Childhood Immunizations: 

The Ethics of Requirement and Refusal

BY

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In American society today the ideal of freedom is held in high regard. Freedom of speech, freedom of religion, and especially freedom of choice shape many of the attitudes and beliefs in this country. Practicing under this idea, each person is given the “right” to make their own decision. Another important ideal in American society is safety. While there are risks associated with everyday life, there are laws and rules which have been established to secure this ideal. As with many ideals, ensuring one is carried out may limit the effect of the other. To ensure public well-being and safety, there are freedoms that must be sacrificed. How does this balance out in the real world, and what compromises must be made to find that balance? These questions are seen in the issue of compulsory childhood immunizations and the right to refuse. One side of the issue, support of compulsory childhood immunizations, public safety and the safety of children against communicable diseases is the factor. The other side of the issue, the right to refuse immunizations for one’s children, addresses the freedom to choose. By reviewing data about vaccine benefits and risks along with public safety issues raised by diseases, I will provide evidence to support both sides of the issues and possible resolutions.

Facts and Concepts Concerning Childhood Immunization

A clarification of what compulsory childhood immunizations are and what vaccines are included is critical in understanding the issue. Each state has immunization requirements that must be met before a child enters school. Included in these vaccinations are diphtheria, pertussis, tetanus, Haemophilus influenzae type b, measles, mumps, rubella, polio, hepatitis B and varicella. These vaccines are not mandatory for children unless entering schools, public or private. Proof of immunization is provided when a parent/guardian brings written proof of a child’s immunizations from a health provider or clinic at time of school registration. These immunizations are not just to protect children but also the parents, teachers and volunteers that provide services to the school.

State laws also allow for exemptions. In every state, medical exemptions, such as allergies to vaccine components and immunocompromised children, are allowed. Parents may also apply for religious exemptions, in 48 states. In 15 states philosophical exemptions are offered. In order for parents to apply for
these exemptions state specific documents must be completed and submitted. These applications may or may not require explanations as to the reasoning. The exemptions may also be for some or all vaccines, depending on the parental preference. Although not required by law, it is recommended that children that are not vaccinated remain at home during outbreaks to protect themselves. Also, if an outbreak occurs within the child’s family, they would also be recommended to stay home until the disease is controlled.

Immunization is a preventative measure, shown to reduce the incidence of a number of contagious diseases. The reductions in the diseases that have vaccines available are due to that vaccine, along with improved sanitation and hygiene. However, the diseases still exist and vaccines are still a means to protection. This is the crux of public safety, the means to prevent diseases that could lead to death. Allowing parental refusal of immunizations emphasizes the right to choose. The justifications for these choices, medical, religious and philosophical allow for expression of freedom. However, there is an additional concept to consider: parents are making the choices for the children. So, one must consider if the parent is acting in the child’s best interests and safety. The consideration of freedom of choice for a child is also a difficult one. At a young age, they cannot be responsible for these decisions, but will the parent be responsible. If the parent is not responsible, then the government may take a roll.

**Ethical Principles and Compulsory Immunization**

Several ethical principals support compulsory immunizations. The principal of beneficence can be supported by mandating childhood immunizations. If each and every child is required to have immunizations, as long as it is medically safe for them, they will have increased protection against severe diseases. Pediatric immunizations are responsible for preventing 3 million worldwide deaths in children each year. Also, if a child is immunized they will not pose a threat to other children, to those that may still be susceptible to disease, and they will not be harmed by the costs of medical care they may need in the instance that they acquire the disease. Refusing immunizations can be seen as harm by not receiving the good that immunizations provide.

Nonmaleficence can be applied to the situation when looking at an unimmunized child as one who could spread disease. If the child is unimmunized, and comes down with a vaccine preventable disease, they could potentially spread it. The major threat of harm is to those who cannot receive immunizations due to medical conditions such as allergies or being immunocompromised. There is also a threat to those individuals, who are still susceptible to the diseases, although they have received immunizations. By choosing to refuse vaccination for their children, parents could be committing an act of nonmaleficence.
To be fair to all children, and to protect them equally, mandatory immunization would be needed. The principle of justice would be upheld if all children were treated equally and all received the immunization. The only exception would be with children who are medically contraindicated, in which receiving would be detrimental. Guarantee of protection cannot be equal due to the nature of vaccinations. Each individual may have differences in their immune response and protection; also each may come in contact with different degrees of severity of the diseases. All children regardless of race, religion and culture would receive immunizations in a just situation allowing equal opportunity for protection.

