

Can parent's decisions concerning whether or not to vaccinate their children have an impact on public health?

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The Problem

The implementation of vaccination campaigns often has low adherence. The vulnerability of the population not exposed to vaccines increases levels of disability and mortality in the world. Recently, in Brazil and in other countries, the anti-vaccination movements have grown exponentially and mimicked immunization rates, mainly from vulnerable groups. The fear of adverse effects and deaths have caused discomfort, especially to parents. The World Health Organization's Expanded Program on Immunization aims to control measles through the combination of measles, mumps, and rubella (MMR) vaccine. Measles is an extremely contagious disease. When children are affected by measles, their quality of life can be compromised by damage to the central nervous system and to hearing..

Objective

To report the impact of the dissemination and describe the evidence of vaccination in children for the prevention of measles.

Methods

We performed a search in the Cochrane Library (CENTRAL) database on 11 April 2019 with the following descriptors: 'Child, Preschool' (MEsh) OR 'Infant' (MEsh) AND 'Measles Vaccine' (MEsh), without publication date restriction. We included studies that dealt with immunization for measles in children from one month to five years of age.

The measurement of visibility was through the Altimetric Attention Score indicator based on the analysis of social networks and platforms with public access classification: researchers, members of the public, health professionals, scientists and science communicators

Key Results

- ✓ We found one systematic review and 12 clinical trials on measles immunization by MMR vaccination in children;
- ✓ The Cochrane Review of efficacy and effectiveness of MMR vaccination included 64 studies: 12 addressed effectiveness; 17 reported short-term side effects and 35 verified MMR vaccine safety;
- ✓ The effectiveness in preventing clinical measles was 95%;
- ✓ The Altimetric Attention Score was 556 points (high level of quality and attention online). It is in the top 5% of all search results ever monitored by Altimetric. Members of the public were the population with the greatest interest in the subject (77% of accesses in general). Although Altimetric analyzed the results based also on the geography division, the majority (39%) of the public was classified as unknown origin.

Conclusion

Among the instruments of public health policy, the measles vaccine is safe and effective at eradicating this disease. The ease and disclosure provided by the various social networks make extremely relevant information accessible, mainly to patients and health professionals. This can facilitate clinical decision making.

Relevance to diversity:

- The access to evidence-based information for clinical decision-making is the most rational and safe way to lead and create awareness programs that will benefit the whole community.

Relevance to patients and consumers:

- The parents' decision-making of whether or not to vaccinate their children, can have an impact on the collective health.



Dissemination and the evidence for measles vaccination in the world

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