Does Flu Vaccine Reduce the Transmission of Virus Within a Class?

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**Does Flu Vaccine Reduce the Transmission of Virus Within a Class?**

Vaccination is considered to be the best method in order to prevent flu within a given population. It can not only reduce the severity of the illness but at the same time, it also reduces the overall illness. Currently there are various licensed influenza vaccines that have been generated and with the higher generation of these vaccines the growing concern among the people is whether or not these vaccines are effective in preventing the transmission of the virus or not. Therefore, in this research study, it has been hypothesized that whether the use of influenza vaccine is an effective strategy for the prevalence of the virus or not.

Nowadays one of the increased cause of mortality among most of the population is influenza along with hospitalization and overall cost on the healthcare department because of this particular type of virus. Specifically, in ageing population, this infectious disease is one of the most leading and severe cause of hospitalization and also, they cause certain other health complications which become quite severe with the passage of time. The influenza virus further causes various other health problems like respiratory distress which results from both influenzas along with frequent cases of secondary pneumonia. The main and foremost objective of the influenza vaccine is to decrease the number of flu-related cases of deaths. The match between circulating strains along with the vaccine strains and also the age and maturity status of the population can affect the overall influence of the vaccination. Therefore this research is undertaken in order to determine that whether or not the vaccinations that are available in the market for influenza virus are effective not only in the treatment of the disease but at the same time in order to prevent the overall prevalence rate of the virus within a given population (Houser & Subbarao, 2015).

Influenza virus is one of the most prevalent viruses and each year almost around a million people all over the world get affected by this virus. With the season changes and also with the climate change more people seek help from the healthcare providers who prefer to give them these injections shots. Mostly the influenza virus affects the respiratory system and also the functioning of the lungs because due to the inflammation in the airways it becomes difficult to inhale and exhale gases. Once the airways are blocked by inflammation then the individuals experience breathlessness which worsens the situation. Therefore, in such situation individuals from other disciplines can also help the patients to deal with these multiple health concerns. The physiotherapists are one key healthcare providers who can help the patients to deal with their health conditions. Because there are times when even after injecting the vaccines the people are unable to control their disease and specifically if their disease condition becomes worse to the point when the individual feels breathlessness then they feel irritated and also at such point the patients feel socially isolated and avoid doing normal activities because of their fear of breathlessness (Houser & Subbarao, 2015)..

Therefore along with general physicians and doctors, these physiotherapists can encourage the patients to continue doing their routine things without being scared of breathlessness. In order to do that the physiotherapists can encourage them to do exercise and also they can play a role to maintain a hygienic and healthy lifestyle. The physiotherapists can also tell them that such experiences are normal when the patient is having severe flu. Another healthcare individual who can play a significant role in the prevention of influenza virus is the dietician. From the last few years it is quite apparent that even after having vaccination against the influenza virus majority of the population are still getting flu and each year these people again caught the virus and suffer severely which not only disturbs the lifestyle of the individual but at the same time it is a burden on the overall budget of the public health. Therefore the services of a dietician are quite crucial in this regard because they can suggest the patient to opt a healthy diet in order to strengthen their immune system because most of the time the individual caught influenza virus because of the weak immunity. Therefore it is safe to say here that along with doctors and physicians who always go for the vaccines to treat this influenza virus, physiotherapists and also dieticians are also important in order to treat the disease and reduce the chances of infection (Houser & Subbarao, 2015).

The effectiveness of the flu vaccine is also questionable because there are patients who get mild reactions and side effects by the use of these vaccines. Some of the most common side effects of these flu vaccines are soreness, redness, and tenderness and also these symptoms are further accompanied by swelling. There are also those people who experience low-grade fever along with headache and also muscle aches. These reactions usually begin right after the shot and then these symptoms last for at least 1 to 2 days. Along with these symptoms, it is also not possible to prevent the transmission of the virus with the help of these vaccines because in the majority of the population if one person is having flu then even after being vaccinated against the influenza virus due to continuous communication the other members of the population also caught the virus. There are various kinds of flu vaccines and one of the most common types of the flu vaccine is the nasal spray flu vaccine and there are some possible side effects of this vaccine which include running nose, wheezing, headache and also muscle pain. These problems occur mostly after vaccination and they are either mild or short-lived. In many of the recent studies it has been shown that side effects of the vaccines occur because of the virus that is involved in the prevalence of the flu, therefore, the vaccines that have been developed so far are not compatible enough to fight against these viruses and hence instead of preventing the prevalence of the disease most of these vaccines make the situation even worse by causing side effects along with other conditions(Lewnard & Cobey, 2018)..

