Professor Martin

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Final Essay

**Should School Children be Vaccinated?**

**Part 1**

Vaccinations have been created, analyzed, and provided to the public for many years yet there are controversies regarding their safety for children. There are parents, colleagues and even professionals in the field of medicine who claim that vaccinations are not necessary for school children. Yet, there are many individuals who believe the opposite and view vaccinations as a great advantage for the well being of children. Indeed there are a variety of issues concerning the topic of vaccinating children but with the issues, there are also a wide range of common places the two opposing sides share.

In regards to the issues of school children being vaccinated, The Center of Disease Control and Prevention (CDC), herd immunity, effectiveness of vaccinations, ingredients in vaccinations, the vaccination schedule and the cause of autism are the main concerns. The CDC has been blamed countless times for providing false evidence in their studies about vaccinations (Green, 2014). Yet, those who favor vaccinations state that the CDC is a successful company that presents credible evidence and strives to help the American public (Satcher ,1999).

Opponents of vaccinations also question the existence of herd immunity. It has been stated in Mark Crislip's article called "In Defense of Vaccines Part 1 of 2", that the percentage of immune people in the population is uncertain and vaccinations immunity does not last forever. Those who support and believe in herd immunity desire to have 92 percent to 94 percent of the

community vaccinated (Vaccines Pros and Cons, 2014). With this high percentage, supporters are optimistic that the diseases will not be spread further (Goldstein, 2000).

A third reason vaccinating children has been an issue in today's society is because there is an uncertainty about the effectiveness of vaccinations for the community as a whole. As stated in class discussions, some believe the effectiveness of vaccinations last for ever while others claim they lose their true potential after 10 to 12 years. Those who believe in the positive impacts of vaccinations demonstrate how diseases have been successfully eliminated since 1798 (Goldstein, 2000). Opposers rebuttal this claim with evidence proving that vaccinations have still caused people to acquire diseases (Top 20 Questions, 2014).

The specific vaccinations given to children in order to live a healthy life is also an issue. Hepatitis B, Vitamin K, and Rubella (MMR) vaccinations are highly discussed when researching on what vaccinations are not beneficial for infants. These three vaccinations have been recommended by many doctors yet the public still claims they are unnecessary for a child so young (Vaccines Pros and Cons, 2014). In addition, the vaccination schedule is argued to be safe because an infants immune system has been proven to be strong enough to receive numbers of shots without penalty (Top 20 Questions, 2014). The ingredients in these vaccinations are argued to be toxic because of their use of mercury such as thimerosal (Baker, 2008). Crislip counter claims this statement in his article on the "Defense of Vaccines" by explaining that although there are toxic elements in vaccinations, the amount used are harmless to the children's immune system.

Another gray area in regards to vaccinating children is to see who should have the power to decide whether or not to vaccinate school children. We all have an opinion with supported evidence and standpoints yet is there a certain figure we should look up to when making this

decision? There are some who believe parents have the right to decide for their children whether vaccinations are an appropriate way of staying healthy and there are others who look up to the society, governments, and or a medical professions. Those who believe parents should have the right to decide seem to take a more emotional stance with pathos statements. And those who put their faith in successful corporations and governments seem to be more persuaded with logical researched evidence from educated professionals.

One of the most sensitive issues for this question of value is whether there is a link between autism and the vaccinations children are given. There have been studies shown that there was a correlation between autism and MMR vaccinations in African American infants (Benson, 2014). Yet, others see this as a coincidence stating that the signs of autism appeared at the same time as diseases such as MMR (Infant and Toddler, 2014).

Although there is a list of issues that surround the topic of vaccinating children, there is a list of common places that bring the society together to help resolve the issues and form an understanding of the different view points. As a society, it is clear to see that parents all want to ensure the best, healthy life for their children. Whether this means to give vaccinations or not, we want children to be safe. Also, it is acknowledged and agreed that vaccinations have been eradicated, eliminated, and reduced diseases around the world. The issues listed brings all of us to the conclusion that the United States still needs to research more thoroughly on the effectiveness and the side effects of vaccinations since they do still carry some risks.

