

## REASONS FOR HESITATION IN CHILDREN'S VACCINATION IN PARENTS IN LATINAMERICA

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### ABSTRACT

**Objective:** Identify the reasons for hesitancy in childhood vaccination in parents in Latin America. **Materials and methods:** Initially, 1426 articles were identified, from which the final sample consisting of 9 articles was derived. A systematic review of scientific literature was carried out using the PRISMA guidelines, based on the research question that arises from the central theme of the reasons for hesitancy in childhood vaccination in parents of minors in Latin America. **Results:** We focus on the 9 articles that were finally analyzed, found in different scientific journals between 2018 and 2024. The databases analyzed were Scielo, with 6 articles and PubMed with 3. From these, reasons related to parents emerge, which includes lack of knowledge and health education of parents, lack of confidence in vaccines and right to decide, not to get vaccinated and reasons related to the context, which include the care of the health provider/health professional, beliefs and customs. **Conclusions:** It was found that motivations are grouped into two general categories; reasons related to parents and reasons related to the context. These elements must be taken into account by authorities and health care providers, in order to achieve greater coverage in immunization programs aimed at minors.

**KEYWORDS:** Vaccination Hesitancy, Parent, Immunization programs, Latin America (Source: DeCS/MeSH).

### INTRODUCTION

Vaccines, apart from saving millions of lives, are part of the human rights to health since they protect against the risk of suffering from complications and diseases.

In the last decade, immunization coverage in Latin America and the Caribbean has decreased drastically and has become one of the lowest in the world.

Vaccination is the most important public health practice to prevent infectious diseases and maintain health. However, some parents hesitate and refuse to vaccinate their children.<sup>[1]</sup>

According to the World Health Organization (WHO), in recent years, during the pandemic, there has been a slowdown in progress in immunization programs. Although more than four million more children were vaccinated globally in 2022 than in 2021, 20 million children have not yet received one or more of their corresponding vaccines. The increase in conflicts, the economic recession and the increase in vaccination

rejection are some of the threats that threaten efforts to vaccinate all children.<sup>[2]</sup>

The WHO and UNICEF point out that childhood vaccination in the Latin American and Caribbean region shows recovery data but is still dangerously lagging behind. Vaccination coverage showed improvements in the last year, but reports indicate that 2 million children are still at risk of contracting preventable diseases that affect their health and well-being.<sup>[3]</sup>

25% of children do not have essential vaccines, a situation that causes immunization coverage rates to be at the levels of three decades ago.<sup>[4]</sup>

Parental hesitancy about vaccines is a situation that currently worries public health systems, because it is associated with the delay and refusal of vaccination in children, a situation that puts them at risk due to the increase of their vulnerability to preventable diseases.<sup>[5,6]</sup>

Parental vaccine reluctance may contribute up to 25% to undervaccination among children aged 19 to 35 months.

Increasing vaccination coverage also implies addressing doubts and barriers to access to vaccination.<sup>[7]</sup>

Vaccination is essential for the prevention and control of infectious disease outbreaks and is also one of the most important public health achievements in history. When it comes to childhood vaccines, parental consent is crucial, for this reason, childhood vaccination rates are directly related to parents' knowledge, beliefs, and behaviors.<sup>[8]</sup>

Cooperation from parents, and more specifically mothers, has been shown to improve the successful completion of children's vaccinations and reduce the likelihood of vaccine failures.<sup>[9,10]</sup>

A systematic review involving 23 studies, including 29.131 parents from more than 30 countries, found that the cumulative prevalence of parental hesitancy to vaccinate was 21.1%, with 13.3% specifically for the Americas region. This study adds the importance of developing effective communication strategies to achieve greater coverage in childhood vaccination programs.<sup>[11]</sup> The increasing trend in vaccine refusals underscores the need to improve crisis response and support health initiatives, particularly in regions where a substantial increase in refusals has been observed in recent years.<sup>[12]</sup>

The above drives the need to continue generating scientific evidence that allows us to reflect on this problem and take the best actions to counteract vaccine hesitancy in parents. Therefore, the objective of this review was to identify the reasons for hesitancy in childhood vaccination in parents in Latin America.

**MATERIALS AND METHODS**

A systematic review of scientific literature was carried out, based on the research question that arises from the central theme of the reasons for hesitancy in childhood

vaccination in parents of minors in Latin America, which guides the development of this study. Search words extracted from health sciences thesauri were included, thereby identifying key terms. The databases reviewed were Scielo and PubMed.

