

Arguments in favor and against the new HPV school entry implementation in Puerto Rico: content analysis of online media coverage

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Background

- The Human papillomavirus (HPV) vaccine is a preventive method to protect people from six types of HPV-related cancers and genital warts.¹
- Information about the HPV vaccine shared in online media outlets may influence vaccine hesitancy, uptake, and parental decision.²⁻⁴
- The presence of anti-vaccine groups in online media has had a negative impact on the HPV vaccine uptake and implementation of vaccination policies.⁵⁻⁶
- In August 2018, Puerto Rico (PR) included the HPV vaccine as a school-entry requirement for all students (male and female) 11 to 12 years old.⁷
- Before and after the requirement took effect, news coverage of this policy promoted discussions by groups in favor of the vaccine as well as the uproar of anti-vaccine groups, which may have influenced parental perceptions of the school-entry policy.

Study Objectives

This qualitative study explored arguments in favor of and against HPV vaccination and the new school-entry vaccination policy among parents, stakeholders, and coalitions in Puerto Rico.

Methods

01 This analysis is part of a study funded by NCI for 5 years titled “The implementation of school-entry policies for Human Papilloma Virus vaccination” which aims to study the impact of the implementation of the new school-entry HPV vaccine policy in PR.

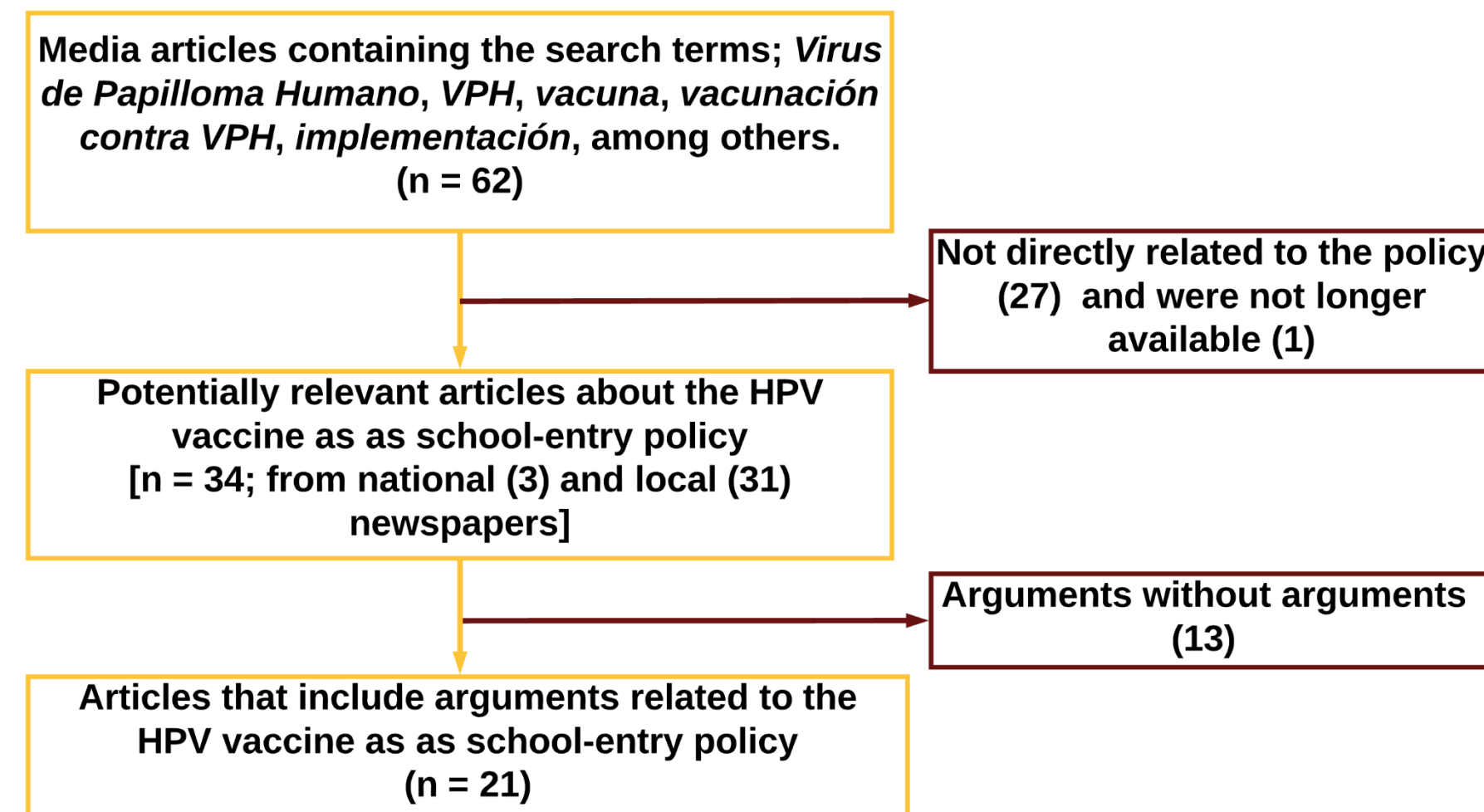
02 A systematic review was conducted to identify digital media reports related to the HPV vaccination policy and its implementation in PR from January 2017 to December 2018. This analysis focuses only on the codes extracted from the arguments provided by different organizations, coalitions and parents interviewed on the media.