The ethical principles of Beneficence, nonmaleficence and justice support each and every child’s receipt of vaccine. The strong evidence that these vaccines provide protection and reduce morbidity and mortality associated with the vaccine-preventable diseases provides an opportunity to offer a level of safety to people of the United States and the world.

Ethical principles apply to the situation of refusal just as strongly. Autonomy, respect for individuality, is key in understanding the right to refuse. If each individual, child and parent alike, is considered to have individual rights, a mandatory vaccinations do not consider this. Parents are expected to be acting in the best interests of the child, and following the family culture or religion, in matters concerning immunization is considered a right. The only argument that can be made to counter act a parental decision is that of a situation where a parent withholding immunizations places their child at risk for sufficient harm. In order to consider the individual, each must be allowed to make the decision right for them.

If forcing a child to have an immunization against their parents wishes the harm done may not be physical, but mental. The act would be a violation of nonmaleficence. The harm done to a parent would be by telling that parent that their belief is wrong and that the immunization is the only right way. If this act is committed, and the child would have been at minimal risk, the child and the parent are being harmed.

Justice can be applied to this situation when considering the fairness to the parties involved. If a family or parent does not believe or want immunizations, is it fair to deny them their choice in the matter? This would deny the freedom of choice that one believes they are provided as a citizen. The current laws in place in the State of Michigan allow for this freedom to choose 3. Every parent can choose which vaccines a child receives and can apply for waivers, allowing the child to enter school.

Vaccines are a great accomplishment of modern medicine and have allowed for a great reduction in disease. However, there are still risks as with any medication or treatment. The risks associated, are facts that parents have
the right to and can use to make their decisions on the matter of their child’s immunizations. If someone is keeping the information from them, it would be a violation of fidelity. If a parent understands the rights they possess to make the best decisions for their child, they will know that mandatory immunizations would violate the promise made to be free to practice their beliefs.

Belief Systems and Compulsory Childhood Immunizations

It is evident that there is more than one path to take in deciding what is ethically sound. In order to better understand where these issues and solutions originate from the current belief systems must be reviewed. There are facts and evidence as well as belief systems that support the two views.

The medical and scientific communities provide the strongest support for immunization for children. Medical Professionals, such as doctors and pharmacists, are afforded a greater understanding of the risks and benefits of vaccinations than is readily available to the general public. Access to information about vaccination is available to the public, however when left to interpretation, the results can be seen differently. By one account, vaccines for children have prevented 3 million deaths in children each year worldwide\(^1\). Immunizations have been held responsible for the eradication of smallpox worldwide. Other diseases, such as tetanus, measles and diphtheria, which were much more prevalent, are now relatively rare. Recent outbreaks of pertussis in Illinois, is being blamed on the number of children that have not been vaccinated against the disease\(^5\). Although not severe in an average secondary school student, it can pose a threat to the health of a young child, infant or child with chronic illness. These outbreaks can also cause children to miss numerous days of school, and disrupt the classroom with a large number of absences. Health care professionals and public health agents hold this as a strong case in support of vaccination. Often when these disease states are not seen in large numbers for years, there is a sense of security, and children do not receive these vaccinations, as a result, one case can spread to a large number of unvaccinated children. This is just one of the views supporting mandatory immunizations for children: prevention of outbreaks.

The ability to prevent the spread and incidence of these diseases, allows for prevention of death. While some of the disease states are rarely seen, emergence due to lack of vaccination could lead to increases in morbidity and mortality. The preventive measure of vaccination against death is minimally invasive, effective, and significant to society\(^6\). Dramatic declines in morbidity have been reported for the nine vaccine-preventable diseases for which vaccination was universally recommended for use in children before 1990. Morbidity associated with smallpox and polio caused by wild-type viruses has declined 100% and nearly 100% for each of the other seven diseases.\(^8\) The evidence seen in these statistics drives medical support of routine vaccination. If each child who was medically able to receive vaccine did, there would be a
greater impact. Currently, these diseases still exist because of the fact that the 
vaccination has been limited, by both individual choice and by resources. As 
technology has improved, the production of vaccines and the supply has the 
ability to lead this reduction in diseases. The medical and scientific community 
develops, supports, and investigates this impact.