The PRISMA (*Preferred Reporting Items for Systematic reviews and Meta- Analyses*), allowed for the appropriate and transparent selection of the final documents analyzed in the study. As inclusion criteria applied for the selection of documents for this study we have: Articles published in scientific journals from 2018 to 2024, studies related to health sciences, Latin American context, Spanish, Portuguese and English languages, articles that contain the descriptors identified from the DeCS and MeSH thesauri, finally, links to articles with a link in force at the time of the development of the study.

Among the exclusion criteria applied in the study were: (a) studies that were not published in scientific journals, (b) articles published before 2018, (c) that do not correspond to the field of health sciences or public health, ( d) that does not correspond to the topic of the study, (e) that do not correspond to the Latin American reality, (f) research in languages other than Spanish, Portuguese and English, (g) duplicate articles, (h) articles that do not have access to the full text, finally, (i) articles whose links are not with a current link.

To search for information, thesaurus terms were used; the descriptors used were “Vaccination hesitancy”, “Parents” and “Latin America” in Spanish, which correspond to the English terms “Vaccine”. Hesitancy”, “Parents” and “Latin America” which were extracted from DeCS and MeSH. The term Latin America was only applied in PubMed. The Boolean operator AND and filters from both databases identified for this study were also used.

**Table 1: Result of the initial search in the database using combined keywords. Source: self made.**

Keywords used in the search strategy	Database	Documents found	Documents applying filters
Vaccination Hesitancy AND Parents AND Latin America	Scielo PubMed	16 results 1409 results	14 results 4 results
Vaccine hesitancy AND Parents AND Latin America			

To the initial results of the search where 1425 studies were found, the corresponding filters with the exclusion criteria were applied, obtaining 14 results in the Scielo database, and 4 results in the PubMed database. Which go to the screening stage, where exclusion criteria are applied again according to the PRISMA flow. Finally, 9 articles are included as shown in Figure 1 (PRIMA flowchart).

According to the approach, eight quantitative studies and one qualitative study were included. Regarding the design, we have 4 cross-sectional studies and five reviews, they are published online in their entirety, without time restriction, in Portuguese, English and Spanish. Editorials, publications that did not address children, and publications that were not aligned with the objective or addressed the research question were excluded.

The selected articles were analyzed and the essential information was concentrated in an information matrix table, where in addition to the data that identifies each of the articles, the types of articles and the reasons for the hesitation were identified. The analysis of the

information was carried out to identify themes and subthemes, which were grouped, summarized and presented in categories, each with its respective narrative.

