

Vaccine hesitancy/refusal: a current issue – Editorial

Hesitação/recusa vacinal: um assunto em pauta – Editorial

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Editor

How to cite this article:

Lago EG. Vaccine hesitancy/refusal: a current issue – Editorial. (*Hesitação/recusa vacinal: um assunto em pauta – Editorial*). Sci Med. 2018;28(4):ID32808. DOI: 10.15448/1980-6108.2018.4.32808

KEYWORDS: vaccine refusal; vaccination hesitancy; anti vaccine movement; anti vaccination groups; immunization programs; physician patient relationship.

In 1998, the renowned British journal *The Lancet* published a report that linked cases of autism and inflammatory bowel disease with the measles, mumps and rubella (MMR) vaccine. The article fell like a bomb-shell in the scientific community and, consecutively, among the lay public. After some time, the physicians' contraindication and/or the parents' refusal to apply this vaccine to their children resulted in several outbreaks of these viruses, especially measles, which may have a great morbidity and mortality. Subsequently, scientific studies and other investigations revealed the misunderstandings in that paper, which in 2010 was retracted by *The Lancet* [1,2]. Unfortunately, the consequences have remained and constitute one of the many motivations alleged by groups opposed to vaccination. But this is just one of the episodes that come to mind when it comes to the subject of vaccination.

Fear of adverse effects is not the only reason people reject vaccines. Vaccine hesitancy (people who delay vaccination or refuse some types of vaccines) and vaccine refusal (people who reject any type of vaccine) may have several motivations other than concern for safety, including philosophical or religious principles, sociocultural aspects, low perception of disease risk, questioning of vaccine efficacy, and even medical advice. In some specific cases, some vaccines may indeed be contraindicated, but eventually doctors also follow false principles, believe in

pseudo-scientific information, or are careless of updating themselves [3-5]. It was also shown that parents generally would like more information on the vaccines indicated for their children [6].

Vaccine hesitancy and vaccine refusal are not recent phenomena, they occur since the early days of the advent of vaccines. In Brazil, for example, the episode “*Revolta da Vacina*” (“Revolt of the Vaccine”) was famous. It took place in Rio de Janeiro in 1904, when Oswaldo Cruz made the smallpox vaccine compulsory, causing the population's revolt. According to Guido Levi [3], however, this episode was more due to the violent manner in which the campaign was conducted than to the vaccine itself.

In the last decades, radical anti-vaccine groups have been gaining strength, especially in high-income countries and in more educated groups. With the advent of the Internet and social networks, the rapid diffusion of false news is facilitated, widening misinformation and bringing as a consequence epidemics of vaccine-preventable diseases and even risk of reintroduction of diseases already eradicated. In the United States, for example, many cases of measles have occurred in recent years in intentionally unvaccinated individuals. In Brazil, there was a significant decrease in vaccination coverage between 2009 and 2017, which is a cause for concern. Among other reasons, vaccine hesitancy/refusal may be involved in this phenomenon, since the advance of

Published: 2018/01/21

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anti-vaccination groups has been observed in our country [4, 7, 8].

In the field of ethics, the principle of autonomy is invoked to guarantee the right of a person to refuse a vaccine for reasons that are not scientifically justified. However, vaccination denial can have consequences for the population to which the individual belongs (for facilitating the persistence and spread of the microorganism) or, in the case of parents who reject the vaccination of their children, the principle of non-maleficence may supplant that of autonomy. Interpretation of ethical principles and jurisprudence on the right of parents to decide on the vaccination of their children varies between countries [9, 10]. In Brazil, a federal law and the Statute of the Child and Adolescent determine as compulsory the vaccination based on the National Immunization Program. Parents or guardians who neglect or reject the vaccination of minors under their responsibility may be criminally indicted for abuse, neglect or omission [5].

Another issue that arises today is about the attitude a pediatrician should have toward parents who reject routine immunizations for their children. Many pediatricians refuse to care for these families, arguing that a lack of parental trust may undermine the physician-patient relationship, or that unvaccinated children may be a risk to other children in the waiting room [5, 11]. According to the Brazilian Code of Medical Ethics, the physician has the right to waive the care in the presence of facts that impair the good relationship with the patient or his/her legal representative [12]. However, the issue is controversial, and others believe that the most correct attitude would be to continue to provide care and try to convince parents that the benefits of immunizations far outweigh

the risks [5, 11]. An Australian study also identified difficulties experienced by primary care professionals in dealing with parents who refuse to vaccinate their children [13].

Although the advent of childhood vaccination is considered the scientific achievement of the twentieth century with the greatest impact on public health [14], the issue of vaccine hesitancy/refusal continues. The World Health Organization, recognizing the increasing risk of this problem and the need for special attention, has created, within the Strategic Advisory Group of Experts (SAGE) on Immunization, a working group specially focused on the subject, the SAGE Working Group on Vaccine Hesitancy (SAGE-WG) [15]. A systematic review on approach strategies has concluded that the problem of vaccine hesitancy/refusal is quite complex, and there is no single strategy that can solve it. In general, multiple strategies work better than the more targeted ones, which theoretically would have a better cost-benefit ratio. One of the major difficulties of more targeted interventions is that many are delineated from a premise-based rather than evidence-based approach [16]. In general, studies agree that educational strategies are the most indicated, and that it is important to listen to patients' motivations to make the message more effective [3-6, 15, 16].

