We had 90 respondents. 88.8% of participants received at least one dose of the vaccine, and 83.1% received all three doses. The vaccine is most effective when given to younger patients of adolescent girls have completed all three doses. The vaccine is most effective when given to younger patients. The biggest predictor of vaccination completion is a strong recommendation from a health care provider, therefore it's important to understand where adolescents get their information about the HPV vaccine.

There was good age distribution within the selected age criteria, as well as among those living in non-metropolitan areas, regardless of socioeconomic status. We distributed a researcher-generated survey via social media platforms to participants aged 18-25 who grew up in rural and micropolitan Pacific Northwest. We had 90 respondents. 88.8% of participants received at least one dose of the vaccine, and 83.1% received all three doses. The majority of those surveyed, 56.6%, admitted they first heard about the vaccine from a doctor or medical professional. 22.4% heard about the vaccine from a parent or guardian, and 9.2% heard about it from a TV HPV associated male cancers are on the rise, and 16.7% of our participants were male. We explored the perceptions of the female-dominated narrative of HPV by asking if participants believed the vaccine only protects females, 8.9% believed HPV statement was true. This research underpins the importance of educating parents about the HPV vaccine and leaves room to improve educational and advertisement campaigns to maximize vaccination rates and eliminate HPV-associated cancers, especially in rural communities.

The objective of this study was to discover how young adults in rural areas of the Pacific Northwest learn about the HPV vaccine, what they know about it, and how they choose to act on that knowledge. This information may be used to improve education about the HPV vaccine in the target population, potentially resulting in higher vaccination rates.

Methods

In total, 166 survey responses were received. After exclusions, the final number of viable respondents was 90. Of those, 74 were submitted by participants identifying as female, 16 from participants identifying as male, and 1 from a participant identifying as other, see in Figure 1. There was good age distribution within the selected age criteria, as shown in Figure 2. Of the 90 viable responses, 89% of participants reported that they had received at least one dose of the HPV vaccine, Figure 3. Of those participants, 83% reported they had received all three doses, Figure 4. When asked why they chose to receive the vaccine, 44% reported that they received the vaccine because a doctor recommended it to them or their parents/guardians, 10% reported that they received it because a doctor recommended it to them directly, and 17% reported that they received it because their parents wanted them to receive the vaccine. 11% reported that they get the vaccine because they wanted to be protected against HPV-related cancers. 3% reported that they asked to receive the vaccine themselves and 3% reported that they required to have the vaccine for school or another program, as detailed in Figure 5.

All participants were asked to report how they had first learned about the vaccine, shown in Figure 6. The majority of participants, 57%, learned about the vaccine from a doctor or another medical professional, 22% learned about the vaccine from friends or family, 16% learned about the vaccine from social media, and 5% learned about the vaccine from television. 4% of participants reported that they had never heard anything about it. One of the knowledge check questions asked participants to indicate whether the statement, “The HPV vaccine only protects females,” was true or false. 52% marked false, which was correct, and 9% marked true. Figure 7. Similar results were seen in the knowledge check true or false question, “HPV can cause cancer other than cervical cancer.” 92% marked true, which was correct, while 8% marked false. Figure 8. The last question asked participants to indicate if they believe it is important for teens to receive the HPV vaccine. 82% responded that they did believe it was important, 10% reported that they did not know, and 8% did not think it was important, as shown in Figure 9.

The purpose of this study was to discover the methods by which young adults in rural areas of the Pacific Northwest learn about the HPV vaccine, their knowledge about the vaccine, and whether or not they received the vaccine, in order to improve education and follow-through on receiving the HPV vaccine. This study found that the majority of individuals who received the vaccine did so because their doctor recommended it to their parents/guardians. This could be due to the fact that the HPV vaccine is often first offered to children between the ages of 11-12, when parents are still involved in their children’s healthcare decisions. This data suggests that increasing education and communication with children’s parents/guardians could help to increase the HPV vaccination rate and increase awareness of the vaccine to their children as well. The second most common reason for patients receiving the vaccine was due to their doctor recommending it to them directly. This suggests that an increase in physician knowledge/education, communication and recommendation to patients could help to improve HPV vaccination rates.

Both of the above recommendations could be accomplished through providing physicians with more knowledge on HPV/vaccine communication methods and distributing more verbal and written information on the availability and importance of the HPV vaccine to parents and their parents/guardians.

Limitations of this study include the gap between female vs. male respondents, as well as the uneven distribution of age groups. The participants of our study included a wide range of age groups but did not represent the younger teenage population. Collecting more data on the younger teenage population could provide insight on the current importance of the HPV vaccine to patients and their parents/guardians.

Future research on how to reduce the perception that only women need to receive the vaccine could increase vaccination rates in male patients. Further development of this topic could address the relationship between each participant’s method of information on the vaccine and their knowledge, and whether that information subsequently resulted in their follow-through with receiving the vaccine or not. It would also be important to discover why some of the participants began the first dose of the vaccine but did not complete the series. This information could find ways to improve vaccination follow-through and compliance and increase HPV vaccination rates among teens and young adults, simultaneously mitigating the detrimental health outcomes of HPV infection.

INTRODUCTION

Garland is the vaccine for the Human Papillomavirus (HPV) used in the United States. It protects against high-risk strains of the virus that are more likely to cause cervical cancer and other HPV associated cancers as well as strains that cause genital warts (2). Despite the proven efficacy of the vaccination to prevent cervical cancer, only one-third of adolescent girls have completed all three doses. The vaccine is most effective when given to younger patients of a stronger immune response, and because the vaccine is administered in 12-24 months from exposure to HPV (3). The biggest predictor of vaccination completion is a strong recommendation from a health care provider, although parental attitudes about the vaccine are also strongly associated (5). Therefore, it is important to understand where adolescents get their information about the HPV vaccine.

Students researchers designed a survey through Qualtrics, which was disseminated through social media. Inclusion criteria was as follows: aged 18-25 who lived in a rural or micropolitan area of the Pacific Northwest. The majority of their lives from age 10 to current age. Survey surveys were excluded if the participant did not meet this criteria. The survey asked participants about their HPV vaccination status as well as why they decided to get the vaccine if they had been vaccinated. Participants were asked where they first learned about the HPV vaccine and their view on whether the vaccine is important for teens to receive or not. The survey also included a series of questions to assess basic knowledge about HPV and the HPV vaccine. Participants were asked to identify their gender, age, and if they received the HPV vaccine, and after exclusion, 90 responses were viable. The results were analyzed by student researchers with tools available through Qualtrics.