The cost of health care continues to grow as has research into how to 
lower costs. Preventative medicine is a relatively new concept in health care, 
with the ultimate goal of reducing costs. If health is preserved by simple cost 
efficient methods, later treatment costs will be reduced. In the instances where 
vaccination is not mandatory, costs can be at times higher, if the government 
does not place a requirement on the receipt of vaccinations and they are 
optional, the out of pocket cost can increase for patients having to deal with 
either paying for the vaccination, or when trying to save money, end up having to 
pay for the care and treatment of a sick child who was unvaccinated. Also 
consider the impact of a sick child\textsuperscript{10}. If an unvaccinated child becomes ill, they 
may end up having to stay home from school to minimize the risk of spreading 
the disease. Often in families whose income is limited, school is not just a 
means for education for the child, but a time that the parent can earn income 
without needing to pay for care of that child. If the income is limited and the child 
must stay home from school the parent may not be able to afford to hire care for 
the child, resulting in them needing to miss work. By most estimates, nearly half 
of all private-sector workers in the U.S. do not have a single day of paid sick 
leave. And more do not have a paid day off that can be used to care for a sick 
child\textsuperscript{11}. Low-wage workers are hit the hardest, with three of every four lacking 
any paid sick leave. They also usually have no health-care coverage or work a 
full-time or more than full-time schedule of piecemeal, part-time jobs, making 
paid sick leave even more unlikely.\textsuperscript{10} At times the illness of a child is something 
that cannot be prevented, viruses such as the common cold, are difficult for 
children to avoid. But if a vaccination can prevent at least one illness, that is a 
few less sick days that the child and parent must bear.\textsuperscript{11}

Overall, medical evidence of immunity to disease, an increase of public 
safety from diseases, reduction of death from disease and reducing health care 
costs, provide strong support for mandatory immunizations for children. While 
there are incidences and expectations, the overall impact is healthier children, in 
the eyes of the supporters of mandatory vaccination, emphasizing safety for all.

**Belief Systems and Refusal of Immunization**

There is another party of thought that justifies the right to refuse 
vaccination, especially in children. Some of these reasons are evident, and built 
into refusal forms; others are less popular, but still hold reasons.

One of the defenses against requiring vaccination for all children is safety. As 
with any medication or treatment there are risks involved. Vaccinations are
able to cause side effect and harmful effects in some situations. The Vaccine Adverse Event Reporting System was established for this specific reasoning. Of the > 1.9 billion net doses of human vaccine distributed from 1991 to 2001, 128,717 reports were received by VAERS. This is less than .01%. The proportions per age groups <1 year, 1-6 years, and 7-17 year, were 18.1%, 26.7%, and 8% of all reports respectively. This shows that just over half of all reported reactions to vaccines occurred in children under the age of 17. These data are what support the belief that vaccines are not necessarily the “safe and effective” preventative medicine they claim to be. Although the data clearly shows that the adverse reactions are not seen often, when is it okay to cause a reaction in a child for something that is supposed to keep them healthy? There exists reasoning that early vaccinations can result in mild cases of sub-clinical encephalitis which, in turn, may well be responsible -- at least in part -- for the increase in autism, hyperactivity, dyslexia, sociopathy, and developmental disabilities, a rise that roughly coincides with the initiation of infant vaccinations. Lastly, administration of a vaccine is not an immediate life-saving procedure, in this sense; refusal is not putting a child in immediate danger. This belief system is one of the core reasons for support of refusing immunization.

In particular, there is one health concern that has become predominant over others in fears of safety of vaccination. That concern is Autism. The MMR-autism theory came to the forefront when, in 1998, Wakefield and colleagues reviewed reports of children with bowel disease and regressive developmental disorders, mostly autism. The researchers suggested that MMR vaccination led to intestinal abnormalities, resulting in impaired intestinal function and developmental regression within 24 hours to a few weeks of vaccination. This hypothesis was based on 12 children. In 9 of the cases, the child's parents or pediatrician speculated that the MMR vaccine had contributed to the behavioral problems of the children in the study. The study used too few cases to make any generalizations about the causes of autism; only 12 children were included in the study. Further, the cases were referred to the researchers and may not be a representative sample of cases of autism. However, the presentation of data, even if refuted by other organizations, still raises concerns with parents, resulting in reasoning for refusal.