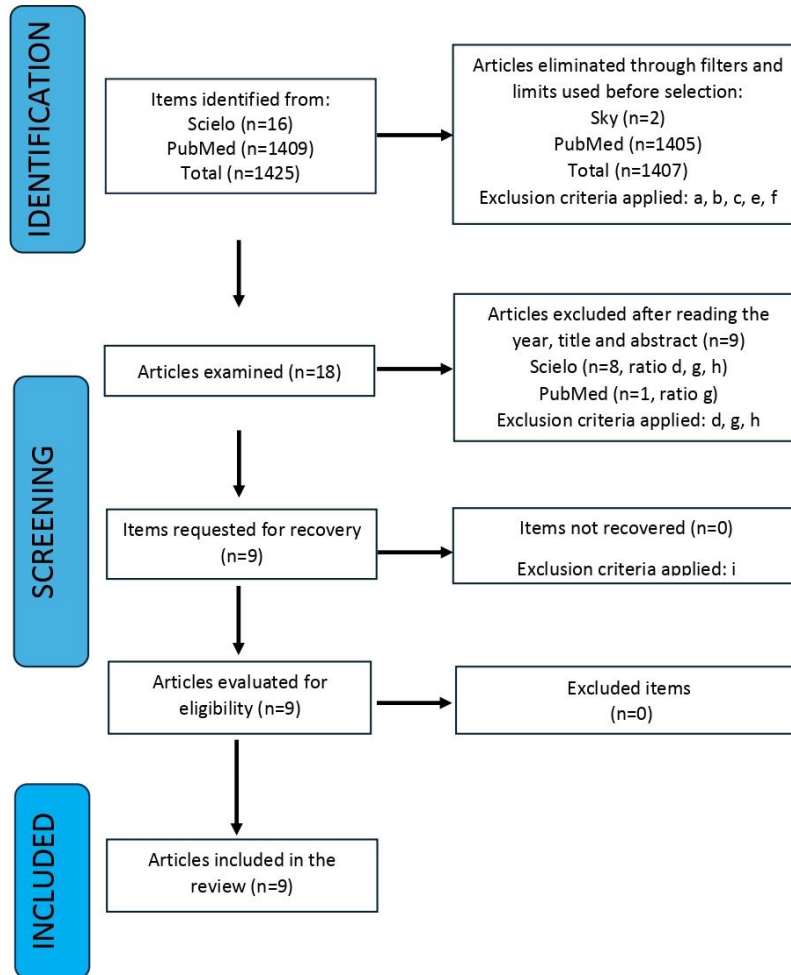


Figure 1: PRISMA flowchart used in he study.

**RESULTS**

In Table 2, based on the review carried out based on the PRISMA statement, selection criteria (inclusion/exclusion) were applied, leaving 9 articles for analysis, showing the authors, year, database and country. As for the year, one corresponds to 2018, one to

2019, one to 2020, one to 2022, four to 2023 and one to 2024. Regarding the databases, in Scielo we find 6 and in PubMed 3. As for in the countries of origin of the studies, Brazil leads production with 6 articles, Panama with one, Mexico with one and the United States with one.

Table 2: Distribution of included articles according to article number, author(s), study title, year, published database and country. Own elaboration.

Article number	Author/s	Study title	Year	Approach/Study design/ Number of participants or articles	Published database	Country
Article 1	Salvador P. et al.	Online survey on the reasons for reluctance to get vaccinated against COVID-19 in children and adolescents in Brazil. <sup>[13]</sup>	2023	Quantitative/Descriptive/Transversal study (1896 participants)	Scielo	Brazil
Article 2	Olbrich Neto J. and Olbrich S.	Attitudes, hesitations, concerns, and inconsistencies regarding vaccines reported by parents of preschool-aged children. <sup>[14]</sup>	2023	Quantitative/Cross-sectional study (1261 participants)	Scielo	Brazil

Article 3	Viana I. et al.	Vaccination of parents and relatives of children and the control of immune- preventable diseases. <sup>[15]</sup>	2023	Integrative review (includes 24 articles)	Scielo	Brazil
Article 4	Melo Júnior E. et al.	Vaccination hesitation in children under five years of age: a scoping review. <sup>[16]</sup>	2023	Scoping review (includes 18 articles)	Scielo	Brazil
Article 5	Bernal-Vaquera B. et al.	Vaccine hesitancy: a systematic review to address the phenomenon in Latin America. <sup>[17]</sup>	2024	Systematic review (includes 19 articles)	Scielo	Mexico
Article 6	Brown A. et al.	Confidence and hesitancy in vaccines in Brazil. <sup>[18]</sup>	2018	Quantitative/Cross-sectional study (1000 participants)	Scielo	Brazil
Article 7	Painter J. et al.	Vaccine-related attitudes and decision making among Latin American immigrant mothers of uninsured adolescent daughters: a qualitative study. <sup>[19]</sup>	2019	Qualitative study (30 participants)	PubMed	USES
Article 8	Guzmán-Holst A. et al.	Barriers to vaccination in Latin America: a systematic review of the literature. <sup>[20]</sup>	2020	Systematic literature review (includes 75 articles)	PubMed	Panama
Article 9	Martínez E. et al.	Attitudes and practices of Brazilian adults regarding mandatory vaccination against COVID-19 and their reluctance towards childhood vaccination. <sup>[21]</sup>	2022	Quantitative/cross-sectional study (1007 participants)	PubMed	Brazil

From the critical reading, the most relevant results can be extracted and systematized from which it was possible to identify the main motivations that are expressed in the selected studies, already synthesized in categories, which are reasons related to parents and reasons related to the context.

**Among those related to parents we have**

- Lack of knowledge and health education of parents, which includes “educational level of parents”, “lack of knowledge of the importance and benefits of vaccines on the part of parents”, “lack of awareness of risks and severity of preventable diseases due to vaccination”, “COVID-19 is not serious in children”, “more hesitation in low socioeconomic groups and parents who are of legal age”; This could be evidenced in the studies corresponding to articles A1, A2, A3, A4, A5, A7, A8 and A9.