03 Three coders analyzed the media reports using the modified grounded theory approach, to identify emergent themes in the data.

04 We categorized the main code assigned for arguments as positive, negative or neutral.

05 A frequency of the quotes was described using *Atlas.TI 8*.

Figure 1. Search strategy and inclusion criteria. An initial search returned 62 articles from which we filtered down to 21 articles.



Results

Figure 2. Codes of the theme Arguments by categories (positive, neutral and negative).

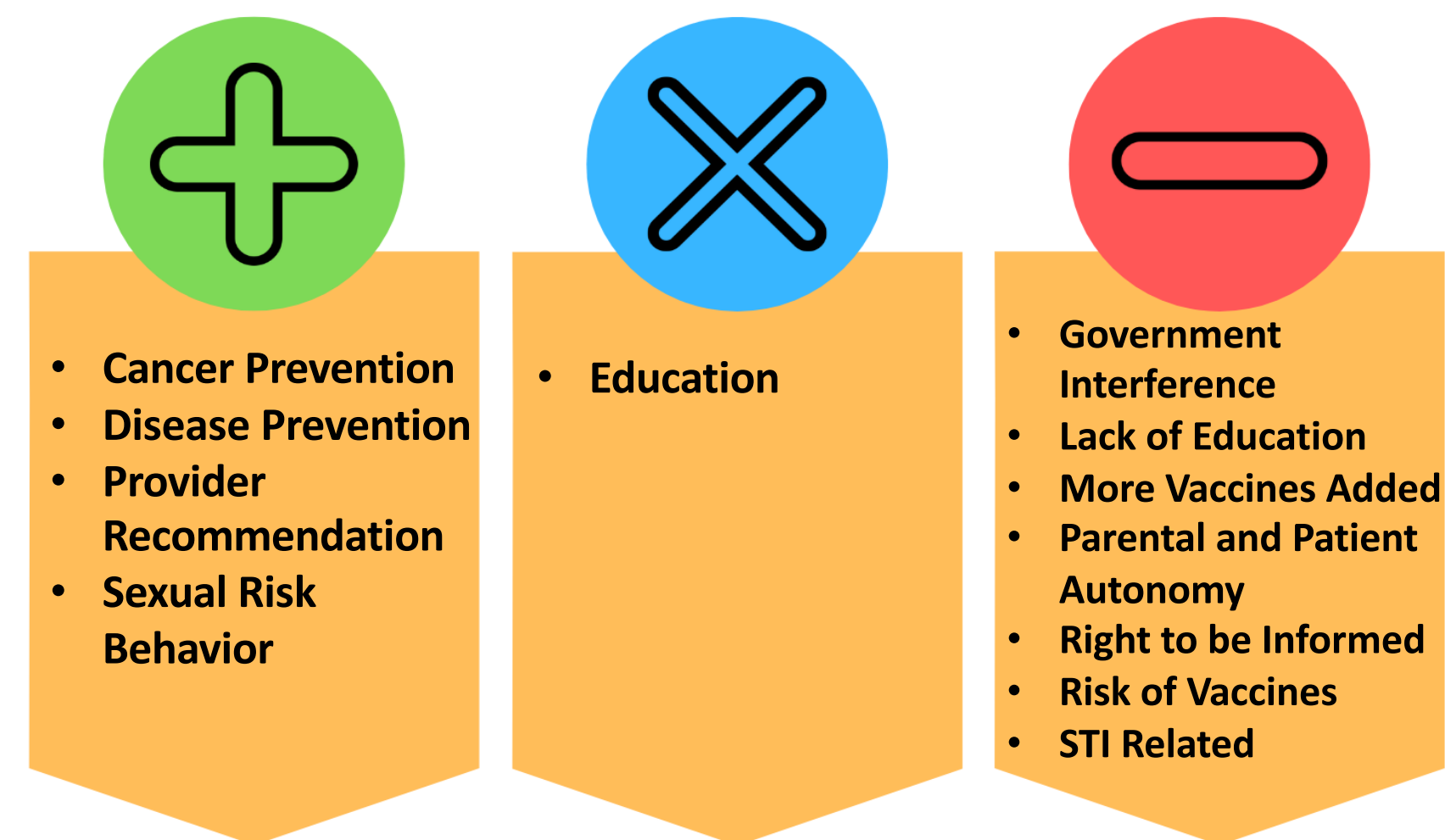


Figure 3. Frequency of quotations by categories.