A recent report from SAGE-WG concluded that research on the reasons and degree of vaccine hesitancy/refusal is important and can help inform and refine the approaches to be implemented at both national and subnational levels [15, 16]. Within this context, *Scientia Medica* publishes in this issue a survey carried out in a region in the north of Portugal, which identified cases of vaccine refusal in all social classes and investigated their motives [17].

REFERENCES

1. Wakefield AJ, Murch SH, Anthony A, Linnell J, Casson DM, Malik M, Berelowitz M, Dhillon AP, Thomson MA, Harvey P, Valentine A, Davies SE, Walker-Smith JA. Ileal-lymphoid-nodular hyperplasia, non-specific colitis, and pervasive developmental disorder in children. *Lancet*. 1998 Feb 28;351(9103):637-41. Erratum in: *Lancet*. 2004 Mar 6;363(9411):750. Retraction in: *Lancet*. 2010 Feb 6;375(9713):445. [https://doi.org/10.1016/S0140-6736\(97\)11096-0](https://doi.org/10.1016/S0140-6736(97)11096-0)
2. Eggertson L. *Lancet* retracts 12-year-old article linking autism to MMR vaccines. *CMAJ*. 2010 Mar 9;182(4):E199-200. <https://doi.org/10.1503/cmaj.109-3179>
3. Levi GC. *Recusa de vacinas – causas e consequências*. São Paulo: Segmento Farma; 2013.
4. Sato APS. What is the importance of vaccine hesitancy in the drop of vaccination coverage in Brazil? *Rev Saúde Pública*. 2018;52:96.
5. Succi RCM. Vaccine refusal - what we need to know. *J Pediatr (Rio J)*. 2018;94(6):574-81. <https://doi.org/10.1016/j.jped.2018.01.008>
6. Ames HM, Glenton C, Lewin S. Parents' and informal caregivers' views and experiences of communication about routine childhood vaccination: a synthesis of qualitative evidence. *Cochrane Database Syst Rev*. 2017 Feb 7;2:CD011787. <https://doi.org/10.1002/14651858.CD011787.pub2>

7. Phadke VK, Bednarczyk RA, Salmon DA, Omer SB. Association Between Vaccine Refusal and Vaccine-Preventable Diseases in the United States: A Review of Measles and Pertussis. *JAMA*. 2016 Mar 15;315(11):1149-58. <https://doi.org/10.1001/jama.2016.1353>
8. Cambricoli F, Palhares I. Grupos contrários à vacinação avançam no País e preocupam Ministério da Saúde. *Estadão Saúde* [internet]. São Paulo; 2017 maio 21 [cited 2018 December]. Available from: <https://saude.estadao.com.br/noticias/geral/grupos-contrarios-a-vacinacao-avancam-no-pais-e-preocupam-ministerio-da-saude,70001800099>
9. Santos P, Hespanhol A. Recusa vacinal – o ponto de vista ético. *Rev Port Med Geral Fam*. 2013;29:328-33. <https://doi.org/10.32385/rpmgf.v29i5.11167>
10. Grzybowski A, Patryn RK, Sak J, Zagaja A. Vaccination refusal. Autonomy and permitted coercion. *Pathog Glob Health*. 2017;111(4):200-5. <https://doi.org/10.1080/20477724.2017.1322261>
11. Alexander K, Lacy TA, Myers AL, Lantos JD. Should Pediatric Practices Have Policies to Not Care for Children With Vaccine-Hesitant Parents? *Pediatrics*. 2016;138(4): e20161597. <https://doi.org/10.1542/peds.2016-1597>
12. Conselho Federal de Medicina. Código de Ética Médica [internet]. Brasília-DF: 2018 [cited 2018 December]. Available from: <http://www.portalmédico.org.br/novocodigo/integra.asp>
13. Berry NJ, Henry A, Danchin M, Trevena LJ, Willaby HW, Leask J. When parents won't vaccinate their children: a qualitative investigation of Australian primary care providers' experiences. *BMC Pediatr*. 2017;17(1):19. <https://doi.org/10.1186/s12887-017-0783-2>
14. Centers for Disease Control and Prevention (CDC). Ten great public health achievements, 1900-1999: impact of vaccines universally recommended for children. *MMWR*. 1999;241:243-8.
15. World Health Organization. Weekly epidemiological record. Meeting of the Strategic Advisory Group of Experts on Immunization, October 2018 – Conclusions and recommendations [internet]. Geneva; 7 December 2018 [cited 2018 December]. Available from: <http://apps.who.int/iris/bitstream/handle/10665/276544/WER9349.pdf?ua=1>
16. Jarrett C, Wilson R, O'Leary M, Eckersberger E, Larson HJ; SAGE Working Group on Vaccine Hesitancy. Strategies for addressing vaccine hesitancy: a systematic review. *Vaccine*. 2015;33(34):4180-90. <https://doi.org/10.1016/j.vaccine.2015.04.040>
17. Fonseca MS, Varela MALN, Frutuoso A, Monteiro MFFRP. Recusa da vacinação em área urbana do norte de Portugal (Vaccine refusal in an urban area of northern Portugal). *Sci Med*. 2018;28(4):ID32152. <http://doi.org/10.15448/1980-6108.2018.4.32152> 