

Diversity and Vaccine Controversy

My area of research dealt with many different aspects of the vaccine movement, the main three were: anti-vaccine sentiments over the Internet, global instances of anti-vaccination efforts, and differences in social class and race in vaccine utilization. I have come to realize that there are two distinct issues arising in the organization that encompasses vaccines. The distinctions are the anti-vaccine movement - the spread of anti-vaccine sentiments over the Internet, and global instances of anti-vaccination efforts, and limited vaccine resources and availability - socioeconomic and race discrepancies. I will focus my summary mainly on the anti-vaccine movement and briefly touch on the issue of vaccine availability.

My research was composed of journal articles retrieved from two databases "ScienceDirect" and "PubMed." The most comprehensive article I found was called "A taxonomy of reasoning flaws in the anti- vaccine movement." In this article the authors break down major arguments supported by anti-vaccinationists. In doing research I've found that the most popular argument for parents choosing not to immunize their children is because "vaccines cause major side effects –severe disorders or death." Jacobson in this article explains the misconception that the DTP vaccine causes Sudden Infant Death Syndrome (SIDS). He points out that the DTP vaccine is most effective when administered within the first 6 month of life, and SIDS is the most common cause of infant death among infants older than one month. So it is purely

coincidence that SIDS follows DTP vaccination. Now I was able to find this information out through research but many parents who have been afflicted with loss of their children in proximity with a vaccine dosage do not see it as coincidence as seen on many anti-vaccination websites.

Media, and especially the Internet have opened up “Pandora’s Box” as a couple of the articles I annotated proclaim. It has become extremely easy for anyone to start a website. Because of the ease people from all across the world are able to share their negative experiences with vaccines-rarely have I come across opinions of triumph toward vaccines on websites. In my research many people claim that the Internet is the main source for their vaccine information, so there comes a serious problem for health policy makers when in a “Google” search of the word vaccine “The National Vaccine Information Center” shows up on the first page. As with many anti-vaccine website, the NVIC wears a blanket of legitimacy. The website is well put together so it easy to take all their opinions and shared experiences of vaccine faultiness as facts, when in reality they are pure opinions with no scientific backing. Fighting the spread of the anti-vaccination movement also becomes increasingly difficult when there are many physicians who denounce vaccinations, whom the NVIC proudly showcase during their conferences.

Many who do not vaccinate do so for two main reasons, because they deem alternative medicines better, or because of their belief system, whether philosophical or religious. Many people site homeopathy as a safe alternative to actual vaccinations, but as good research would show, there is no equal alternative to immunizations. E. Ernst in an article I’ve annotated shares a story of two cases where parents followed their homeopaths advice and took

“homeopathic immunizations” against malaria. The patients contracted malaria and one suffered multiple organ failure. The appeal in homeopathy is that patients are given real genuine care. I think because of the decrease in general care practitioners, many patients are forced to hop from one doctor to the next and are not able to build trusting relationships. The other reason for not being vaccinated is due to different belief systems. The United States provides exemptions from vaccines for those who chose to exercise that power, but vaccination exemption rates are becoming dangerous high. The 2007-2008 rates of exemption by state show five states with exemption rates over 3%, the maximum in after which herd immunity can be compromised. Illinois is one of those states, and in 2008 a measles outbreak occurred, the disease source was from Switzerland.

In Switzerland vaccine coverage has been increasing since 2000, so the measles outbreak that occurred there was surprising. I would like to point out that Switzerland, like many of the countries I've research pursuing high vaccinations have socialized medical systems- UK, Australia, Canada, and none of them have compulsory vaccination laws like the US. Yet, through different mechanisms they have all managed to attain high rates of vaccination.

Global eradication is not necessarily a movement in the anti-vaccine sector, but definitely has serious affects on it. It is very important that 2nd and 3rd world countries get the vaccines for these VPDs. Although it is sometimes difficult due to cultural differences to implicate certain vaccine programs, it can be done. Nigeria is an example. Ultimately if we do not reach out to these countries here is the proposed result: a person who has contracted polio from India travels to Minnesota- another state with high exemption rates. Due to

clustering- groups of unvaccinated individuals populate an area in higher rates that vaccinated individuals- herd immunity has been diminished and those who were unvaccinated as well as those vaccinated get polio. Now there is a media frenzy that proclaims the polio vaccine does nothing, anti-vaccination sentiments rise, polio vaccines lower, and the disease is spread to epidemic proportions. Although the situation is hypothetical, there is evidence that proves its possible.

Before I conclude, I would like to touch briefly on my findings in relation to social class and disparities in race among vaccine use. It is true that whites and those of higher income do get vaccinated more often, but the major issue involves people living rural areas. Vaccinations are slow to get to rural areas, in my research an article said up to 2 years of initial production of a vaccine. If there is to be equality in increasing vaccine rates across the country, public health officials should seek to make clinics more accessible and resourceful. Here is where I believed socialized medicine would have the greatest impact. Its difficult to get qualified doctors to move to rural areas, but if medicine became standardized, rural areas would be up-to date on their facilities and doctors would want to practice there; with more doctors would come more patients with their children, and therefore vaccines.

Overall, the anti-vaccination movement is very complex. It will take very profound public health initiatives and law changes to maintain high rates of immunization. The public needs to be more educated on the purposes of vaccines, how they work, and whom they work on. Misinformation is the main reason why the anti-vaccine sentiments, in the US and overseas are flourishing. For further research I think it would be important to examine the New River

Valley's level of vaccination coverage. Many of the articles use questionnaires as their method to find information, so that could be an objective for next semester.