In some cases safety is a secondary concern, but culture and religion play a big role. In cultures from under developed countries and others that hold on to tradition, western medicine is not seen as the first line against disease. In culture such as the Hmong, who now have predominant settlement in the United States, due to government efforts to “assist” during and after the Vietnam War, do not embrace vaccination. Their ways of healing and preventing disease relies on pleasing spirits. Vaccination is a foreign concept and does not fit in to their view of health. By mandating vaccination for their children, a violation of their beliefs occurs, and the ideal of freedom of choice is destroyed.
Religious beliefs also factor in decisions to refuse immunization for children. The Christian Science Church thinks that healing is the natural result of drawing closer to God and therefore immunizations are not necessary. Outside of the Christian Science Church, most denominations or churches support vaccination as a choice; therefore most Christians who refuse vaccination on a religious basis do so under their own interpretation. Examples of reasoning behind refusals of vaccination based on scripture include the following: Bible teachings to keep the blood pure, and keeping seed from being mixed, therefore vaccination is a route to impurity; If vaccinations are efficacious, then vaccinated neighbor would be in no danger from someone who is not vaccinated, therefore no harm is coming to one’s neighbor; the Bible teaches children are a gift from God to the parents who are entrusted with their care and well being. These beliefs support the right to refuse immunizations due to religious reasons. Other religions may also have issues with vaccine components and production methods. Overall, in order to protect religious freedom, the right to refuse vaccination must be upheld.

Outside of religious and medical safety issues there are few more beliefs that support the right to refuse. Natural health and homeopathic medicines believe health functions on a different level than contemporary western medicine does. The first reason is that such parents do not accept the germ theory of disease. According to Natural Health, if a child develops measles, whooping cough, chicken pox or any of the other common childhood infections, it is not because of germs but because of the toxic conditions of the body, a condition referred to as Toxaemia. There are many causes of Toxanemia but in western countries the most common are overfeeding, dietary errors, poor parental health and chemical pollutants. In third world countries the causes are more related to malnourishment, impure water and poor sanitation. Because vaccination does nothing to reduce or eliminate the toxic conditions of the body out of which childhood infections arise, parents regard this practice as totally futile for it bears no relation to the root causes of childhood infection. The second reason is that parents do not regard the childhood infections as harmful, but in fact, as beneficial. They therefore do not fear these diseases; they welcome them, because they regard childhood infections as nothing more than internal housecleaning which enables the body to rid itself of the accumulated toxic wastes. Natural Health teaches that the common symptoms of childhood infection i.e. fever; fatigue, no appetite, etc represent the body’s attempts at eliminating toxic waste. This is why parents make no effort to suppress these symptoms with drug therapy. Instead parents allow these symptoms to run their course for this enables the child’s body to complete the process of toxic elimination. Homeopathic medicine also believes that the large number of vaccines that children receive over a short period of time hinder the immune system by overloading it and not allowing a natural process to happen resulting in a weaker immune system. Although, these beliefs are considered natural medicine, many parents and families who practice modern western medicine but
refuse immunizations for their children have reasoning that is similar to the above beliefs.

The foundation of freedom of choice is the idea behind right to refuse childhood immunizations. There exist many reasons and beliefs, which must be respected in order to maintain that foundation. When considering the role of immunizations in prevention and not treatment, and how refusal does not cause immediate danger, the decision of compulsory immunization becomes more difficult.

Current Attitudes and Sources of Information

Many of the current attitudes of vaccination rely on two sources of information: the internet and information from family/friends. A survey found that over 80% of people both health care and non-health care will utilize the internet to gain information about vaccinations for children. Most health care professionals will rely on information provided by government agencies or scientific journals or studies to gain facts. Others will look to search engines such as google.com or a medical website such as WebMD. Looking at the source of information about vaccination helps to better understand the dynamics of the differing belief systems supporting or opposing compulsory childhood immunizations.

The religious and cultural beliefs that support the right to refuse vaccination often stem from family interaction. Those who have strong religious convictions and practices will commonly follow the ways of their religion or culture. The sources of information on the internet or through popular news will have the greatest impact on those who refuse immunizations for their children. Meanwhile, information from scientific journals will have significant impacts on the health care professional. The medical professional has had a great deal of training designed around technology and science, and often is open to the ideas of preventing disease and strengthens the immune system through science. For the lay public side effects and other dangers presented by vaccines are important factors in deciding whether or not to have their children receive immunizations.