The lack of confidence in vaccines includes aspects such as “the vaccine is in the experimental phase”, the vaccine is not safe, effective, or reliable”, “the vaccine has

adverse effects”), this could be evidenced in the corresponding studies. to articles A1, A4, A6, A8 and A9.

- The right to decide not to be vaccinated includes “freedom and respect for your decisions”, this was evident in the studies corresponding to articles A1, A7 and A9.

**Among those related to the context we have**

- Attention from the health professional, which includes “the professional does not generate trust”, “the professional generates a feeling of obligation to get vaccinated”, this could be evidenced in the studies corresponding to articles A2, A3, A7 and A8.

-Beliefs and customs, includes “lifestyles”, “family and social customs”, “religion”, this could be evidenced in the studies corresponding to articles A3 and A4.

All this is collected and summarized in Table 3.

**Table 3: Motivations identified in systematized categories of the results found in the selected articles. Own elaboration.**

No.	Identified categories	Category Description	Articles	Number of items
	Reasons related to parents			
1	Lack of knowledge and	It includes “educational level of parents”, “lack of knowledge of the importance and benefits of	A1, A2, A3, A4, A5, A7, A8 and A9	8

	health education of parents	vaccines on the part of parents”, “lack of awareness of risks and the severity of vaccine-preventable diseases”, “COVID-19 is not serious in children”, “more hesitation in low socioeconomic group and parents who are of legal age”		
2	Lack of trust in vaccines	It includes aspects such as “the vaccine is in the experimental phase”, “the vaccine is not safe, effective, or reliable”, “the vaccine has adverse effects”	A1, A4, A6, A8 and A9	5
3	Right to decide not to get vaccinated	It includes “freedom and respect for your decisions”	A1, A7 and A9	3
	<b>Context-related reasons</b>			
4	Health provider/health professional care	It includes “the professional does not generate trust”, “the professional generates a feeling of obligation to get vaccinated”	A2, A3, A7 and A8	4
5	Beliefs and customs	It includes “lifestyles”, “family and social customs”, “religion”	A3 and A4	2

**DISCUSSION**

From the critical reading, the most relevant results could be extracted and systematized, from which the main motivations expressed in the selected studies could be identified, already synthesized into categories, which are reasons related to parents and reasons related to the context., which coincides with what was stated by Cataldi J. and O’Leary S.<sup>[22]</sup>, who highlight in their study the individual and contextual factors associated with rejection of vaccination in parents.

Among the aspects related to parents, we have, first of all, the lack of knowledge and health education of parents, which in turn includes “the educational level of parents”, “lack of knowledge of the importance and benefits of vaccines on the part of parents”, “lack of awareness of risks and the severity of vaccine-preventable diseases”, “COVID-19 is not serious in children”, “more hesitation is found in low socioeconomic groups and parents who are of legal age”. This could be evidenced in studies A1, A2, A3, A4, A5, A7, A8 and A9, whose authors are Salvador et al.<sup>[13]</sup>, Olbrich Neto and Olbrich<sup>[14]</sup>, Viana et al.<sup>[15]</sup>, Melo Júnior et al.<sup>[16]</sup>, Bernal-Vaquera et al.<sup>[17]</sup>, Painter et al.<sup>[19]</sup>, Guzmán-Holst et al.<sup>[20]</sup> and Martínez et al.<sup>[21]</sup>, respectively.

It should be noted that the level of education and health literacy of parents is crucial for them to know and be more aware of the importance and benefits that vaccines bring. The information you have about this aspect is decisive in making the decision to get vaccinated or not. A deficiency in the ADDIN CSL\_CITATION {"citationItems":[{"id":"ITEM1","itemData":{"DOI":"10.1016/j.vaccine.2019.10.088","ISSN":"18732518","PMID":"31767469","abstract":"Current vaccination coverage rates in Latin America and the Caribbean (LAC) are lower than the region-wide rates set by the Pan American Health Organization. To improve vaccination uptake, it is crucial to identify barriers to vaccination. We

