiety compared to men. According to (Yulia Ardiyanti et al., 2017), their research concluded that the gender characteristics of respondents who experienced anxiety were female because women find it difficult to control their emotions, which gives rise to anxiety. Ed is an unpleasant mood condition accompanied by a subjective feeling of uncertainty and threat in the future. Anxiety includes the main symptoms of fear and worry (Stahl, 2013). According to Stuart & Sundeen (2008); Putri.,(2019), factors that influence anxiety are education, age and gender.

In this study, it was found that all six respondents (13.1%) with severe levels of anxiety were in the late teens age category. Stuart G.W & Laraia M.T (2007) stated that an individual's maturity or maturity will influence a person's ability to cope with mechanisms so that more mature individuals find it challenging to experience anxiety because individuals have a more remarkable ability to adapt to anxiety compared to immature people. This theory is in line with research; it has been proven in research that mature ages, namely adults, have a lower prevalence of anxiety levels compared to teenagers. This proves that mature people have sufficient coping abilities to overcome anxiety.

Analysis of the Relationship Between Knowledge Level and Parental Anxiety Regarding the COVID-19 Antigen Swab Process

The results of the analysis of the relationship between level of knowledge and anxiety show that there is a significant (meaningful) relationship between the variable level of knowledge and anxiety with a substantial correlation strength value between the two variables. Meanwhile, the direction of the correlation between the two variables is negative, where the higher the level of knowledge, the lower the parents' anxiety. Knowledge is a change in an individual's behavior that comes from the experiences experienced by each individual. Another opinion describes knowledge as information that a person stores in their brain's memory (Pakpahan, 2017). Similar findings have been reported in studies utilizing the STAI questionnaire to assess anxiety, which demonstrated that higher levels of knowledge correlate with reduced anxiety (Boker et al., 2002; Knowles & Olatunji, 2020). These findings suggest that educational interventions targeting knowledge gaps can be effective in mitigating anxiety, particularly in stressful healthcare scenarios.

People who have insufficient knowledge regarding COVID-19 will have anxiety in the community itself. Anxiety is triggered by various factors, one of which is knowledge (Y UAP, 2019). Knowledge is the basis of a person's actions, stimulating someone to do something. According to Sirait (2020), anxiety is a psychological condition or individual form of tension, restlessness, or worry that is accompanied by feelings of threat and fear due to uncertainty in the future that something terrible will happen.

Anxiety can be caused by various factors, including a lack of knowledge (Suwandi & Malinti, 2020). Anxiety is fear, worry, and restlessness, which have an impact on changes in behavior such as withdrawing from the environment, difficulty focusing on activities, difficulty eating, irritability, low emotional control, anger, illogic, and difficulty sleeping (Jarnawi, 2020). That is why, with sufficient knowledge, anxiety can be reduced, and, of course, the negative impacts of anxiety itself. On the other hand, insufficient knowledge can cause anxiety. As found in this study, parents with a good level of knowledge had a moderate level of anxiety.

Researchers think or believe this can happen because parents see children who are fussy and even cry when the antigen swab examination is carried out. This can increase parents' anxiety regarding the antigen swab examination process and even regarding the examination results because parents are also unable to monitor the child's activities outside the home, so it does not rule out the possibility that the examination results will show the child is positive for COVID-19. This theory aligns with research conducted by Daha et al. (2021), which found a significant relationship between the level of knowledge and people's anxiety about the coronavirus disease (COVID-19), with a p-value of 0.000.

Analysis of the Relationship Between Attitudes and Parental Anxiety Regarding the COVID-19 Antigen Swab Process

Analysis of the relationship between attitudes and parents' level of anxiety regarding the COVID-19 antigen. The results of the analysis of the relationship between attitude and anxiety show that there is a significant (meaningful) relationship between the attitude variable and anxiety with a substantial correlation strength value between the two variables. Meanwhile, the direction of the correlation between the two variables is negative, where the higher the attitude, the lower the parental anxiety. Human attitudes are predictors of normal behavior, although environment and self-confidence can influence them. This means that attitudes will determine actions, but sometimes attitudes are not reflected in actions. Whether something is good or bad will influence personal actions (Yantietal, 2020). Attitudes will

impact the behavior of every society; with a good attitude, it is hoped that it will lead to good behavior, although not always.

