

Bioethics Human Papillomavirus and HPV Vaccine

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Abstract

This paper will discuss what the Human Papillomavirus (HPV) is. Ethical questions posed are "Should the HPV (Human Papillomavirus) vaccine be required? If yes at what age and should it be required for both boys and girls? During the paper another ethical question that will be discussed is, "On what basis should parents be permitted to refuse and be exempt from the mandate"? An analysis of the Human papillomavirus will explain what is HPV, how it is passed between people, any symptoms that could occur, and information about treatment, vaccines, and prevention. The role and responsibilities of the Family Nurse Practitioner, clinical aspects, scientific evidence, conflicts, social issues, contextual facts and stakeholders will all be discussed. In addition bioethical principles autonomy, informed consent, beneficence, non-maleficence, and justice will be discussed that are relevant and applicable to the ethical issues associated with the Human papillomavirus and HPV vaccine.

Keywords

HPV vaccine; Oropharyngeal cancers; Genital warts; Tonsils; Papilloma virus vaccine

Introduction

The ethical questions that will be discussed related to the Human Papilloma Virus and vaccination is

"Should the HPV (Human Papillomavirus) vaccine be required? At what age should the Human Papilloma Vaccine be administered? Should the Human Papilloma Vaccine be administered to both boys and girls and on what basis should parents be permitted to refuse and be exempt from the mandate"?

“The Human papillomavirus (HPV) is the most common sexually transmitted infection in the United States with approximately 14 million newly diagnosed cases annually” [1]. The Human papillomavirus is a group of more than 200 related viruses, of which more than 40 are spread through direct sexual contact. Human papillomavirus infects the skin or moist areas of the body and is transmitted through direct contact. “HPVs are called papillomaviruses because some of the HPV types cause warts or papilloma’s, which are non-cancerous tumors. But some types of HPV are known for causing cancer. HPV causes most cases of cervical cancer, as well as many vaginal, vulvar, anal, penile, and oropharyngeal cancers (cancers of the throat and tongue)”. Most sexually active men and women are exposed to the Human papillomavirus at some point during their lifetime [1]. The Human papillomavirus in its various forms can lead to genital warts and can cause certain types of cancer. “In the United States cancers that stem from HPV affect approximately 19,400 women and 12, 100 men”. The different forms of warts caused from HPV can affect individuals in various age groups. Genital warts are the most common and highly contagious, spreading via skin-to-skin contact. The other warts usually go away in children without treatment and in some cases medications directly applied on the warts will help eliminate them. There is no cure for HPV but safe and effective vaccinations are recommended which will be discussed in this paper.

Should the HPV (Human Papillomavirus) vaccine be required?

I feel that the HPV vaccine should be required and is important for more individuals to get vaccinated. As a Family Nurse Practitioner it is my duty to educate the female and male populations I care for educating and informing them on the importance and benefits of receiving the HPV vaccine. “HPV Vaccines are available to help prevent infection by HPV and some of the cancers linked to HPV-16 and HPV-18. These 2 types cause about 70% of all cervical cancers, pre-cancers, as well as many cancers of the anus, penis, vulva, vagina, and throat” (American Cancer Society, 2018). The combination of HPV vaccination and cervical screenings can provide the greatest protection against cervical cancer. The vaccine does not eliminate the need for cervical screenings, which still need to be done. “Widespread HPV vaccination has the potential to reduce cervical cancer incidence around the world by as much as 90%. In addition, the vaccines may reduce the need for screening and subsequent medical care, biopsies, and invasive procedures associated with follow-up from abnormal cervical screening, thus helping to reduce health care costs and anxieties related to follow-up procedures”. Gardasil 9 is the only HPV vaccine available in the United States. “The HPV vaccine Gardasil helps prevent infection by four types of HPV (HPV-16, HPV-18, and also HPV-6 and HPV-11, the two HPV types that cause 90% of genital warts), Gardasil 9 that prevents infection by the same HPV types as Gardasil, plus HPV-31, HPV-33, HPV-45, HPV-52, and HPV-58. Collectively, these types are implicated in 90% of cervical cancers”.

At what age should the Human Papilloma Vaccine be administered? Should the Human Papilloma Vaccine be administered to both boys and girls?