conducted a systematic literature review to identify the key barriers to vaccination in the LAC region, and to classify and quantify factors affecting vaccination coverage using the barrier categories outlined by the Strategic Advisory Group of Experts (SAGE) working group. We mapped knowledge gaps in the understanding of region-specific and population-specific vaccine hesitancy. Nine databases (Medline via PubMed, Web of Science, LILACS, MedCarib, SciELO, Scopus, PATH, SAGE Online and Google Scholar) were searched for articles published in English, Spanish and Portuguese up to 15 July 2017. A total of 6867 articles were identified of which 75 were included in the review. Majority of the articles were quantitative in nature and nearly half from Brazil. Many other countries in LAC have limited published evidence on barriers to vaccination. The most commonly investigated target population was parents (of children <8 years of age [yoa] and adolescents 9–10 yoa) but there was a balance in the number of publications that reported on influenza, childhood and human papillomavirus vaccination. There was limited direct evidence which reported insights on the new generation of childhood vaccines (pneumococcal or meningococcal vaccines) or studies targeting adolescents and pregnant women. Among the SAGE barrier categories, ‘individual/group influences’ were the most frequently reported barrier category (68%) followed by ‘contextual influences’ (47%). Adverse socioeconomic factors, a low level of education, lack of awareness of diseases and their vaccines, religious and cultural beliefs are commonly cited as obstacles to vaccination acceptance. Additional evidence is needed to fully understand the barriers to vaccination for different target populations, countries in the region and specific vaccine types.", "author":{"droppingparticle":"","family":"GuzmanA","given":"","nondroppingparticle":"","parsenames":false,"suffix":""},"dropping-particle":"","family":"DeAntonio R","given":"","nondroppingparticle":"","parsenames":false,"suffix":""},"dropping-particle":"","family":"Prado D","given":"","nondroppingparticle":"","parsenames":fal

se,"suffix":""},{"dropping-particle":"","family":"Juliao P","given":"","nondroppingparticle":"","parsenames":false,"suffix":""},"id":"ITEM1","issued":{"dateparts":["0"]},"publisher":"GlaxoSmithKline Biologicals S.A.,"title":"Barriers to vaccination in Latin America: A systematic literature review. Vaccine [revista en Internet] 2020 [acceso 31 de mayo de 2024]; 38(3): 470-481.,"type":"articlejournal"},"uris":["http://www.mendeley.com/documents/?uuid=551c529866e047a39bcb911beadb8b9"]},"mendeley":{"formattedCitation":"(20)","plainTextFormattedCitation":"(20)","previouslyFormattedCitation":"(19)"},"properties":{"noteIndex":0},"schema":"https://github.com/citationstylelanguage/schema/raw/master/csl-citation.json"}above results in the rejection of vaccines and their application to their minor children.<sup>[13,14,16,17,20]</sup> That is, the lack of knowledge about vaccines is one of the main reasons for hesitancy about them.<sup>[15,16,19]</sup> Likewise, being older makes them have more rejection.<sup>[20,21]</sup>

Lafnitzegger and Gaviria-Agudelo<sup>[23]</sup> point out that there are multiple factors that influence parents' decision-making, including the knowledge they have, sources of information, risk perception, trust and individual experiences. among others. Bauer A.<sup>[24]</sup> adds that people need to be health literate, and found that many people needed to be informed by a health professional. In general, there is a demand to improve knowledge about disease prevention through vaccination.

Health personnel are identified as the ideal and reliable personnel to educate. Navin<sup>[25]</sup> highlights that educational sessions can overcome vaccine rejection in some cases; To achieve this, solid and continuous programs must be designed to guarantee parental literacy. On this point, Alharbi<sup>[26]</sup> found a strong relationship between educational level and knowledge about vaccination; Most parents at every level of education have poor knowledge about vaccines. And almost all participants (96.7%) believe the information provided by the Ministry of Health, as well as the advice of the health professional.

Secondly, the lack of confidence in vaccines, which includes aspects such as “the vaccine is in the experimental phase”, “the vaccine is not safe, effective, or reliable”, “the vaccine has adverse effects”, this was evident. in the studies corresponding to articles A1, A4, A6, A8 and A9, whose authors are Salvador et al.<sup>[13]</sup> Melo Júnior et al.<sup>[16]</sup> Brown et al.<sup>[18]</sup>, Guzmán-Holst et al.<sup>[20]</sup> and Martínez et al.<sup>[21]</sup>, respectively.