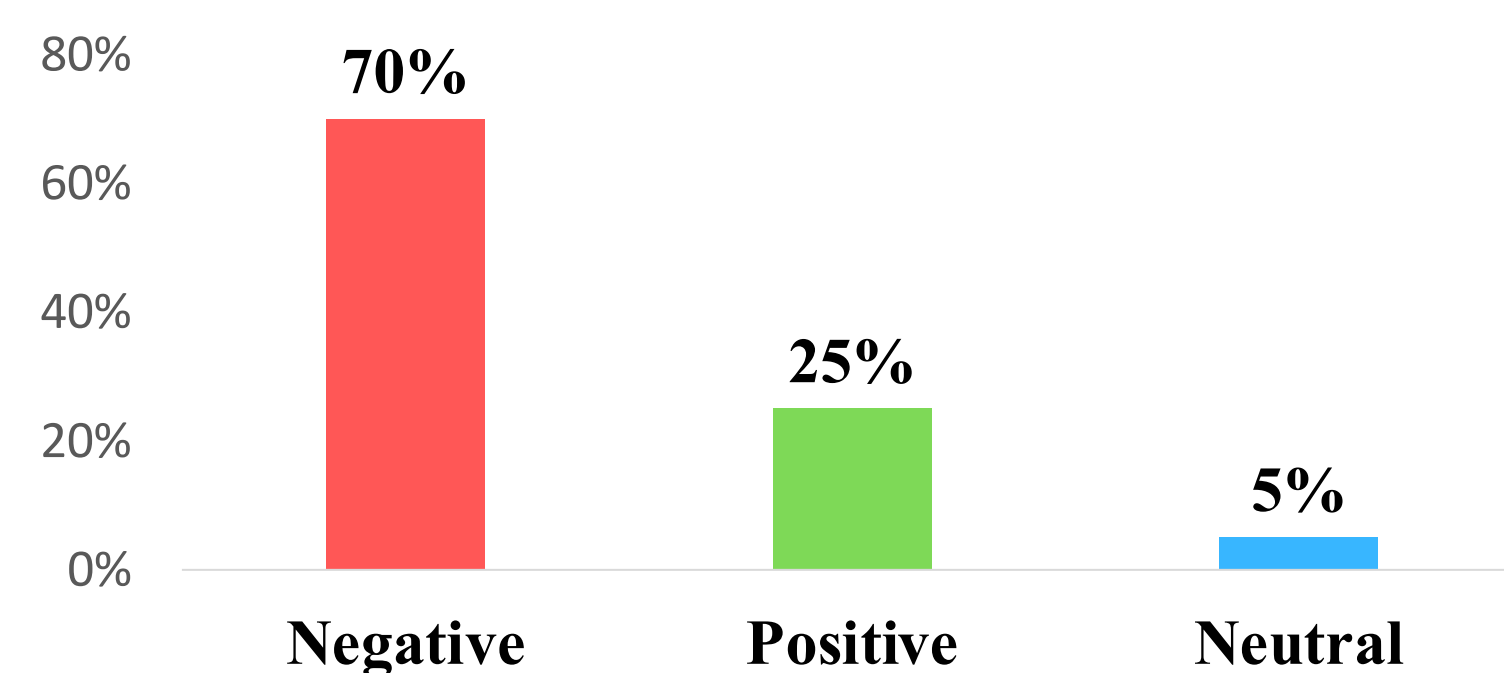


Table 1. Example of quotations in order of most predominant codes.

Codes	Quotations
Parental and Patient Autonomy	"We don't oppose, but people must be informed and decide whether or not to put their hands on their children,"
Cancer Prevention	"..., secretary of a medical office, said she did not hesitate to give her daughter the vaccine to prevent cancer and that it had no adverse effect."
Risk of Vaccines	"This project does not even mention the risks inherent in vaccination. Reading it seems that vaccines are made of holy water," he said. He recalled that the US Supreme Court declared that vaccines are 'inevitably unsafe'."
Right to be informed	"We are not against vaccines, but what is being injected into our children has benefits and risks. It is our right as parents to be informed,"
Lack of Education	"... stressed that, instead of fear campaigns, information campaigns that talk about both HPV and prevention and responsible sex education should be promoted."
Pharmaceutical and Economic Interest	In this regard, he said that "Congress decided to give full immunity to the pharmaceutical companies that manufacture them and created the Vaccine Damage Court, which has paid over 3.8 billion dollars to claimants for disabling damages or death by vaccination."
More Vaccines Added	"every day more vaccines are imposed as a condition to attend school or care, such as the controversial HPV..."
Government Interference	"So my criticism, my great criticism is that the government once again behind closed doors and at 12 o'clock at night approves something that affects an entire population that for my judgment we are again like guinea pigs, when mom and dad really have other alternatives, number one, to educate those young... because the government now makes it mandatory but unfortunately they have not done a thorough investigation to see if that is the only form of prevention."
Education	"I feel with a great responsibility, but I have to inform myself with data, not scary campaigns because cancer is serious, but it lends itself to much manipulation," said another mother of an 11-year-old girl who analyzes whether or not she will get the vaccine to your daughter."