According to the CDC both boys and girls should receive the HPV vaccine at 11 or 12 years old. “Any male or female with a history of sexual abuse or assault, the ACIP recommends routine HPV vaccination beginning at 9 years old” (American Academy of Family Physicians, 2018). The HPV vaccine for girls was available since 2006 and in 2011 the CDC recommended that boys should also receive the HPV vaccine [2]. The current recommendations for Gardasil 9 vaccination from the CDC are that “All children aged 11 or 12 years should get two HPV vaccine shots 6 to 12 months apart. If the two shots are given less than 5 months apart, a third shot will be needed. Young women can get HPV vaccine until they are 27 years old and young men can get HPV vaccine until they are 22 years old. “For males who engage in sex with other men or who have weakened immune systems can also get HPV vaccine until they are 27”. (CDC, 2018) It is important to know that adolescents both male and female who receive their first dose of the HPV vaccine at age 15 years or older will require three doses of the HPV vaccine over a period of six months. As a Family Nurse Practitioner it is my duty to also inform parents as well as teenage boys and girls that if they did not start or finish the HPV vaccine series when they were younger they should get it now [3,4].

It is just as important for males to receive the HPV vaccine as females because during research studies and learning more about HPV scientist and researchers felt that that the HPV vaccine not only helps to protect against cervical cancer but other cancers as well, including several that affect men. Since HPV is spread and transmitted through sexual contact, a male who's infected with the virus can pass it along to another male or to a female sexual partner. These are the main reasons the CDC recommends that the HPV vaccine also include males. “According to the Centers for Disease Control and Prevention (CDC), approximately 79 million people, mostly in their late teens or early 20s, are infected with HPV. There are many different strains of this virus. Not all of them cause cancer and some ultimately cause no symptoms at all. That's one reason vaccination is so important: It's possible for a person who's unknowingly harboring HPV to pass it along. Gardasil 9 protects against nine strains of HPV that are associated with genital warts and with cancer: types 6, 11, 16, 18, 31, 33, 45, 52, and 58”.

“In males other strains of HPV can lead to considerably more serious health problems such as several types of cancer that include penile cancer. Cancer of the penis causes lumps, growths, or swelling of the tip. Luckily, penile cancer is rare. Oropharyngeal cancer. This mouthful of a term refers to cancer of the throat, mouth, tongue, and/or tonsils, is a type of head and neck cancer that can also be caused by HPV. Males are more likely than females to develop HPV-related oropharyngeal cancer, although it's not totally clear why. Anal cancer may cause symptoms such as rectal itching or bleeding, pain or a sensation of fullness in the anal area, an abnormal discharge from the anus, or a change in bowel movements, like thinning stools”.

It is key to educate these individuals and parents on the importance of prevention preventing a serious health problem.

On what basis should parents be permitted to refuse and be exempt from the mandate”?

Parents are permitted to refuse vaccines for minor children if they feel it can cause harm exercising the ethical principle of non-maleficence and paternalism. As the guardian of their children they have the right to do what they feel is in the best interest of their children. The parents utilize the ethical principle of Beneficence in that case. Parents have rights and their autonomy allows them to make these decisions with good intentions and rationales as to why they would want to refuse vaccines such as the HPV. Parents also have the right and are permitted to refuse and be exempt from the mandate being told their child has to receive a vaccine they are not comfortable with them receive. “Everywhere routine vaccines are mandated in the United States, one or more exemptions are allowed, parents may be eligible to refuse them legally. In the United States, Exceptions to vaccine mandates fall into three basic categories: Medical, Religious, Personal or Philosophical reasons, and pregnancy ” [5].

“In 2007, many legislatures considered, and two enacted, bills mandating HPV vaccination for young girls as a condition of school attendance and in 2011 the CDC recommended the HPV vaccine be administered to males. Such mandates raise significant legal, ethical, and social concerns. Mandating HPV vaccination for minor females and males is premature since long-term safety and effectiveness of the vaccine has not been established.” There is No Mandate in New York for girls and boys to receive the HPV vaccine, it is only a recommendation and information to parents is required explaining HPV.

