



# Building Trust and HPV Vaccine Confidence with Parents Residing in Rural Areas

**Tami Thomas, PhD, RN, CPNP, RNC, FAANP, FAAN\***

*Nicole Wertheim College of Nursing and Health Sciences, Florida International University, Miami, FL - USA*

*Steering Committee Member of the National HPV Vaccine Roundtable (NHPVRT) and Chair of the Empowering Parents and Allies Task Group of the NHPVRT –USA*

*\*Robert Wood Johnson Foundation Nurse Faculty Scholar Alumna*

## Purpose

The purpose of this presentation is to present a body of research data on parents' levels of knowledge and acceptance with the HPV vaccine. The identification of culturally relevant healthcare intervention points that can be tailored to increase HPV vaccination uptake and the unique social and economic situation within each vulnerable community is essential to achieve increased rates of HPV vaccine series completion. This funded nursing research identifies how the compounding effects of culture, economy, and geographical location intersect and form a gestalt triad determining health-related disparities in these rural areas. This deterministic triad is unique to underserved communities, and even if two communities experience the same health disparity, each community is likely to have a discretely different composition of cultural, economic, and geographic determinants. The data provides a correlation between this deterministic triad and HPV vaccine series completion.<sup>1</sup>

## Methods

Community Engagement approaches and ongoing community partnerships support the studies focused on HPV Vaccination and interactions with primary care services in areas with challenges of geography, economy and culture. Both Quantitative (N = 650) and qualitative (N =40) methods were used to assess HPV vaccine attitudes, beliefs and behaviors. Quantitative research utilized a psychometrically validated survey focused specifically on parents' knowledge, attitudes and beliefs about HPV and Cancer in two states including six separate counties.<sup>2</sup> Qualitative research including interviews and focus groups (N= 40) with parents followed quantitative descriptive research studies. Findings from three consecutive studies were evaluated for correlating and contrasting findings.

## Quantitative Results

Quantitative data analysis included descriptive statistical procedures; logistic regression and structural equation modeling analysis survey data provide foundational data.

Quantitative data analysis included descriptive statistical procedures; logistic regression and structural equation modeling analysis survey data provide foundational data. Geographic location, economic status, ethnicity and religious affiliation varied as predictors of participation in HPV vaccination. Religious practice did not correlate with health promotion activities or access to health care. These results varied from county to county and state to state.

## Qualitative Results

Qualitative data analysis was completed in several steps beginning with the digital audio recordings were transcribed and checked for accuracy. In addition, notes taken during focus groups were utilized to verify participants by their individual anonymous codes so answers to questions and any additional comments that were made were verified. An expert in qualitative research analyzed the transcripts and a trained graduate research assistant, who was not present during data collection assisted to ensure rigor and eliminate bias. Constant comparative analysis was completed and this systemic approach laid a foundation for concept analysis. The results indicate that Religiosity (i.e., participation in religious social structures) was a recurring and important theme when discussing health promotion. Spirituality (i.e., subjective commitment to spiritual or religious beliefs) influenced the ways in which individuals perceived their control over and how they are coping with health issues. Parents described the barriers to HPV vaccination including geography and economic challenges in their community.

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## Conclusions

Health disparities, along with the barriers to overcoming them and initiate HPV vaccination, have their roots in the triad of culture, geographic location, and economic factors in vulnerable rural communities.

These communities experience health disparities that become exacerbated by limited opportunities for employment, thus propagating cultural norms that further reduce access to healthcare and opportunities for HPV vaccine completion. One key to building parental trust and HPV vaccine trust is the awareness of this triad of rural health disparities. Understanding each individual cultural, geographic and economic elements as a triad is necessary, but not sufficient unless the compounding effects of all three elements are accounted for in the development of interventions to improve HPV vaccination. Efforts are underway in to respond to this triad through health promotion education and interventions tailored specifically to the sociocultural, geographic, and economic determinants of each unique community's health-related disparities. Early responses to recruitment and engagement during our research studies show promise and the ability to expand these approaches to other communities, improving rates of HPV vaccine completion.

## References/Funding

- 1) Thomas, T., DiClemente, R. & Snell, S. (2014) Overcoming the triad of rural health disparities: How local culture, lack of economic opportunity, and geographic location instigate health disparities. *Health Education Journal*, 73(3) 285-294.
- 2) Thomas, T., Strickland, O., DiClemente, R., & Higgins, M. (2013) Parental Human Papillomavirus Vaccine Survey (PHPVS): Nurse Led Instrument Development and Psychometric Testing for use in Research and Primary Care Screening. *Journal of Nursing Measurement*, 21(1): 96-109. PMID: 23786137.

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