A search for “childhood vaccines” on google.com produced the following results. The first few sites linked to vaccine supportive websites, including the CDC’s National Immunization Program and information from the American Academy of Family Physicians. Those sites reported on the importance of immunization and information and schedules for the recommended vaccines. They report the risks as being low and the benefits of vaccines overcoming the risks. The sites that are listed next are against childhood vaccinations. Such sites brought up a study on Thimerosol in vaccines and it link to neurodevelopment disorders. Another highlights the connection to SIDS. One site is the Thinktwice Global Vaccine Institute, which just provides information on dangers of vaccines and alternatives. There is a mix of information following,
the most memorable and dramatic are the stories on the sites warning about vaccines and what they have done to children. These are the main sites of information that parents receive information on regarding what they should do.

An internet survey that was published in 2006 allowed for a global perspective on where vaccine information was obtained. By use of a German internet vaccine forum for lay persons, a survey was performed to assess current attitudes of parents regarding prevalent issues related to childhood vaccination. Of 6025 participants, 5722 (95.0%) regarded their pediatrician as the most important source of information regarding immunization, followed by leaflets (48.0%), health magazines (44.7%), and the internet (38.7%). Furthermore, 22.6% of survey participants felt that immunizations are administered "too early" in life and 21.0 and 12.2% thought that overload of the child's immune system and induction of allergies, respectively, would be side effects of immunizations.

A US survey was also conducted in 2002. According to the National Immunization Survey 25% of US preschool children are not up to date with the 4:3:1:3:3 series vaccination series they should have by 19-35 months of age. Prior research on risk factors for immunization has revealed that parental attitudes, beliefs and sociodemographic characteristics are associated with the vaccination status of their children. There was a significant association between parental concern about vaccine safety and their child's immunization coverage; for those parents with the least concern, coverage was 75%, for those with intermediate concern, coverage was 65%, and for those with the highest concern, coverage was 53%, (p<0.01, n=7789). These differences remained significant after controlling for demographic characteristics. No other significant associations were found.

In relation to the government and parental rights when it comes to immunization, current law is clear. The government recommends all vaccinations; the parents have every right to reject this. No matter the attitude the parent receives, they have every right to make the decision that they believe suits their child the best. As was stated earlier there are provisions in place for a parent to refuse vaccination for a child and still enroll that child in school. An instance in which government may play a role includes such a situation in which the parents are deemed as not acting in the child's best interest. In this case a court can override a parent's decision if the child's life is in danger or would be if the parent's choice was followed. In the case of vaccine this is rarely the case, with the exception of post-exposure rabies vaccine. Therefore, unless a change is made in vaccination requirements, changing them to mandatory, the government's role would be minimal.

Role of the Health Care Professional

Health care professionals are often on the side of vaccinations and understand the science behind immunizations. While the role will be to
administer and advocate for vaccinations, they need to be a critical source of unbiased information for parents. Some complaints of parents on websites against vaccination told of physicians and other health care providers that were not sensitive to their hesitation or choices about not vaccinating. The health care provider must listen carefully and respectfully to the parents' concerns. They should be available to answer questions and provide unbiased information and reputable data-based websites to refer to. Discussing each vaccine separately and address specific concerns. Continued refusal after adequate discussion should be respected unless the child is put in significant danger, as in the instance of an outbreak. Differences in opinion should not be a source to end the relationship between the health care provider and the patient unless completely unavoidable.

Where does the decision lie?

Ultimately there are 3 approaches to a childhood vaccinations:

1. All childhood vaccinations should be mandatory unless medically contraindicated.
2. No vaccines should be required, nor should waivers be required for refusal of the childhood vaccines.
3. Parents/Guardians should be fully educated on vaccine pros and cons before making a decision on vaccination, and encouragement of vaccination should be done with respect to each party.

As can be inferred from the above options the last one, which emphasizes education, should be implemented. Today's environment is similar to this, but with more pressure on vaccination for all, and less on education for all, then vaccination. In order to both protect a child from diseases that could threaten their health and well being and endanger others in the case of an outbreak, and protecting ones right to choose, options must be available. If each and every parent is educated properly, the ideal situation is that the vaccines most needed by the child will be received, or if that is not possible, the parent will know how to best protect the child in the incidence the disease occurs. One's right to refuse cannot be denied in a situation where the science still has doubts.
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