There is also evidence that some parents consider the possible risks resulting from the immunization to be more serious than those from the actual disease. Consequently, some parents are opposed to immunizing their children and by doing so; they significantly underestimate the possible consequences of acquiring contagious diseases (Serpell & Green,). Some reasons for parental refusal include the violation of religious principles and the low level of trust in the government. “The theme of trust influenced the decision making of new mothers about vaccinations. The most common reasons for parents’ refusal were fear of side effects, religious and philosophical reasons, belief that the disease was not harmful, and antigovernment sentiment. More efficient communication between parents and providers is needed to address these concerns [6]. Other reasons stated by parents requesting nonmedical vaccine exemptions were concerned that the vaccine might cause harm. These parents reported feeling vaccines were unsafe and ineffective, lack of trust and faith in the government, and a lack of belief that the diseases were relevant to their children. Efforts must be made to educate parents, especially those requesting exemption, of the value and safety of immunizations. Vaccines provide only temporary protection. Allegations of conspiracies to hide the truth about vaccine safety. Accusations those civil liberties are being violated by mandatory vaccinations”. Parents who did not intend to vaccinate reported feeling alienated

by providers. Parents also expressed concern about side effects that might create permanent damage, challenging the possible severity of vaccine- preventable diseases, and believing their child is not at risk”. Parents who were convinced of the benefit of vaccines were educated and affluent. Cautious parents had the lowest mean income and education level. Relaxed parents were less likely to have their children vaccinated and tended to be higher than average socioeconomically. Unconvinced parents had little trust in information about vaccines provided by healthcare providers, government sources, school, insurers, and managed care organizations”. These parents who intended to vaccinate their children reported trusting their pediatrician and feeling satisfied by the discussion they had with the doctor. These mothers also wanted to adhere to the social contact and not diverge from the cultural norm”[6]. Therefore, as I explored deeper into the concepts of the HPV vaccine another ethical question is “why should parents be allowed to refuse the vaccine for their daughters and sons”? My personal answer to this question is yes because as a parent of two daughters, one daughter received the three doses of the HPV vaccine and my younger daughter did not. The more I discovered about the vaccine with the potential risk, harm, side effects and much more after she received the HPV vaccine, the harm and risk outweighed the benefits. I was very upset that I allowed my older daughter to receive it and my provider did not inform me of the harm and risk which was unethical, because only the benefits were explained. This ethical situation involved beneficence, non-maleficence, and paternalism. As parents and legal guardians we are doing what we feel is in the best interest of our children utilizing the ethical principles of beneficence, paternalism and autonomy. “HPV does not pose imminent and significant risk of harm to others, a sex specific mandate raises constitutional concerns, and a mandate will burden financially existing government health programs and private physicians. Absent careful consideration and public conversation, HPV mandates may undermine coverage rates for other vaccines”. The arguments for and against the vaccine can largely be broken down into either ethical or economic issues, with the ethical issues split between concerns about the morality of a vaccine for a sexually transmitted infection and the question of parental rights in regards to mandatory vaccination” [5,7]. Parent refusal against their child receiving the HPV vaccine has increased in the United States.

In the United States there is still ongoing debates and differences in opinion by healthcare professionals and parents regarding the risks versus the benefits of children receiving the Human Papilloma Virus Vaccine, “The HPV vaccine was approved in 2006 that is effective in preventing the types of HPV responsible for 70% of cervical cancers and 90% of genital warts. Proposals for routine and mandatory HPV vaccination of girls have become sources of controversy for parents of school- aged youth, legislators, members of the medical community, and the public at large”. It is important as providers to educate and inform parents about the risk of HPV in males as well when they refuse vaccination [8]. In the United States regarding males with the 2011 CDC recommendation of HPV vaccine for males “Non-cervical cancers caused by HPV are now as common as cervical cancers. In addition, most of the HPV-positive non-cervical cancers arise in men. There are no formal

screening programs for the non-cervical cancers, so universal vaccination could have an important public health benefit. For example, researchers estimate that Gardasil 9 could reduce the number of new anal cancers by 90% [9]”.