Factors that influence attitudes towards attitude objects are personal experiences that leave a strong impression and the influence of other people who are considered essential (Kurniawan, 2018). Notoatmodjo (2014) states that attitude is a very important concept in the socio-psychological component because it is a tendency to act and perceive. In overcoming anxiety, it is necessary to use efforts to change thought patterns (cognitive) so that behavior can be changed (Surbakti et al., 2017).

In this study, it was found that respondents with good attitudes had moderate levels of anxiety. Apart from attitude, many other factors influence a person's anxiety, one of which is the coping response. The nature of stressors can change so that they can influence individuals in dealing with anxiety, depending on the individual's coping mechanisms. When an individual's coping is good, the individual can control the anxiety they feel so that it does not hurt themselves and others. Shin & Newman (2019) write that anxiety comes from the perception of uncontrollable events so that individuals will focus more on controlled actions. This theory is in line with research conducted by Mustari et al. (2021), where it was found that there is a relationship between anxiety and people's attitudes in the new average era of COVID-19 with a value: $0.000 < \alpha: 0.05$. Researchers think that some respondents have good attitude results, and some have a moderate level of anxiety; if the attitude is good, then a person's anxiety level is also a good process.

Implications

The results of this study have important practical, theoretical, and policy implications. In practice, improving public health education programs through mass and social media needs to be optimized, especially for adolescents with lower knowledge and coping skills. Communication strategies should be adjusted to age and education, while psychosocial services, such as brief counseling, can help reduce parental anxiety during the antigen swab test process.

From a policy perspective, these results support the development of a health education curriculum that includes anxiety management and pandemic information, as well as integrating psychosocial services in health facilities. Theoretically, these findings emphasize the relationship between knowledge, attitudes, and anxiety, support the development of the knowledge-attitude-anxiety (KAP) model and open up opportunities for further research on the role of age, gender, and education in health psychology. Additional research should focus on long-term analysis and vulnerable groups to support more humanistic, evidence-based policies.

Limitations and Recommendations

This study has several limitations that need to be considered. First, the study design used a cross-sectional approach, so it is impossible to determine the cause-and-effect relationship between the variables studied. Second, this study was only conducted in one location, so the results may not be generalizable to a wider population. Third, data collection through questionnaires can produce response bias, such as differences between respondents' perceptions and actual conditions. In addition, this study has not considered other factors, such as social support, trust in health services, and direct experience with COVID-19, which may contribute to respondents' anxiety levels.

To overcome these limitations, future studies should use a longitudinal design to understand the relationship between knowledge, attitudes, and anxiety over time. In addition, studies need to include more geographically, socially, and culturally diverse populations to increase the external validity of the findings. Public health education programs should be designed more specifically for adolescents and individuals with low education levels, using interactive and technology-based approaches to increase effectiveness. Health facilities also need to provide integrated psychosocial services, such as mental health counseling, to help people manage anxiety related to COVID-19 testing or other pandemics. The results of this study can also be a basis for policymakers to design more holistic health interventions, including education, anxiety management, and psychological support at the community level.

CONCLUSIONS

Based on the research and discussion presented, several conclusions can be drawn to address the objectives outlined in this study. Parents' knowledge of the COVID-19 antigen swab examination process is generally considered adequate, although some parents still require further information. Regarding their attitudes, most parents demonstrate a positive outlook towards the antigen swab examination process for their children, while others display a more neutral or less favorable attitude. When it comes to parental anxiety, most parents report experiencing a moderate level of anxiety about the antigen swab examination, with some expressing mild or severe stress.

This study concludes that parental knowledge and attitudes significantly affect their anxiety levels regarding pediatric COVID-19 antigen swab tests. Health education interventions and tailored psychosocial support are crucial in addressing parental concerns during testing. Furthermore, the study found a significant relationship between parents' level of knowledge and their attitudes, indicating that increased knowledge tends to be associated with more positive attitudes. A strong

negative relationship was identified between attitudes and anxiety levels, suggesting that more positive attitudes are linked to lower levels of anxiety.

These findings highlight the importance of enhancing parental knowledge and fostering positive attitudes through targeted health education and counseling. Such efforts can help alleviate parental anxiety and improve overall adherence to pediatric testing protocols, contributing to better healthcare outcomes for children.

Declaration of Interest

The authors declared no conflict of interest.

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Authors' Contributions

All authors contributed substantially to the conceptualization, design, data curation, formal analysis, interpretation, writing, review, and editing of the paper. All authors approve the final version to be published.

Data Availability

The datasets generated during and analyzed during the current study are available from the corresponding author upon reasonable request.

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