After collecting different view points, claims, and ideas one can look at the issues and common places of vaccinations in order to make a a wise decision for vaccinating themselves as well as their children. By observing the issues and the different sides, it allows individuals to be more open minded and educated about the question of value. Vaccinations have been a topic for

discussion for many years and with cooperative argumentations and dissection of the issues and common places, we can hopefully  reach an agreement or understanding of both sides.

**Part 2**

**Position: School children should be vaccinated**

" It is time to give your child his first set of vaccinations. Please sign these papers and we will proceed." Millions of people hear these words from their doctors when they become a new parent and some of them refuse to let the doctor take further action. The reasons for this can vary yet they are not necessarily guaranteed to be true. As a nation and a world as a whole, we want to live in a safe environment surrounding healthy and happy people including ourselves. We have acknowledged that there have been vaccinations that eradicated or reduced disease yet we still like to see the United States research more thoroughly on the effectiveness of these vaccinations. We have agreements on the idea that vaccinations carry risks but they question for the society is whether the risks of vaccines are still worth it in the long run. For some, living a healthy life means to follow the vaccination schedule as an extra precaution and for others it means to take matters in their own hands and not trust every vaccination provided to the children of the public. As the society grows and knowledge continues to expand our scientific creations, it is safe to say that vaccinations are beneficial for children and will positively impact our future. Vaccinations assist in creating community immunity and have been approved by professional and trustworthy companies such as the center of disease control and prevention (CDC).

Vaccinations do the opposite of harming children. In fact, they prevent children from encountering harmful diseases by destroying the existence of the diseases with community immunity (Goldstein). To first understand the claim at hand, it is crucial to define and understand

community immunity. Community immunity is when a community is immunized against a contagious disease. Therefore, if most of the community is protected against that disease, there will be little opportunity for an outbreak. For example, an effective small pox vaccination discovered by the English Physician Edward Jenner was proven to eradicate the small pox disease after "the United Nations launched its global vaccination campaign in the mid-60's" (Goldstein). This proves to show how when a vaccination goes global and a wide range of the population takes part in protecting themselves, they can over power the spread of harmful diseases. Eradicating a disease is such a powerful act and us humans can have control over it if we become unified and vaccinate ourselves as well as our children. Furthermore, the polio virus was eliminated from the Western Hemisphere after the U.S. public health authorities decided to make Jonas Stalk and Albert Stabin's polio vaccination available universally to all children in the 1950s (Goldstein). This indicates that we need to embrace the knowledge and the scientific discoveries that are made in order to make a difference in the world. With that in mind, there are some parents who have never experienced the disease outbreaks and therefore they do not realize the severity and risk of not vaccinating their children (Palfreman, 2010). The parents of these children who are not vaccinated are frequently blamed for the new outbreaks that occur in the United States such as one in San Diego with a child that attained the measles disease (Palfreman, 2010). It does not seem reasonable to oppose vaccinations and deny that this action can cause outbreaks to reoccur in a community. It is true that there are children who are too young to get a certain vaccination, but community immunity helps protect these children as well. For example, children under the age of one years old are too young to receive the measles vaccination but they can still receive some form of protection from people around them who have acquired the vaccination (Satcher, 2000). Even the smallest amount of protection for the community counts as

a step toward the right direction. We can not only think of ourselves and our own children when deciding a stance on vaccination. We must consider those who depend on community immunity in order to live a healthy lifestyle. These people include, those who do not have a fully-working immune system, people with HIV, elderly people, and newborn babies who are too young to be vaccinated as mentioned before (Loving, 2014). In order to make a positive impact in the society and create a safe and healthy environment for children to live and thrive in, it is crucial to be unified as an immunized community to permanently eliminate dangerous diseases. We can not sit back and let the disease take control.