Informed Consent

Informed Consent allows parents, guardians, and individuals the opportunity to make an informed decision about receiving vaccinations, treatments, surgery, invasive procedures, research and so much more. “Ethical debates also surround vaccine implementation and delivery, such as those concerning informed consent. “Although federal guidelines do not require written consent before vaccination (as they do for certain other procedures, such as surgeries), the National Childhood Vaccine Injury Act of 1986 requires that doctors give vaccine recipients, or their parents or legal representatives, a Vaccine Information Statement (VIS) [10]”. According to the CDC, the VIS provides basic information about vaccine risks and benefits and is designed to provide the information a patient or parent needs to make an informed decision. One of the main controversies surrounding the HPV vaccine in both girls and boys is the issue of pediatric decision-making with parents and their children. Parents must “consent” to their daughters and sons receiving the vaccination if they are minors and often times, the daughters and sons are old enough to assent and may disagree with their parents about receiving or refusing the HPV vaccine. “As children age, the balance changes from surrogate decision-making by their parents on their behalf to their own ability to make informed decisions”. In many states, reproductive care is considered confidential for adolescents and does not require parental consent. Since HPV is sexually transmitted, questions arise as to whether this may cause children to engage in high-risk sexual activity since there is a perceived protection from some of the ramifications. However, high-risk behavior can lead to a number of other sexually-transmitted diseases”.

There are several states have specific informed consent laws in place to protect and inform all populations. “Certain lawmakers and other patient rights advocates believe that requiring specific consent is ethical and appropriate, so that parents are better informed about vaccines, and have adequate time to ask questions if needed. Opponents fear that a regulated written consent procedure may add unnecessary fear or concern to the vaccination process [11]”.

Ethical principles and the role of the family nurse practitioner

When analyzing the ethical dilemma of immunization refusal by parents, it is important to consider the responsibility of the NP in providing health care for a child and the family. Within the scope of our practice, all healthcare providers are bound by all ethical principles, including autonomy, beneficence, no maleficence, paternalism and justice. These ethical principles help guide our practice referring to these principles allowing providers and parents to theoretically be able to work together to achieve the best positive outcome for their children [12]. “It is the role of the provider to make appropriate treatment decisions consistent with ethical principles. Every person, including the parent, provider, and, if age

appropriate, the child, has a unique ethical spectrum and value set that must be taken into account when dealing with the situation of parental refusal to immunize” [6].

Autonomy

The first concept, autonomy, which grants independence and freedom to choose the course of action, allows each person to decide what is best for him or her. Parental consent is required determining what is in the best interest of their child as the legal guardians because a child is not deemed competent as a minor and lacks the understanding to make a choice with lifelong implications. It would be unreasonable to assume that a minor child could make an autonomous decision to be immunized. However, if a teenager is emancipated and or sexually active parental consent is not required for him or her to make an autonomous decision to be immunized with the HPV vaccine. It is also important to understand as the provider that parents and legal guardian’s autonomy allows them to make decisions for their child because they have parental authority and must not be excluded from the decision-making process regarding their child. “As children become adults, they gain understanding but not the legal right to make autonomous decisions; therefore, for children, it is the parents’ responsibility and right to make medical decisions about immunizations”.

Beneficence and Non-maleficence

The ethical principle of beneficence implies the moral obligation of the primary care provider to benefit and help others, while that of nonmaleficence is the corresponding negative principle suggesting, “First do no harm”. “Beneficence is the ethical principle that enjoins healthcare professionals to remain focused on the their professional goals in providing a good for individuals” [13]. “Non-maleficence is the ethical principle that enjoins us to avoid harm in the course of providing healthcare services. The duty of the provider is to protect the patient from any avoidable harm in the course of prescribing care.” The ethical principles of Justice and non-maleficence can create several barriers to individuals in regard to how will their socioeconomic status impact access to treatment and will the HPV vaccine be administered to all girls and boys whose parents consent to it. The role of the nurse practitioner is to advocate justice for patients to avoid harm regardless of their socioeconomic status. When applied to immunizations, there are two opposing views that must be examined: the benefit and harm of the immunization on the child as an individual versus the benefit and harm of the immunization on the community. The first considers the best interest of the child, in which the benefits of the intervention must outweigh the potential harms caused by the intervention, while the second evaluates the benefits to public health, where the general society will primarily benefit rather than the individual, who may in fact be harmed [14]. The HPV vaccine as a level of prevention to girls and boys may be seen as beneficial to both the individual and the community; however, there is no guarantee that an individual will not contract HPV. HPV can be dangerous to the public because it is an infection that is highly contagious and is spread through direct contact. HPV has the potential to cause serious harm to another individual and those infected. Regarding the potential to harm, some may be