Currently, there is no proper treatment for influenza virus other than vaccination. All the medications that are available are either ineffective or they cause severe side effects, therefore, most of the healthcare providers prefer to use influenza vaccines because although the vaccines themselves have some drawbacks and also annually millions of people suffer from this particular health condition but having said that it is the only way to combat the prevalence of this virus. The two main type of influenza vaccines that are currently in use are the inactivated and live attenuated vaccines. It has been noticed currently that the influenza vaccines must be reformulated each year or even semi-annually in order to respond to the antigens changes in the influenza virus, the low effectiveness of the current influenza vaccines are due to the mismatch between the vaccine strains and the particular viral strains that are circulating. One of the complicated tasks that are faced during the vaccine manufacturing is the prediction that the antigenic match can possibly be worsened by the mutations developed during the entire manufacturing process. This possible mutation is not only one of the leading cause of the ineffectiveness of the influenza virus but at the same, it is one of the leading cause of the prevalence of the influenza virus within a given population. In this article, it has been described very clearly that how from the past few years there are more reports of patients having influenza virus and the condition is even worse in the ageing population (Lewnard & Cobey, 2018).

The overall effectiveness of the influenza vaccines is quite unusual in three ways. It varies from season to season, by a particular age group from season to season and also by the vaccination history (Lewnard & Cobey, 2018). There are various types of influenza virus and it has been noted that the efficacy of the influenza vaccines is not uniform among all the given strains. The virus that is currently one of the main sources of infection is the H5N1 and the influenza virus, therefore, it is important to consider the main characteristics and the mode of infection of these viruses before designing any vaccines. On the basis of these discussions, it is safe to say that vaccines are one of the effective and safe methods to get rid of the influenza virus. But due to the high variability of the virus and the mutation rate, it is now a challenging task to address this particular healthcare problem, it is now becoming more prevalent and also its transmission is also quite high among the individuals. Therefore in the research studies conducted by (Lewnard & Cobey, 2018), all the possibilities are discussed in details that why this is becoming a burden not only on the patients but also on the overall healthcare and public health policymakers. In this research study, it has been discussed clearly why besides getting vaccinated most of the people fall sick each year and what should be done in order to enhance the efficacy of the vaccines. Such information is quite useful for researchers who want to design vaccines for this particular virus in a more effective and also cost-effective way.

The information that is provided in this research study is also quite effective for nurses. As it is a well-known fact that nurses are the ones who basically deal with the patients and by using the information provided in this research study the enrolled nurses will be able to deal with the situation. Therefore for the enrolled nurses, this kind of information is quite important because the information provided in this research study provides an insight that what are some of the possible drawbacks of the influenza vaccination and what the patient should do for self-monitoring of the health condition. As an enrolled nurse it is important to know the possible side effects of a given vaccine or medicine so this research study provides a brief insight into all the possibilities of this type of health condition and the possible treatment which can be quite ideal while dealing with patients who not only suffer from flu but also from the side effects or inefficiency of the treatment (Lewnard & Cobey, 2018)..

From the past couple of years, there are many attempts to design vaccines for the influenza virus but despite being vaccinated most of the people still develop this condition. There are different attempts by the scientists to design a vaccine which is efficient for every season and also for every age group but despite various attempts, the number of people who suffer from this particular virus is increasing each year. The reason that it is still a problem for the public health policymakers, researchers and also the healthcare providers is the mutation rate and also the variability of this virus. Once the vaccine against the virus is developed then the virus changes their surface sequences due to which the ability of the vaccines to get adsorbed and then removing the virus from the body becomes difficult. Another reason that the virus gets transmitted and no proper measure is taken is that, most of the healthcare providers don’t even consider it as a health problem and therefore it is not taken seriously by most of the public health policy makers and healthcare providers. Therefore the transmission and also the prevalence of this condition is increasing and the vaccines that are being developed become ineffective and most people get infected with this condition annually and with each changing season.

**References**

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