

Proposal to address (Vaccine-Preventable Diseases)

ASSESSMENT

Definition of the Public Health Problem/Issue

Vaccine-Preventable Diseases are a Public Health problem in the United States of America. The vaccines that are administered and are highly recommended for use are to prevent diseases among children and adults, so that their bodies will be less susceptible to particular diseases. If more of the population does not partake in the action of getting these vaccines there will be more sickness and death spreading around our Nation from one unvaccinated person to the next. If the problem is not solved the children and older adults (50+) will be influenced the most because their weak immune systems cannot conquer these diseases alone. These vaccines that are administered and studied are under the watch of many organizations including the following: Advisory Committee on Immunization Practices of the U.S., Department of Health and Human Services, Centers for Disease Control and Prevention, American Academy of Pediatrics, Healthy People 2010, and the American Academy of Family Physicians. With the help of these groups they have outlined goals that will improve upon the number of people vaccinated in the U.S. This includes developing a common childhood vaccination schedule, improve vaccination coverage in young children, maintain vaccination coverage in young children, increase vaccine coverage among high risk groups, etc. "Vaccine-preventable diseases are the major cause of illness and death for people of all ages in the United States." The statistics conclude that "400,000 children and adults in the U.S. who become ill, and 500,000 die each year from vaccine-preventable diseases"

(<http://www.thecommunityguide.org/vaccines/Vaccine-Preventable-Diseases.pdf>).

Description of Successful Programs/ Interventions

Successful programs and interventions that have been used to help improve the number of people in the US to get vaccinated included a Client Reminder and Recall System. This system is used by community organizations, providers, and healthcare systems to deliver messages to the people by letters, post-cards, telephone calls, and emails to remind them to schedule the vaccinations. Some of the messages may be reminders for appointments, advising the client to reschedule

because they missed their appointment, or reminding them to make a follow-up appointment. All of these helpful reminders are sent straight to the client to enforce the importance of the vaccination appointments and provide information to get in touch with the doctor's office as soon as possible. The effectiveness that this program has on increasing immunization for the vaccines that are recommended for all people to have (such as measles, mumps, chicken pox, influenza, etc) is eight percentage points. This is a proven and effective intervention plan.

Another effective intervention plan that is used to increase the coverage with universally recommended vaccines is the Vaccination Requirements for Child Care, School, and College Attendance. This plan began in the 1970s which required all children and adults attending child care or school to be vaccinated with the required vaccinations. Since then ninety-five percent of student became vaccinated. Overall this plan of action increased universal vaccination intake by fifteen percentage points.

The previous two examples briefly demonstrate how interventions and programs are effective in increasing the number of people getting vaccinated in the US, there are many more specific and targeted populations of people that these organizations aim to get vaccinated. Many successful plans come from interacting with the public (phone calls, letters, etc.), vaccination requirements, education, media attention, and readily available services that offer long hours and easy access to facilities.

Identified barriers to program success

Although these programs have succeeded to increase the number of people getting vaccinated, they have had some problem areas that can interfere with the rate of success. The problems that can occur within the Client Reminder and Recall System is that the post-cards could get lost in the mail, or the address could potentially be wrong. Also, if an email reminder goes out it could be sent to the wrong email address. And the same goes for a telephone call, the health care systems could dial the wrong house by one digit and the client won't ever get the reminder. Therefore all these faults result in the client not going to get vaccinated.

Other program barriers can be identified through the education aspect that is not provided to both the clients and health care providers. Without education, the population of the US cannot know about the harmful effects of them not being vaccinated. And it is not helpful to

the success rate of these programs when the health care providers do not know who to administer the vaccinations to and how often to do so. The Multi-component interventions were found to have downfalls when the programs did not include additional activities such as reminders, education, longer office hours, etc. All of these barriers prove that there is always room to improve these interventions and programs to keep on increasing the number of Americans vaccinated each year.

PROGRAM PROPOSAL

Specific Problem to be Addressed

The specific problem I will be addressing is the number of young adults (aged 18-25) who are vaccinated on a consistent basis each year. I am choosing this specific age group to be vaccinated consistently because I think in the present day of 2012 it is fair to say that many young men and women of this age group are either high-school students, college students, working, and/or parents. Thus, these people are around other people which is how diseases spread quickly. If everybody is sure to be vaccinated then the number of people getting sick will be a lot less likely.

Target Population

The targeted population for my specific interventions is young men and women between the ages of 18 and 25. I believe they are the part of the population that is considered to be the most “healthy” and are at an independent state in their lives where they can make, and want to make healthy choices for themselves. This particular age group is very concerned about their health and ways to improve it. The interventions that I have come up with to improve their consistent vaccination intakes are an iPhone application that reminds them of the date that they are supposed to call the doctor, a reminder before the appointment, and a reminder of the time of the appointment. Also, I have thought of another plan to educate them on the importance of these vaccines and that by creating a college class devoted to vaccines and their importance. I feel this will improve the population’s vaccination usage.

