

# THE REASONS FOR VACCINE HESITANCY TO THE MEASLES VACCINE: A QUICK REVIEW

OS MOTIVOS PARA A HESITAÇÃO VACINAL DA VACINA CONTRA SARAMPO: UMA REVISÃO RÁPIDA

LAS RAZONES DE LA INDECISIÓN A LA VACUNA CONTRA EL SARAMPIÓN: UNA REVISIÓN RÁPIDA

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#### **ABSTRACT**

Objective: To synthesize the evidence available in the scientific literature on the factors associated with measles vaccine hesitancy in children under two years of age, with a focus on the applicability of the findings to public health actions.

Methods: A rapid review was carried out, using previously defined methodological shortcuts. The PubMed database was searched, with a 5-year time frame (2017-2022), restrictions on the languages Portuguese, English and Spanish, and only studies with free full text. Studies addressing vaccine hesitancy in children under two years of age were included.

Results: The search resulted in 21 articles, of which 14 met the eligibility criteria. The main factors related to vaccine hesitancy were fear of adverse events, low confidence in the vaccine, misinformation, the influence of the internet and social networks, negative experiences with health services and social inequalities.

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Conclusion: Vaccine hesitancy must be tackled with strategies that involve clear, empathetic and evidence-based communication. It is essential to strengthen the bond with health services and educational actions to increase confidence in vaccines.

**Keywords:** Vaccine hesitancy. Measles vaccine. Public health.

#### **RESUMO**

Objetivo: Sintetizar as evidências disponíveis na literatura científica acerca dos fatores associados à hesitação vacinal contra a vacina do sarampo em crianças menores de dois anos, com foco na aplicabilidade dos achados para ações de saúde pública.

Métodos: Realizou-se uma revisão rápida, com atalhos metodológicos previamente definidos. Foi realizada busca na base de dados PubMed, com recorte temporal de 5 anos (2017–2022), restrição aos idiomas português, inglês e espanhol, e apenas estudos com texto completo gratuito. Foram incluídos estudos que abordassem a hesitação vacinal em crianças menores de dois anos.

Resultados: A busca resultou em 21 artigos, dos quais 14 preencheram os critérios de elegibilidade. Os principais fatores relacionados à hesitação vacinal foram medo de eventos adversos, baixa confiança na vacina, desinformação, influência da internet e redes sociais, experiências negativas com os serviços de saúde e desigualdades sociais.

Conclusão: A hesitação vacinal deve ser enfrentada com estratégias que envolvam comunicação clara, empática e baseada em evidências. É fundamental o fortalecimento do vínculo com os serviços de saúde e ações educativas para aumentar a confiança nas vacinas.

Palavras-chave: Hesitação vacinal. Vacina do sarampo. Saúde pública.

## **RESUMEN**

Objetivo: Sintetizar las evidencias disponibles en la literatura científica sobre los factores asociados a la indecisión frente a la vacuna del sarampión en niños menores de dos años, con especial atención a la aplicabilidad de los hallazgos a las acciones de salud pública.

Métodos: Se realizó una revisión rápida, utilizando atajos metodológicos previamente definidos. Se realizó una búsqueda en la base de datos PubMed, con un marco temporal de 5 años (2017-2022), restricciones en los idiomas portugués, inglés y español, y solo estudios con texto completo libre. Se incluyeron estudios que abordaran la indecisión vacunal en niños menores de dos años.

Resultados: La búsqueda dio lugar a 21 artículos, de los cuales 14 cumplieron los criterios de elegibilidad. Los principales factores relacionados con la indecisión a la hora de vacunarse fueron el miedo a los efectos adversos, la escasa confianza en la vacuna, la desinformación, la influencia de Internet y las redes sociales, las experiencias negativas con los servicios sanitarios y las desigualdades sociales.

Conclusión: La indecisión ante la vacuna debe abordarse con estrategias que impliquen una comunicación clara, empática y basada en la evidencia. Es fundamental reforzar el vínculo con los servicios sanitarios y las acciones educativas para aumentar la confianza en las vacunas.

Palabras clave: Dudas sobre la vacuna. Vacuna contra el sarampión. Salud pública.



## **INTRODUCTION**

Despite the advances achieved by immunization, vaccine hesitancy has been consolidated as a growing challenge. Measles, a highly contagious and vaccine-preventable disease, returned to circulation in Brazil in 2019, even after the certification of elimination in 2016. The drop in childhood vaccination coverage, especially in critical age groups, puts at risk the advances made in recent decades.

