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Parental decisions that do not risk children's lives but place them at significant harm: foregoing vaccination

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Abstract The decisions of parents to forego vaccines "mandatory" for their children generate in physician and pediatricians some dilemmas and issues such as what to do when parents do not authorize administration of vaccines to their children? Do parents place their children at risk severe enough to notify governmental child protection services and treat this as parental negligence? What to do in the situation where the parental decision to forego immunization of their children affects others? The best interests of the child include ensuring the child's benefit over any other situation. Related to this, parents against vaccines have arguments to justify their position that physicians cannot force parents to immunize their children. By the same principle, physicians must ensure the welfare of children and remain alert, respecting that parental decisions do not exceed the threshold of "no harm to the child" and only if the parental decision in regard to foregoing vaccination places the child at risk of serious harm is government intervention justified. This resource should be left as the last resort because most conflicts must be resolved within the relationship of the physicians with the parents.

PALABRAS CLAVE
Vacunas;
Rechazo a inmunizar;
Bienestar del menor;
Decisiones paternas;
Umbral del daño

Decisiones de los padres que no arriesgan la vida de sus hijos, pero que los exponen a daños serios: no a las vacunas

Resumen La decisión de los padres de no aplicar vacunas que son ''obligatorias'' a sus hijos genera dilemas en los médicos y pediatras. ¿Qué debe hacerse cuando los padres no consienten la aplicación de vacunas a sus niños? ¿Esto sitúa a los niños en riesgo suficientemente gravecomo

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para que amerite la notificación a los servicios de protección infantil del Estado y que setrate como negligencia de parte de los padres? ¿Qué debe hacerse cuando, por no inmunizar a sus hijos, se pone en riesgo a terceros? El principio del interés superior del menor implica velar por el beneficio del niño sobre cualquier otra situación. Al respecto, los padres antivacunas tienen argumentos para justificar su postura. Los médicos no pueden obligar a los padres a vacunar a sus hijos. Sin embargo, bajo el mismo principio, deben velar por el bienestar del niño y permanecer alerta de que los padres no rebasen el umbral de daño al menor. Si los padres ponen en riesgo de daño grave a su hijo al tomar la decisión de no vacunarlo, entonces estará justificada la intervención legal en la decisión. Este recurso debe ser la última opción, pues los conflictos, en su mayoría, deben resolverse en el seno de la relación del médico con los padres.

1. Introduction

As pediatricians, in our daily practice we encounter parents who reject vaccinations for their children, creating a sense of helplessness and occasionally frustration for the physicians. If the parents are questioned, they offer many and varied reasons for not vaccinating. These range from religious motivations, personal beliefs, naturopathic knowledge, and family and anecdotal influences. Recently, a curious and surprising piece of data is that in contrast to what one might think, the proportion of parents who are perceived to opt out of vaccinating their children is higher in those homes with higher purchasing power. This phenomenon has been attributed to their giving little value to these types of medical procedures and the poor information received, as well as the misperception that greater weight should be given to the apparent risk of the vaccines than to the benefits from the vaccines. In turn, in homes with lower purchasing power, this situation does not frequently occur because there is speculation that they value the opportunities for care that the public health system offers their children.

In any event, there will be parents who do not desire and who do not accept vaccinations for their children. Physicians cannot vaccinate a child without the parent's informed consent. Faced with this situation, should the pediatricians remain on the sidelines or should they act in any particular manner?

2. Decision making shared between the parents and the physicians

2.1. The evidence

The "anti-vaccination" movement was launched in the U.S. and has slowly propagated to Mexico, especially since 1998 when *The Lancet* published a study by the British physician Andrew Wakefield[1] that linked the triple viral vaccine given for immunization against measles, mumps and rubella—with autism.

Subsequent medical investigations demonstrated that the conclusions by Wakefield lacked scientific basis, but the damage had already been done. In 2004 *The Lancet* completely separated itself from the article it had published in 1998, pointing out that the data from the study had been falsified.[2] Wakefield was excluded from the medical registry in May 2010 with an observation that indicated the fraudulent falsification that he had incurred and his license to practice medicine in the UK was revoked.

Today the beneficial role of vaccines in children is debated between anti-vaccination supporters and physicians. For example, in the last months of this year we heard about the measles outbreak in the U.S., which has been attributed to parents not vaccinating their children. In fact, there are schools that report the number of children not vaccinated exceeds 50%, with which the so-called "herd vaccination" stops working. Such exceptions are due to, according to the reports, religious, personal and medical reasons.[3]

This situation has not yet been evaluated in Mexico, but the perception is of a trend similar to that of the U.S. on a smaller scale. Although most cases of non-vaccination reflect, in general, problems of access and accessibility, some parents choose not to immunize their children for other reasons important to analyze and study.