Proposed Interventions

Intervention #1 (educational, policy or environmental)

The first intervention that I have chosen to do is an environmental intervention. My target population and goal primarily is to get young adults between the ages of 18 and 25 to get vaccinated with the appropriate vaccines available to them. Because it is not mandatory and young adults stop going to the doctor (or do not make appointments as they regularly should) there is a lack of knowledge about their own health. I have thought about designing an iPhone app, because technology is so widely used especially by this particular population. The iPhone app will be free, and it will be a reminder to the person that they need to make a doctor's appointment, and the app will again remind them of when their appointment is, and will remind them a third and final time the exact time of their scheduled appointment. The app will include a list of local doctors and their phone numbers and addresses, a time, date, and location space to save your scheduled appointment, and a reschedule button. All of these options will help the person make their appointment and remember their appointment because the iPhone is where 18-25 year olds attention is most of the time. Also I thought that this would be a creative and efficient way to remind the young adult population about their appointments because the Client Reminder and Recall System proved to be so effective.

Intervention #2 (educational, policy or environmental)

For the second intervention I would plan to do an educational intervention that educates the population of young adults from ages 18-25. Because this group of young adults is typically in high school, college, and at work they are surrounded by many others who may or may not be vaccinated. These educational classes can be offered by high-school, college, and jobs to educate their students/employees on the benefits and risks (if they do not get vaccinated) of these vaccinations. The classes will be offered for free and can even be implemented to make mandatory by the school principles and owners of the work places. I feel as if the classes would be a success because they would be free, and if the students do it in school and the workers have to do it at work there are no excuses and cannot claim that they "did not know." The young adult population I feel will take immediate action because they understand what they do now to their bodies influences their body and its health for the rest of their lives. Also, this target population is

able to transport themselves and so they have the ability to call, make the appointments to get vaccinated, and go!

Healthy People Objective(s)

Looking at my proposed interventions Healthy People 2010 and the Community Guide have made a goal that intersects with mine. Their Objective was to “Increase the proportion of adults who are vaccinated annually against influenza and ever vaccinated against pneumococcal disease.” The population that is targeted here is adults and the baseline “varies by vaccine and population” as does the 2010 Objective.

Data Collection Plan

The way that I would go about collecting the data for my objective to target the 18-25 year old population and increase the number of vaccinations that they get by keeping track of the records in the doctors office. The fact that each and every file is confidential is where the problem would rely (as well as money) and the doctors would have to have the patients agree to some kind of form stating that their vaccinations could be used for a study to see how many more vaccinations people are getting after these interventions went into action. After obtaining the numbers from the doctor’s office (in a perfect world) I would be able to graph the numbers and stick a percent on it to see if, in fact, the numbers vaccinated would increase.

Another way I would go about collecting the data is for schools, colleges, and workplaces that decide to make these vaccinations mandatory could record which vaccinations and how many of their students/employees decide to get them. As they continue to collect the data they could then see if the intervention plans are working or not. They could take down and record the types of immunizations and the number of people getting them each year. This will be a reliable way to collect the data firsthand.

SUMMARY

Major Assessment Findings

While researching this topic concerning Vaccine-Preventable Diseases I have come to see how it is a public health problem and how it can be tackled (so to speak). Because it is a world-wide problem and

vaccines are not always mandatory in places like schools, workplaces, etc. It is hard to make sure that everybody is always vaccinated with the appropriate types of vaccines, and that their vaccines are up to date. When reading the intervention plans that have already been put into action I was surprised to find out how many programs actually got results. This helped me plan my interventions, because knowing that a reminder system helped the people of America go to the doctor's office, I thought I could create one that would be close to them...closer than their mail, which is their phones! Also, because much of the population is either in school or at work it would be a good idea to grab their attention while they are already at these places and to inform them on the healthy decisions that they could make for themselves. And if the workplaces and schools decide to make the vaccinations mandatory they will need them to keep their jobs and continue going to school.

Two Proposed Interventions

The two interventions that I came up with was (1) to create and iPhone app that would alert the person to make an appointment, and the app would remind them of their appointment, and also has a reschedule button. The reason I think this intervention would be successful is because the reminder systems that were tried before had succeeded. And, I know that Americans love their technology and their health so this would be a good way to remind them to get vaccinated.

The second intervention that I came up with is to educate the 18-25 year olds in the school systems and workplaces so they have an informative way to receive the information that is beneficial to their health. Also, if the owners of these places decided to make it mandatory for these young adults to be vaccinated then they would have no choice but to (or they would lose their jobs and education).

The way I would collect data for both of these interventions is to record how many people got vaccinated, which vaccinations they received, and how often they are receiving them (or going to get different ones). The doctors, principals, and workplace owners would have to sign off and have their employees and students sign off on paper saying that they were okay with sharing this information so it could be used to determine how effective these intervention programs are. Once the data was collected I would use it to put it into charts, and graphs and compare it to recent studies and see if, in fact, the numbers have increased.