concerned about the invasiveness of a needle in a child and the pain it might cause. The pain resulting from the HPV vaccine injection is usually minimal and can be relieved by acetaminophen and topical local anesthetics [15]. Some may also argue that by causing pain or potential harmful side effects to a perfectly healthy individual, we are violating the principle of non-maleficence.

Immunizations given to prevent those diseases resulting from potential future behaviors are also seen as problematic. For example, concerns may arise with immunizations given to children to prevent sexually transmitted infections, such as the HPV immunization. These infections are normally contracted later in life as a result of lifestyle choices, and adult behaviors are highly unpredictable when evaluating a child [14].

Utilizing these ethical principles, it is the responsibility of all providers to provide prophylactic health interventions to better the lives of children and provide protection from infectious diseases that may cause future significant health problems. The provider must respect the parents' decisions whether or not to vaccinate their child in accordance with what they feel is in their child's best interests. However, the perception of what is in the best interest of a particular child is subjective.

Justice

In the United States, low-income children and children without health insurance can face challenges to receiving vaccinations, however the "Section 317 is a federal program to vaccinate underserved children program" [4]. Although the Section 317 federal program in its attempts to vaccinate underserved children, and help support vaccination coverage, they are unable to serve all children in need [10]. Justice, beneficence and non-maleficence are ethical issues that occur when caring for the needs of those entrusted to your care as a provider. "Beneficence is the ethical principle that enjoins healthcare professionals to remain focused on the professional goals in providing a good for individuals [13]". The federal program section 317 to vaccinate underserved children with nurse practitioner is utilizing the ethical principle of beneficence, however as we apply the ethical principle of non-maleficence in the attempt to do no harm we as practitioners have to seek justice for our patients because they are unable to serve all children in need of the vaccine. All individuals should be treated fairly and receive the same healthcare and vaccines as everyone else. "Non-maleficence is the ethical principle that enjoins us to avoid harm in the course of providing healthcare services. The duty of the provider is to protect the patient from any avoidable harm in the course of prescribing care". There is not fair and equal justice to all individuals affected. Non-maleficence is another ethical issue because we have an ethical duty to "do no harm" and being unable to provide individuals requesting the HPV vaccine has the potential to cause harm to those affected. The ethical issue of Justice is important ensuring equal opportunities for all males and females to benefit from the HPV vaccination regardless of socioeconomic status or health insurance all lives are of equal value, and equally deserving of opportunities to be protected by vaccination.

Stakeholders Involved with the HPV Vaccine

The stakeholders consist of the parents, legal guardians, individuals vaccinated, family nurse practitioners, physicians, researchers, HPV vaccine manufacturers, business investors, stock holders in the HPV vaccine, public health nurses, and the community because HPV in an infected is highly contagious. Each stakeholder has a significant role and the ethical principles of autonomy, beneficence, non-maleficence, justice, paternalism and informed consent all apply to the debate of the HPV vaccine with stakeholders. Throughout the nation and in every country where the HPV vaccination is recommended, required or mandated the harm caused by the HPV vaccine to their children has been permanent in most cases including those that lost their life have parents after being vaccinated. These parents are fighting against all odds to try and find ways to restore their children's life to pre-vaccine status and seeking honest answers from the manufacturer stakeholders their right to informed consent was ignored and tragedy occurred, hold a power nearly impossible to defeat. Meanwhile, HPV vaccine stakeholder promoters are doing their level best to eliminate any conversations about HPV vaccine issues except for those discussing ways to increase uptake and/or market share [16]. These stakeholders are only concerned about the benefit of making money and not concerned about the harm caused by the vaccine. The groups of stakeholders which includes manufacturer's, business investors, shareholders and the possibly areas of our government because they have all the money, power and influence to accomplish their goal of vaccinating the entire healthy global population against HPV infections. The other stakeholders which consist of the parents, legal guardians, individuals vaccinated, family nurse practitioners, physicians, and anyone who has the best interest of these male and females that were caused harm by the HPV vaccine and are emotionally, financially and physically exhausted by their efforts to discover exactly what happened and how to repair the damage) [16].