Regarding this, mistrust arises since the vaccine is still in the experimental phase, therefore its effectiveness has not yet been properly proven, this happened during the beginning of the pandemic.<sup>[13,18,20]</sup> Furthermore, another study adds the presence of adverse effects that can be harmful.<sup>[16,21]</sup> This coincides with what was pointed out by Sayed A.<sup>[27]</sup>, who in his study reveals that among the main concerns of parents for not vaccinating their

children are the possible side effects of the vaccine, safety and effectiveness, that is, say they don't trust the product. Along the same lines, Pourrazavi et al.<sup>[28]</sup>, points out in their study that there were several cognitive determinants that influence vaccination hesitancy. Lack of trust and complacency were the most common factors predicting vaccine hesitancy.

Let us not forget that one of the key requirements for a vaccine is its safety and effectiveness. Nowadays, when the problem of vaccination is extremely acute, some citizens have begun to voluntarily refuse important procedures, without thinking about the danger this poses to themselves and other people. Health care providers are challenged to clearly and simply communicate the benefits of vaccines to children and the general population.<sup>[29]</sup>

Regarding the right to decide not to be vaccinated, which includes “freedom and respect for your decisions”, this could be evidenced in the studies corresponding to articles A1, A7 and A9, whose authors are Salvador et al.<sup>[13]</sup>, Painter et al.<sup>[19]</sup> and Martínez et al.<sup>[21]</sup>, respectively. It is pointed out that parents who show hesitancy towards vaccines emphasize their right to decide not to be vaccinated and not to vaccinate their children.<sup>[13]</sup>, parents can determine what is best for their children<sup>[19]</sup>, that is, to have the freedom to decide for themselves.<sup>[21]</sup> Given this, Avelino-Silva V. et al.<sup>[30]</sup> point out that vaccine reluctance is a worrying threat to the control of vaccine-preventable diseases.

It should be noted that effective health communication could promote a general understanding of the importance, risks and benefits of vaccination and thus reduce vaccine refusal. On this controversial point, Wilkinson and McBride A.<sup>[31]</sup> point out that in general, parents play a fundamental role in making decisions about their children's treatment and medical procedures. Except in emergency cases, the informed consent of the caregiver with parental responsibility is always requested before carrying out important medical interventions.

In the United Kingdom, parental consent is now routinely required for childhood vaccination, although some groups have argued that mandatory vaccination would be in the best interests of children. If parents refuse vaccines after receiving advice about the evidence of vaccine safety and effectiveness, their decision is usually respected. In rare cases, vaccination may proceed against the parents' wishes; for example, in the case of a child in care or a child with a particularly serious illness.

Among the aspects related to the context, in turn, we have, first of all, the attention of the health professional, which includes aspects such as “the professional does not generate trust”, “the professional generates a feeling of obligation to get vaccinated”, this could be evidenced in the studies. corresponding to articles A2, A3, A7 and A8, whose authors are Olbrich Neto and Olbrich<sup>[14]</sup>, Viana et

al.<sup>[15]</sup>, Painter et al.<sup>[19]</sup>, Guzmán-Holst et al.<sup>[20]</sup>, respectively. And there were between 20 and 30% of parents who felt obliged to vaccinate their minor children.<sup>[14]</sup>, others point out that the action of the health professional to share information with parents must be essential, they must fulfill their educational and informative role.<sup>[15]</sup> Your opinion is important and decisive<sup>[19]</sup>, as professionals in the health system they must generate trust, addressing parents with an empathetic sense and being persuasive when giving instructions, only in this way can adherence to vaccination in parents be guaranteed.<sup>[19,20]</sup>

Wiley et al.<sup>[32]</sup>, they highlight medical practice where coercive measures are usually applied, where people want to make it seen as an obligation to get vaccinated or vaccinate their minor child; To do this, parents must first be guided, in a persuasive way they must be made to understand the importance of the vaccine for their minors and children, in addition to pointing out that parents have the responsibility of taking care of them and taking care of their health. Educational and persuasive action should not be exhausted at all times.

Similarly, Nurmi and Harman<sup>[33]</sup> point out that the loss of trust in medical actors was a central factor in the process by which parents began to question and finally reject childhood vaccination.

Rumetta<sup>[34]</sup>, adds that the lack of communication and empathy on the part of health professionals is a reason for rejection of vaccines. Likewise, Nurmi and Jaakola<sup>[35]</sup> point out that building trustworthy health systems is not simply a matter of training health professionals so that they can listen and speak more empathetically to patients. The development of institutions that are committed to the values of transparency, solidarity and equity and can effectively and respectfully communicate these commitments to critical audiences is required.

