

Please note – This is an extract from a student’s response for one of three articles

The article is the Ministry of Health’s School consent form: *‘HPV Vaccine (Human Papillomavirus Vaccine) A vaccine to help prevent cervical cancer.’*

3

This article was written by the NZ Ministry of Health.

The purpose is to give information about the HPV virus to parents and year eight girls, to ask for their consent to immunise their child for free. The form and other information are available to the general public; however, the intended audience is the year 8 girls and their parents in New Zealand. The information is about the HPV virus and receiving the vaccine Gardasil.

4

One biological feature is, *“Cervical Cancer develops when HPV infections don't clear and cause abnormal cells to grow on the cervix. If these cells go undetected and untreated they can lead to cervical cancer.”*

1

This is accurate, because when someone has sexual contact with someone who is a carrier of HPV, the virus invades cells in the cervix of the vagina and reproduces within them. As the cells divide and mature, they rise to the surface and the virus particles are released to then further invade more immature cells. If this process is allowed to continue over a long period of time, for example a decade, severe abnormalities can lead to cervical cancer.

1

The HPV virus goes through different stages. In mild abnormality, only a few cells are changed and sometimes clear up on their own. This can be checked in a regular Smear or Pap test. With a moderate abnormality, the affected cells are found throughout most of the surface lining on the cervix. This can also be picked up on regular Smear or Pap test and if caught early enough can be treated. With severe abnormality, cells progress to malignancy after the virus slips two key cancer causing genes into the DNA of the host.

Another biological feature is, *“The vaccine causes the immune system to produce its own protection against four HPV types.”*

This is accurate because the Gardasil vaccine is an inactivated vaccine. That means that it includes only the antigens that stimulate the immune system. The antigen in the vaccine is the protein of HPV, produced by using recombinant DNA technology. The proteins change into low risk virus-like particles. The antigens in the Gardasil vaccine stimulate the immune response to produce antibodies against it. Antibodies are proteins produced by the body’s immune system when it detects harmful substances. They attach to a specific antigen to let T lymphocytes or T cells destroy the antigen.

1

Some people cannot become immune because of vaccine failures or they are immunocompromised.

These people remain vulnerable to the virus if they are sexually active and rely on community immunity. When community immunity occurs, it reduces the risk of HPV infection because a critical portion of the community is immunised against a contagious infection, like HPV. Most members of the community are protected against the infection because there is little opportunity for an outbreak.

2

The vested interest of this form is the government, through the Ministry of Health, to improve, promote and protect the health of all New Zealanders.

They are offering the free vaccination because they want to help protect these young girls from the four types of HPV infection that could lead to most cervical cancers and genital

warts in the future. They are promoting this vaccination because they want to protect people from the HPV virus when they become sexually active.

To increase the Ministry of Health's success to accomplish healthy communities would be to make the vaccine available to more than one year level at school in case children were not vaccinated when they were in year 8. They could make it available to both year 8 and 9 and maybe even year 10 to help increase the success of the community.