It is well known that before the introduction of the calendars of vaccination in Mexico and the world, infectious diseases were the leading cause of infant mortality and epidemics were frequent. Until the end of the last century, children could be infected with serious diseases, with multiple sequelae and eventual death, which are today completely preventable. For example, in the case of poliomyelitis the number of cases and deaths attributable to this disease decreased dramatically after the initiation of the vaccination in Mexico in 1963.[4] Since 1994 the U.S. was certified free of the polio virus followed by the elimination in the Western Pacific region in 2000 and in Europe in 2002.[5,6]

With this scientific evidence and statistics, the beneficial role of vaccines in the world is undeniable; therefore, the majority of medical associations and pediatricians recommend its use as a means of disease prevention. The existing reasons for immunizing children can be refuted with solid evidence, mostly arguing that the best interests of the child can be disproven with solid evidence. Some would even argue for the State's intervention to prevent a child from suffering from a serious disease that could be prevented.

On the other hand, perhaps the parents would agree that for the most part vaccines are safe. However, a small percentage of immunizations could cause undesired adverse reactions to which it is not necessary to expose the young child because he/she does not have the disease or is at risk

of becoming ill. If a vaccination program successfully reduces the threat of a disease, it could also sufficiently reduce the perception the population has about the disease such that a parent would reject the vaccine.

It is true that when sufficient persons are vaccinated in a population, protection reaches those persons who are not vaccinated because the microorganisms face many difficulties in propagating. It is for this reason that the unvaccinated population is "without risk". This makes people believe that it is not necessary to vaccinate their children against a disease that does not occur for decades. Facing such a situation, a parent could reasonably not want to vaccinate their child against measles because the child lives in an urban community with a high index of vaccination and there would be little probability that the child would come in contact with a child who has the disease. The request of the parent is coherent with the reality of the society and not wanting to expose the child to the unnecessary risks of the vaccine. However, what would happen if all parents would act in this manner? The disease indices would probably increase again, with epidemics of preventable serious diseases occurring that would once again cause sequelae and deaths. Parents would once again accept the vaccines as an ally of the health of their children and not as a threat.[7]

On several occasions compulsory vaccination policies have provoked opposition from parents who argue that the government should not interfere in the freedom that a parent has to choose the type of care they want for their child while looking for the best interest of the child and for the child to not be harmed or exposed to a serious risk. In this case, the principle of harm to justify the intervention of the State in the parental decisions would be difficult to be used because the parents, although they do not immunize their children, are not harming them. On the contrary, they "are looking out for their best interests".

Health professionals and parents are obligated to look for the maximum benefit and minimize harm to the children. When the decision is made to vaccinate or not vaccinate a child, the child's well-being should be the main concern. However, parents and physicians may not always agree on what constitutes the best interest of the child in a very particular situation. On such occasions, the physicians may be tolerant of the parental decisions, if and when they are not harmful or place the child at risk.

Although decision making involving the health of the child should be shared between the physician and the parents, authorization from the parents before the children receive any type of intervention will always be required. Physicians cannot vaccinate a child without such authorization: it cannot be forced even though they are "obligatory."

3. Harm to the child: the limit of medical and social tolerance

It is known beforehand that parents act in the best interest of the children. So, when should the physician interfere with the parental decision to not vaccinate their child … when the child is at serious risk if not vaccinated. For example, if a child is brought to the emergency department because he/she was attacked by bats during an outing and has contaminated wounds that place the child at risk for tetanus or rabies, diseases for which those who have been vaccinated do not serve as a shield for those not vaccinated because there is no group immunity produced, the physician should request permission from the parents to give the minor only the vaccines to avoid tetanus or rabies without administering other vaccines for which the child is not at risk due to the accident. In the example given, treatment is considered proportional to the situation of the patient. That is, in the same way that the child requires prophylactic antibiotics to prevent an infection and human anti-rabies gamma globulin (IGRH), he/she will also require the tetanus toxoid to prevent tetanus. In both cases the treatment is exclusively geared to a particular risk situation and this situation should not be used or abused for applying another vaccine unrelated to the patient's condition.

Immunizing a child will depend on many factors including the probability of contracting or not the disease, as well as morbidity and mortality associated with the infection and the risks implied with administering the vaccine. When the pediatrician faces these types of parental decisions, the first and most important is "know how to listen" to the parents. Perhaps they do not apply the same criteria of decision of physicians and have—or do not have—access to different types of evidence from health personnel.[8,9]

Vaccines are sufficiently safe. However, they are not exempt of risks. They are also not 100% effective. This creates a dilemma for parents and it should not be minimized. The pediatrician needs to be honest with the parents and propose and share in an understandable, clear and concise fashion what he/she knows about the risks and benefits of the vaccine in question. In an attempt to clarify any misunderstanding and confusion in that regard, the physician must inform the parents that the risk of administering the vaccine should be analyzed in an isolated manner, but in relation to the risks of not giving the vaccine, and explain in a manner to make understanding the situation easier. For example, the risk of encephalopathy associated with the measles vaccine is approximately "one in a million", but the risk of encephalopathy caused by measles is one thousand times greater, such that the parents can see the risk in an objective manner. Likewise, one must continue informing and teaching parents, either in consultation, referring them to information on the internet or with books with well-supported and specific information on the prevention of diseases through vaccination.