When these parents are confronting dishonest stakeholders with questions the responses they receive are typical tactics that include (but are not limited to) marginalizing suffering families, blaming psychosomatic disorders, using mass hysteria as an excuse, using threats of custody issues, claiming parental invention of the symptoms, blaming, name-calling, and so on. "Any country where HPV vaccines are used apparently utilizes the same set of tactics to avoid the possibility of honest scientific discussions regarding the risk/benefit profile of HPV vaccines, potential adverse reactions, or any other concerns about Gardasil, Cervarix, or Gardasil 9".

This is one of the major reasons parents do not want to consent having their son or daughter vaccinated with the HPV vaccine. "This behavior is not tolerable under any circumstances, but even less acceptable when promoting mass vaccination of a healthy population for a

disease they may never have been at risk of contracting in the first place”. All stakeholders have a moral and ethical responsibility to do no harm to an individual, however this is not the case with some stakeholders with a vested interest in the HPV vaccine. “HPV vaccine stakeholders need to understand that ultimately, it will not matter what tactics were used to try and suppress honest debate because there is no power on earth strong enough to defeat parents who are fighting for their child’s future”.

The Role of the Family Nurse Practitioner

The role and responsibilities and duty that Family Nurse Practitioners have is provide the best possible care to those they care for utilizing beneficence. Family Nurse Practitioners face ethical dilemmas in their everyday practice as the primary provider for example when parents refuse to have their children immunized and refuse the HPV vaccination. The most important role of the family nurse practitioner is too be present listening carefully to the parental concerns, responding honestly, and providing clear information about the risks and benefits, FNPs may be able to build trust and to convince once hesitant parents to have their children immunized with the HPV vaccine. The parents who still practice their ethical rights of autonomy with the intention they are acting in the best interest of their child, the FNP must respect their decision since the HPV is not mandated and only recommended to both boys and girls at age 11 to 12 years old.

FNP’s role is important when considering the ethical principles to which they are bound with autonomy, beneficence, and non- maleficence, utilizing these ethical principles the FNP can work with the parents to decide what treatment is best for the child. FNPs serving the children in our communities, it is our responsibility to treat these children with the best preventative medicine possible. In so doing, FNPs will gain the increasing trust of the parents who may subsequently make the decision to immunize. Safety issues, harm, and a lack of trust are some main concerns associated with parental hesitation or unwillingness to vaccinate children especially the HPV vaccine [17]. The HPV Vaccine still remains a controversial topic in the media with associated side effects, harm, paralysis and much more so parents are worried.

Positive therapeutic communication between the parents and family nurse practitioners is critical and one of the most important roles of the FNP. “FNP’s should be always be open minded and create a comfortable environment by listening first, because parents may have a variety of religious or philosophical beliefs and concerns that may need to be addressed” [18]. “Controversy is grounded in moral, religious, political, economic, and socio cultural arguments including whether concerns that the vaccine increases sexual risk taking, sends mixed messages about abstaining from sexual intercourse, usurps parental authority, and increases the potential for development of new health disparities are offset by the value of administering a cost-effective, age-appropriate public health measure targeting a life-threatening problem”. Therefore, the FNP should respond to parental concerns by respecting their autonomy acknowledging them and by providing information of the risk, and benefits of

the HPV vaccine in a way that they will develop an understanding remaining nonjudgmental, friendly and efficient. The ethical principles beneficence and non-maleficence are exercised because both the parents and FNP share a common interest and have a sincere concern for the child's welfare. “The role of the FNP expressing genuine concern will be an effective way to show that the NP and parent both have the child's best interest in mind.