In addition to community immunity benefiting children health and life, the Center of Disease Control and Prevention does its best to provide accurate studies and research on the vaccinations given to the public. With every claim, there are those who believe the opposite. There are some individuals who claim that vaccinating children has not been proven to be safe because of the Center of Disease Control Preventions (CDC) failing to provide accurate research on how vaccinations do not harm children (Green, 2014). Opponents of CDC and vaccinations claim that the CDC incorrectly studied whether vaccinations cause autism in children. They explain that the CDC studies only used "young children, from 0-3 years of age, even though average age for an autism diagnosis at the time was 4.4 years" (Green, 2014). With this being an accurate statement, it still does not prove that vaccinations are harmful to children or correlate with autism. The CDC perhaps should study the right age group for the vaccinations in their future researchers but it is also important to understand that there have been more children diagnosed with autism because diagnostic techniques have advanced (Goldstein, 2000). It is not that CDC is hiding the correlation between autism and vaccinations but that they also see autism and vaccinations expanding simultaneously as a coincidence.

Further more, stating that the CDC is untrustworthy is also an inaccurate claim to make when the CDC, FDA, and doctors have been analyzing vaccinations in the most effective ways. According to David Satcher, an Assistant Secretary for Health, a Surgeon General, and member of the U.S. Public Health Service and U.S. Department of Health and Human Services, the CDC's studies have been published in scientific and peer reviewed publications and therefore they are highly credible. In his article, "Statement on Risk vs Benefit of Vaccinations", Satcher states how the CDC has established a credible program called the Vaccines Safety Datalink (VSD). The VSD links vaccination, hospitalization and medical records to large managed care organizations. VSD's primary goal is to identify the health outcome of interest, link the date in vaccination records, and most importantly, to compare the health event in those who are vaccinated, unvaccinated, and vaccinated at different times (Satcher, 1999). This indicates that the CDC is doing its job in researching vaccinations and presenting accurate information for the general public. One has complete access to the CDCs studies and can research on specific vaccinations they have concerns with. It is understandable if one has a concern with a vaccination but not giving the CDC credit for their hard work and research skills does not seem appropriate in this situation. Not only are vaccinations being studied extensively by large credible organizations such as CDC but they are also required to follow the same pathways as drugs and other biologics. In order to have a vaccination available to the public, it must first submit an Investigations New Drug application (IND) to the FDA. The IND is a crucial document that describes the quality and the method of manufacture of the vaccination. It also provides information of the "vaccinations safety and ability to elicit a protective immune response in animal testing as well as the proposed clinical protocol for studies in humans" (Satcher, 1999). After being approved by the FDA, the vaccination must go through three phases

of trial, submitted to the Biologics License Application (BLA), and given appropriate product labeling in order to be released to the public (Satcher, 1999). Even with efforts the CDC takes to produce safe vaccinations for the public, some may still doubt all their work. CDC is constantly striving to enhance their vaccination safety efforts. In order to do so the CDC had The institute of Medicine (IOM) of the National Academy of Sciences undertake broad reviews of vaccinations safety (Satcher, 1999). The reviews for instance, "examined all available data specific to pediatric vaccines and drew independent conclusions on the safety of each vaccine" (Satcher, 1999). Additionally, the Task Force on Safer Childhood Vaccines is also involved in examining issues and making recommendations to "ensure development of safer childhood vaccines and improve licensing, manufacturing, processing,warning,...and research on vaccines" (Satcher, 1999). It is clear to see that the CDC has many groups of professionals in different fields assisting them in making accurate judgments and providing factual evidence in their researches. It does not seem to be likely that the professionals with background in health and medicine take all their time studying to come out with false claims and accusations. There is a common place for everyone that we want a safer environment for ourselves and our children. The individuals in CDC have made it their lifetime career to provide safety for the general public. With the extensive list of requirements, studies and guidelines that the CDC and FDA provide, vaccinations are proven to be safe for the public. These large corporations are studying these vaccinations extensively to make a mistake and harm the public. They want the best for the children and the society as well as themselves.

All in all, with some set backs, vaccinations seem to be a great discovering and creation for our world to take advantage of. Its an outlet for a healthier, happier, and disease free future. If we all participate in eradicating and eliminating diseases with the concept of community

immunity, we can truly succeed in creating a better world for us and our future children to live in. Trusting professionals and groups of people that put in hours of work each day to provide the best products for the public should not be looked down upon. We must have a positive outlook and see the best in everything that has be done for us. If we have eradicated a disease before, it would be reasonable to continue the process and believe in the powerful and positive impacts of vaccinations.

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