4. Justified concerns

Recently, parents presented for examination of their newborn 5-day-old daughter. When they were questioned about vaccinations at birth they stated that only the hepatitis B and no BCG (the national Mexican scheme includes BCG and hepatitis B at birth) was given. The reason for that decision was that the girl's father had BCGitis (lymphadenitis secondary to the application of the BCG vaccine) in 1978 when the vaccine was given and he did not want his daughter to run such a risk. Also, he had read that this vaccine was not given in many countries with conditions similar to Mexico. However, the father was convinced of the benefit of the rest of the vaccines and agreed to their administration. In this case, the argument offered by the father is prudent and justified.

Although the risk of presenting such a complication in association with the vaccine is low, it does exist and although the negative decision of the father has a strong justification, the father should be informed, independent of the decision taken, without trying to convince him of the risks and benefits of giving the vaccine.

Many parents have concerns related with one or two specific vaccines such as the prior example. One useful strategy would be to discuss each vaccine separately. The benefits and risks of each vaccine differ, and a parent who is reluctant to consent to a particular vaccination may allow the administration of another vaccine. In fact, the same anti-vaccination groups admit to the specific benefits of some vaccines.

Parents may also have concerns about the administration of multiple vaccines to a child in a single visit. To most parents this appears to be excessive, three injections in one visit. Taking measures to reduce the pain of the injection may be sufficient. In other cases, parents may be open to a calendar of immunizations that does not require multiple injections during a single visit or the option of giving a combination of vaccines during one visit. If the concern is that in one injection three to five vaccines are given, parents should be informed that before massively using any vaccine, many studies have been carried out to prove their efficacy and safety under the scheme. Before adding a new vaccine to be given at the same time as other existing vaccines, new studies need to be carried out to demonstrate that together they are equally effective and with few secondary effects as administered separately. This is done for convenience, for economic reasons and also to prevent the children from being administered multiple shots.

Another position of parents who are anti-vaccine is that the large pharmaceutical companies are the only beneficiaries, a situation that is completely false. If it were proven that vaccines are mere commercial ventures and do not benefit the population, countries such as Cuba, North Korea or the Islamic Republic of Iran, which have calendars very similar to ours and soaring rates of vaccination, would not approve them: surely they would save that money.

When the argument is that children are very small to be receiving so many vaccines, the response would be that the age of the vaccination depends on the balance between two factors. If the vaccines are administered too soon, then they are sometimes not effective because of the immaturity of the child's immune system. If the vaccines are administered too late, the risk of the child becoming ill before being vaccinated increases. In general, 1 month prior or 1 month after the calendar of immunizations worldwide is very similar. When the risk of infection is greater, it is necessary to administer the vaccines at an earlier time. Delaying vaccine administration 1 year (or 2 years) means exposing the child to the risk of infection.

Even if the parents refuse administration of a vaccine, pediatricians should take advantage of their ongoing relationship with the family and, during each subsequent visit, consider it an opportunity to revisit the subject. A relationship based on respect, education and trust may encourage parents who were initially against vaccination to be willing to reconsider giving those vaccines that previously were not accepted.

If the negative response continues after adequate discussion, then it should be respected unless the child is at significant risk of serious harm (such as in the example with the bat attack). Only then should the authorities intervene to annul the parental decision based on lack of medical care. The concerns of the physician about the responsibilities of not administering the vaccines could be minimized if the medical record well documents that the parents did not consent to the vaccine. In any case and according to the relationship with the parents, consideration can be given to having the parents sign their refusal to consent.

In general, pediatricians should avoid conflicts with parents of patients solely because a parent refuses to vaccinate their child. However, when an atmosphere of distrust develops and there are significant differences between the philosophy of the physician and the parents or a poor level of communication persists, the pediatrician should encourage the family to seek another physician.

There will always be opponents to vaccine administration. However, the philosophy that should reign is the one that absolutely focuses on the best interest of the child. Physicians should not enter into conflict with parents when the parents refuse to allow the vaccine unless the child is at risk of serious harm, which will rarely occur. Vaccines should be given in a free, voluntary and informed manner because none are exempt from risk. Therefore, parents should be aware and autonomous in their decision.

Parents should be free to educate and care for their children, making the best decisions on their behalf. They, better than anyone, know what is best for their children and their families, and they will adhere to the principle of the best interests of the child in a natural way, ensuring their full well-being. However, physicians can also appeal for the best interest of children who come in without their parents. Undoubtedly, the perspective is another: the health of the child.

The best interest of the child is used universally as the threshold for identifying and requesting State intervention during situations in which the well-being of the child is at risk. Among the existing interests, the interests of the child will take precedence. However, on different occasions, the medical decision will come into conflict with those of the parents and these differences eventually will be irreconcilable. This does not mean that the parents are wrong and the physicians are always right. To believe in this manner is a paternalistic practice and does not justify legal intervention. Perhaps the disagreement could be resolved at the heart of the conflict, grounded in a good physician/parent/patient relationship and on tolerance. The only factor that should prompt the physician to seek legal protection for the child should be the level of harm the parental decision may expose the child to, when there is no benefit for the child and in its place there is malfeasance, which is equal to severe harm to the health and life of the child.

Conflict of interest

The authors declare no conflict of interest of any nature.

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