Conclusion, Goals, and Summary Analysis

It is important that as many people as possible get vaccinated. “The HPV vaccination protects vaccinated individuals against infection by the HPV types targeted by the respective vaccine, but also vaccination of a significant proportion of the population can reduce the prevalence of the vaccine-targeted HPV types in the population, thereby providing some protection for individuals who are not vaccinated (a phenomenon called herd immunity). For example, in Australia, where a high proportion of girls are vaccinated with Gardasil, the incidence of genital warts went down during the first 4 years of the vaccination program among young males—who were not being vaccinated at the time—as well as among young females”. In addition the HPV vaccination is the approved public health intervention for reducing the risk of developing HPV-associated cancers at sites other than the cervix. Until recently, the other cancers caused by HPV were less common than cervical cancer. However, the incidence of HPV-positive oral, mouth, pharyngeal and anal cancer has been increasing in the United States, while the incidence of cervical cancer has declined, due mainly to highly effective cervical cancer screening programs.

All information presented to parents from the FNP should be credible, thorough, and honest. Parents must be given accurate information regarding possible adverse events. With much media attention and focus directed regarding the HPV vaccine both pros and cons, their potential side effects, risks, it is our duty to educate the parents, teenagers and public. This information and initiatives from the CDC, Immunization Action Coalition, and the American Academy of Pediatrics can provide parents with the most up- to- date information. Providing parents all the necessary information regarding risks and benefits, NPs can accomplish their job of minimizing harm to children. Although some parents may ultimately choose not to immunize their children, primary and preventative care should continue to be provided to these children in conjunction with ongoing parental education.

Short-term goals

Knowledge deficits are a major barrier influencing a parent's willingness to consent to the HPV vaccine. FNP's should be current on the most recent information in order to help direct parents to informative websites that provide reliable information about efficacy and safety. Parents may choose to consent having their child receive the HPV Vaccine. Education, communication and honesty should be provided to parents and individuals.

Long term goals

There is a significant time period for the child, teen and or early adult to receive the HPV vaccine. It has been shown that practitioners who take the time to listen to parental concerns and respond thoughtfully are perceived as more trustworthy sources to parents. Even those parents who were previously distrustful of official sources may be more willing to accept information from a provider after a thorough conversation. The role of the FNP is also to inform the parents that the earlier the child receives the HPV vaccine it will be more effective before they become sexually active and may contract the virus from another individual. In addition, long-term goals will consist of breaking down the barriers related to the HPV vaccine. "Barriers to the uptake of the HPV vaccine have implications for young women and men's future sexual, physical and reproductive health. Interventions to address barriers to uptake of the vaccine should target appropriate, and multiple, levels of the socio-ecological model. Issues of trust require clear, accessible, and sometimes culturally appropriate, information about the HPV vaccination". The views from young women and men should be involved in the consent and decision-making if they want to consent or refuse the HPV vaccine [19].

Parental refusal to consent not immunizing against HPV, ethically some FNPs might believe they are at risk of harming the child as well as other members of the community. Because they believe they are not providing adequate preventative care, FNPs believe that by not being immunized with the HPV vaccine, these children are at a much higher risk of contracting diseases as well as spreading diseases within the community.

As FNPs we have ethical duty to explore any conflicts that may occur between the bioethical principles and the requirements of our profession in the workplace. Numerous reasons why parents may be opposed to immunizing their children, such as religious or philosophical beliefs, fear of the side effects, lack of trust in the government, a low perceived susceptibility to immunization, preventable diseases, and cost. By being respectful and carefully listening to parents' concerns, FNPs may in fact be able to ease parents' anxieties regarding immunizations by providing the risk and benefit information as well as discussing misinterpretations that might exist. This may be an effective strategy in the immunization consent process and success of more children receiving the HPV vaccine. After reading up to date research I will speak to my younger 20-year-old daughter about the benefits and risk of receiving the HPV vaccine. Having exercised my ethical principles of autonomy, paternalism I am faced with the some guilt that I may have caused a potential harm to her because receiving it now as a 20 year old, the HPV vaccine is not as effective if she received it at 11 or 12 years old, However, I feel at this time any preventive cautionary steps taken can still help prevent her from contracting the HPV virus.

Most importantly ethically and as a Family Nurse Practitioner, it is important to educate parents and let them also know that vaccinating their son and daughter, you may save someone else's son and daughter from a potentially life-threatening virus and cancers.

Competing Interests

The author declares that he has no competing interests.

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