With respect to the beliefs and customs that include “lifestyles”, “family and social customs”, “religion”, it could be evidenced in the studies corresponding to articles A3 and A4, whose authors are Viana et al.<sup>[15]</sup> and Melo Júnior et al.<sup>[16]</sup> respectively.

On this point, it should be noted that the social context in which the family operates is crucial, since this will influence the practices and attitudes of parents towards the vaccination of their children. The lifestyle of the parents and family influences the decision to vaccinate or not vaccinate the minor; in many cases some opt for alternative medicine and others have religious practices that instill in them not to vaccinate, since they reject the intervention of medicine and vaccines as methods to generate well-being (the greater the involvement in religion, the greater the hesitation towards vaccines)<sup>[15]</sup>, in general misinformation makes parents think that immunity contravenes the sense that diseases are natural and that their Whether or not it is present or not due to

divine decisions, a vaccine cannot decide whether a disease is eradicated or should be counteracted.<sup>[16]</sup>

We note that childhood vaccination rates vary widely by country and region, and the reasons for these variations are likely to be specific to the particular context.<sup>[36]</sup> Trangerud points out that religion has been identified as one of the many factors that can contribute to the delay or refusal of vaccination. The objections are due to: \*a type of clash of worldviews, in which vaccines do not make sense as a health intervention; \*a type of divine will; \*a type of immorality, which considers some vaccines to be unethical due to their production or effect; \*a type of impurity, which indicates the ingredients that will contaminate the body; and \*a type of conspiracy or plot that aims to control the population or groups of people. It is important to understand this, as it is important for decision making when implementing health policies.

We see that religious objections to vaccines are in the news, but the interaction of doctors and health professionals with patients' underlying religious objections has been minimal, presumably because patients lack the tools to respectfully address them while also respecting the patient autonomy.<sup>[37]</sup> Health providers must take on the challenge of informing and educating the population, respecting beliefs and customs. To achieve this, it is crucial to provide empathetic, safe and quality care that has the capacity to resolve the health needs of the population. Shen and Dubey<sup>[38]</sup>, they point to parents who doubt vaccines as an opportunity, who far outnumber those who refuse to get vaccinated; Therefore, counseling this group could be more effective.

We agree with what was pointed out by Cooper et al.<sup>[39]</sup> who revealed that parents' opinions and practices regarding childhood vaccination are complex and dynamic social processes that will reflect various networks of influence, meaning and logic. These contribute to the acceptance or not of vaccination, thus complementing, but also expanding, more individualistic models about vaccination acceptance.

Therefore, to be successful in developing interventions to promote parental acceptance of childhood vaccination will require understanding the specific factors that influence the opinions and vaccination practices of the group or groups in the context of interest and adapting these interventions to these. personal factors of the parents and the context in which they operate.

The results of the study contribute to the reflection on the motivations that parents have for not vaccinating their children, motivations that are certainly varied and complex to be understood since they involve several aspects, firstly the reasons related to parents as individuals, that is, say ways of thinking and acting of the people who in this case are the parents; and secondly, the contextual reasons, that is, the culture, social

practices of the locality where they operate and beliefs, in addition to adding to social networks that are spaces from where many parents consume information, and based on it they act and they make decisions.

It was found that the main motivations can be grouped into two general categories; reasons related to parents and reasons related to the context. In the first we have a lack of knowledge and health education of the parents; the lack of confidence in vaccines and the right to decide not to be vaccinated. In the second we have the care of the health provider/health professional and the beliefs and customs.

This study seeks to contribute with elements that are taken by members of the management teams of health establishments, as well as by health professionals who must design strategies based on scientific evidence, which will significantly help improve health practice. It must be taken into account as Kirui points out<sup>[40]</sup>, that strategies to combat vaccine hesitancy are more effective if they are timely, multifaceted, and collaborative. As a recommendation, we agree with what was stated by Viana et al.<sup>[15]</sup>, who highlights that this situation of parents' rejection of vaccination should be taken as an opportunity to be able to get closer to them and thus be able to educate them, raise awareness and persuade them that they should vaccinate their children so as not to expose them to situations of risk that can make them vulnerable to preventable diseases.

## CONCLUSIONS

We can conclude that we found that the motivations found can be grouped into two general categories; reasons related to parents and reasons related to the context.

In the first case we have a lack of knowledge and health education of the parents; the lack of confidence in vaccines and the right to decide not to be vaccinated. And in the second case we have the attention of the health provider/health professional and the beliefs and customs.

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