Understanding the factors that contribute to vaccine hesitancy is essential to guide public policies and communication strategies. This study seeks to identify the main reasons that lead parents to hesitate or refuse measles vaccination in children under two years of age.

#### **METHODOLOGY**

It is a rapid review, defined as a synthesis of evidence with the application of methodological shortcuts to provide timely and relevant results for health management. The research question was structured based on the PICO model:

Q: Children under two years old

I: Measles vaccination

C: Not applicable

O: Vaccine hesitancy

T: All types of study

The following methodological shortcuts were adopted:

- Search period limited to the last 5 years (2017–2022);
- · Inclusion of articles with free full text only;
- Languages: Portuguese, English and Spanish;
- Population: children up to 2 years old;
- Data source: PubMed only;
- Review by a single reviewer at initial screening.

The search strategy was developed with the following descriptors and Boolean operators applied in PubMed:

(("vaccine hesitancy"[All Fields] OR "vaccine hesitancy and rejection"[All Fields] OR ("vaccination hesitancy"[MeSH Terms] OR ("vaccination"[All Fields] AND "hesitancy"[All Fields]) OR "vaccination hesitancy"[All Fields] OR ("vaccine"[All Fields] AND "hesitancy"[All Fields]) OR "vaccine hesitancy"[All Fields])) AND "measles"[All Fields] AND ("child"[MeSH Terms] OR "child"[All Fields] OR "children"[All Fields])) AND (2017:2022[pdat])



# **3 RESULTS**

We included 14 studies after screening and eligibility analysis. The following table presents the data extracted from the selected studies:

Authors	Year	Country	Title	Methodology	Goal
Papaevangelou V.	2021	No information	Measles vaccination of special risk groups	Narrative review	To review the safety of measles vaccine in groups at increased risk of adverse events
Martinot A. et al.	2021	France	Evolution between 2008 and 2018 of mothers' perception regarding vaccination and infant vaccine coverage in France	Cross- sectional study with standardized questionnaire	To assess mothers' perceptions of childhood vaccination and its evolution
Diehl C, Hunkler C.	2022	Germany	Vaccination- related attitudes and behavior across birth cohorts: Evidence from Germany	Retrospective cohort study with database analysis	Assess vaccine attitudes and behaviors among different cohorts
Gianfredi V. et al.	2019	Italy	Polio and measles: reasons of missed vaccination in Italy, 2015- 2017	Observational study with analysis of electronic forms	Describe reasons for the lack of measles and polio vaccination
Blatt DB, Blatt SD, Dennehy PH	2020	USA	It's Not Only Vaccine Hesitancy; It's Also Physician Hesitancy	Reflective narrative	Discuss the hesitation of doctors in the face of hesitant parents
Jama A. et al.	2018	Sweden	Perspectives on the Measles, Mumps and Rubella Vaccination among Somali Mothers in Stockholm	Qualitative study with interviews	Explore Somali mothers' perceptions of MMR vaccination
Nguyen KH. et al.	2022	USA	Parental Vaccine	Secondary data analysis	To assess the



			Hesitancy and Association With Childhood Vaccination		association between parental vaccine hesitancy and childhood vaccination
Périnet S. et al.	2017	Canada	Delayed measles vaccination of toddlers in Canada	Secondary data analysis	coverage Explore factors associated with delayed measles vaccination

#### DISCUSSION

The results reveal that vaccine hesitancy is a multifactorial phenomenon. Among the main reasons identified are fear of adverse reactions, misinformation spread on social networks, negative experiences with health services, and sociocultural factors. Martinot et al. [4] highlight that mothers with less schooling are more prone to hesitation. Diehl and Hunkler [5] point to a worrying trend among highly educated parents who choose to follow their hesitant convictions.

Trust in health professionals proved to be one of the main factors of positive influence on the decision to vaccinate. Strategies based on active listening, assertive communication, and the use of accessible language were cited as effective in reducing hesitation. The WHO has ranked vaccine hesitancy as one of the ten biggest threats to global health [1].

#### CONCLUSION

Measles vaccine hesitancy in young children reflects complex challenges that require multidimensional approaches. Public policies and educational actions should consider the factors identified in this review, with a focus on restoring the population's confidence in vaccines and health services.



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