



# Importance of Human Papillomavirus Vaccination in Hmong-American Adolescents

Min Lequan\*

Department of Clinical Microbiology, National Institute of Respiratory Diseases (INER), Mexico City, Mexico

## ABOUT THE STUDY

The Human Papillomavirus (HPV) is a common and serious health risk. Nearly eighty million Americans have at least one HPV strain. Twelve high-risk virus strains cause nearly all cases of cervical cancer, accounting for 75% of vaginal, 69% of vulvar, 63% of penile, 91% of anal, and 72% of oropharyngeal cancers. There is an 80% lifetime risk of acquiring HPV in sexually active women, and HPV infection rates in men may be even higher. The latter could explain the rise in anal and oropharyngeal cancer rates in men from 1975 to 2009, when rates were nearly 2.5 times higher than in women. Furthermore, between 1988 and 2009, the incidence of anal and oropharyngeal cancers in Minnesota increased from 0.7 to 1.3 cases per 100,000 people and 1.0 to 2.5 cases per 100,000 people, respectively [1].

Cervical cancer caused by HPV is still the leading cause of cancer death in women for many racial/ethnic minority populations, particularly Hmong Americans, for whom cervical cancer is the leading cause of cancer death in women. Hmong women have the highest cervical cancer incidence and mortality rates (36.6 cases and 10.5 cases per 100,000 people, respectively), more than four times those of their Non-Hispanic whites counterparts (8.0 cases and 2.5 cases per 100,000 people, respectively), and these rates continue to rise. Despite this, HPV vaccine rates for Hmong children aged 9 to 17 are low, with reports of rates of 32% in girls and 20% in boys, which are significantly lower than the national rates of 47% and 53%, respectively, in 2017 [2].

The reasons for Hmong adolescents' low vaccination rates are currently unknown. Other studies in other cultural minority communities with HPV vaccination disparities point to a variety of factors, including lack of awareness, cultural or religious beliefs, limited health literacy, concerns about HPV being associated with sexual activity initiation, mistrust of healthcare providers, and provider behaviour. As many multi-level factors clearly influence vaccination participation, these findings highlight the importance of targeting health determinants

beyond the individual level as a means of eliminating or reducing health disparities. Numerous studies have emphasized the importance of Bronfenbrenner's 1979 Socio Ecological Model (SEM) as a framework for describing how personal, intrapersonal, institutional, community, and societal/public policy ecologies influence individuals' health behaviours. At least two of these levels of influence are targeted by multilevel interventions (ecologies). When implemented correctly, multilevel interventions can create synergistic influences that promote long-term healthy behaviour changes. To address the complexities of vaccine hesitancy in minority populations, multilevel interventions are likely to be required.

The literature gaps indicate that multilevel strategies to increase HPV vaccine uptake in the Hmong community are urgently required. Strategies that reflect community assets may be more effective as part of a multilevel approach. Traditionally, public health and clinical practices have used a deficit model in which members of at-risk populations are viewed as in need of health services, the delivery of which is designed and implemented by non-community 'experts.' The assets approach, on the other hand, uses cultural and community strengths to solve health problems. Community members are treated as equal partners in the design and implementation of an intervention in Community-Based Participatory Action Research (CBPAR). In these types of partnerships, leveraging community expertise adds context-specific knowledge of a community's priorities and the individual and community resources available to co-produce solutions. Interventions are better equipped to incorporate protective factors within a community that influence, promote, and sustain an individual's health by redressing the imbalance between the assets and deficit models [3-5].

The primary goal of this study was to identify key factors that influence HPV vaccination in Hmong adolescents and parents (barriers, facilitators, decision-making processes). The SEM framework, in conjunction with a community-based assets approach, was used to identify these multilevel factors influencing HPV vaccination uptake in the Hmong community.

**Correspondence to:** Min Lequan, Department of Clinical Microbiology, National Institute of Respiratory Diseases (INER), Mexico City, Mexico, E-mail: lequanmin@gmail.com

**Received:** 02-Aug-2022, Manuscript No. JVV-22-18119; **Editor assigned:** 04-Aug-2022, PreQC No. JVV-22-18119 (PQ); **Reviewed:** 18-Aug-2022, QC No JVV-22-18119; **Revised:** 25-Aug-2022, Manuscript No. JVV-22-18119 (R); **Published:** 02-Sep-2022. DOI: 10.35248/2157-7560.22.S20.002.

**Citation:** Lequan M (2022) Importance of Human Papillomavirus Vaccination in Hmong-American Adolescents. J Vaccines Vaccin. S20:002.

**Copyright:** © 2022 Lequan M. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

A Community-Based Participatory Action Research (CBPAR) partnership carried out this work.

Hmong adolescents and their parents identified HPV vaccine barriers and facilitators, which we mapped using a Multilevel Structural Equation Modeling (ML-SEM). Low levels of HPV or HPV vaccine knowledge, concerns about side effects both at the individual level and through community-level stories about harm from vaccinations in Southeast Asia, cost concerns, and structural constraints in health care settings were among the barriers to HPV vaccination identified by participants. They expressed a desire to learn more about HPV and the HPV vaccine, as well as make community connections and communicate with health care providers. Some parents wanted institutions to require it and clinicians to provide it, while others wanted clinicians to recommend it and still others wanted time to understand and discuss the pros and cons of vaccinations before accepting or refusing it. A multi-level approach that capitalizes on Hmong adolescent, parent, and community assets could be beneficial for increasing HPV vaccine uptake.

## REFERENCES

1. Polosukhin VV, Richmond BW, Du RH. Secretory IgA deficiency in individual small airways is associated with persistent inflammation and remodeling. *Am J Respir Crit Care Med.* 2017;195(8):1010-1021.
2. Lareau SC, Fahy B, Meek P, Wang A. Chronic obstructive pulmonary disease (COPD). *Am J Respir Crit Care Med.* 2019;199(1):P1-P2.
3. Wang C, Xu J, Yang L. Prevalence and risk factors of chronic obstructive pulmonary disease in China (the China Pulmonary Health (CPH) study): A national cross-sectional study. *Lancet* 2018;391(2):1706-1717.
4. Mathers CD, Loncar D. Projections of global mortality and burden of disease from 2002 to 2030. *PLoS Med.* 2006;3(11):e442.
5. BR Celli, W MacNee. Standards for the diagnosis and treatment of patients with COPD: a summary of the ATS/ERS position paper. *Eur Respir J.* 2004;23(6):932-946.