STI Related	"What is the need of a school-age boy or girl who has not begun sexually to be protected against a disease that is acquired through sexual contact? That is one of several concerns that ..., executive director of the Puerto Rico Autism Alliance, has about HPV vaccine."
Sexual Risk Behaviour	"I recommend the vaccine as prevention, especially in adolescents because of its high incidence of sexual activity, although everyone should have free will of whether it suits him or not,"
Disease Prevention	"As a precaution to different diseases, we bring him to vaccinate," said ..., who urged parents to vaccinate their children to prevent them from infecting others with preventable diseases through vaccination. His daughter, over 12 years old, he added, has already received the HPV vaccine.
Provider Recommendation	Meanwhile, took her daughter and a granddaughter, at age 16 and 11, to vaccinate them against HPV on the recommendation of her pediatrician.

Conclusions

- This study explored the most emerging arguments discussed in the media before and during the implementation of the HPV school entry policy in Puerto Rico.
- The results demonstrate that most information disseminated was against the new school-entry policy of the HPV vaccine.
- These findings showed that the news reports published online were not balanced, which can lead to the promotion of vaccine hesitancy among parents and the general population.
- Given the number of negative arguments revealed, efforts between implementers should explore strategies to address these arguments related to the vaccine and this new mandate, to address common concerns that could impede the successful implementation of this policy in PR.

Future Analysis

Future qualitative analysis will evaluate for interactions and connectivity between arguments and categories using Atlas.ti.

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Look for poster number D045 for complementary information of content analysis.