Inactivated Polio Vaccine has Diminished Polio Cases

A Brief Introduction to Paralytic Polio Disease: Polio is a frightening disease that can lead to irreversible paralysis and even death. It is caused by a virus that enters the body through the mouth and eventually invades the nervous system. Children under the age of five are the most at risk for polio and once a person is infected, there is no cure ("WHO | Poliomyelitis"). The United States saw its peak of polio cases in 1952 (Hinman, Alan R). This persuaded the introduction of the polio vaccine in 1955 which led to the eradication of this disease in the United States. However, polio can still be found in other parts of the world and the threat of its return to the United States is possible ("Polio Vaccine (IPV): When to Get Vaccinated").

Pros and Cons of Receiving Vaccine: Receiving IPV is more beneficial than harmful, though some may argue differently. The vaccine prevents contracting polio disease. There is soreness where the shot is given, but the sensation in temporary. The argument that vaccinations may lead to autism has been proven false by recent studies (Hviid, Anders).

IPV vs. OPV: Two methods of preventing polio exist: inactive polio vaccination and oral polio vaccination. IPV is an inactive injection of proteins from the polio virus while OPV consisted of liquid drops that are swallowed. OPV used to be a popular method for vaccinating children in the U.S. and played a huge role in eradicating the virus from the country ("Polio Vaccine: What You Need to Know"). While both forms have been known to achieve immunity, OPV may have a higher risk of actually transmitting paralytic polio ("Polio Vaccine: What You Need to Know"). According to a peer reviewed article, “An average of eight cases of paralytic polio continues to be reported each year in association with the administration of OPV” (Hinman, Alan R). Because of the correlation between OPV and polio, OPV is no longer a recommended version of the polio vaccine. In conclusion, inactive polio vaccine is a safer alternative to oral polio vaccine. The pain of a shot is only temporary side effect of IPV, but the risk of OPV may be life changing.
Team Reflection:

Issues we encountered while compiling this project included figuring out which vaccine to choose and what stance we should take. In terms of finding resources, we didn’t face difficulties. When weighing opposing evidence, we considered how reputable the sources were and how much sources were for or against our stance. We acquired many skills during this project such as researching and summarizing, that we will most likely use in other classes.

Acknowledgements:

Devon compiled the annotated bibliography, summarized the history of the polio vaccine, and found reputable sources. Amanda typed up the team reflection, outlined the pros and cons of the vaccine, received comments from Mrs. Brickman, and helped find a graph that was relevant to our project. Holly typed the acknowledgements, found reputable sources, compiled/edited the project, found a usable graph, made the figure legend, and kept the group updated with the progress of the project. Catherine found a picture of children affected by polio and gave its citation. Row summarized the difference between OPV and IPV and attended general meetings.
Works Cited


This peer reviewed article comes from a reliable source and explains the differences between oral vaccination and IPV. These professionals wrote an analysis on the benefits and risks of the vaccine. This information comes from a peer reviewed journal.


This article discusses the link, or lack thereof, between the polio vaccine and autism. Although the study is a little outdated, it comes from a reputable source and is still relevant.


This is the website from where we obtained our graph. It is excellent because it shows how effective the polio vaccine was introduced in the 1960s. This site providing it is affiliated with the government.


This site goes in detail with the actual vaccine. It describes how many doses of the vaccine are needed and the time increments that they should be administered. This source supports the notion that the vaccine is harmless and the chance of it causing anything bad to happen is very unlikely. The information was reviewed recently and the website reporting it is trustworthy.


This site explains what polio is, who is most at risk for contracting the disease, why people should get the vaccine, and the risks that come with the vaccine. This information is provided by a non-biased government agency and is recent enough for our purposes.


This source discusses what causes the disease of polio, what the symptoms are, and who is mostly affected by it. They also provide information on the World Health Organization initiative to eradicate polio worldwide. Not only is this source up to date, it is also respectable.