## Sigma's 29th International Nursing Research Congress

## Caregiver Barriers to HPV Vaccination in the African American and Afro-Caribbean Population

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Purpose: The purpose of this systematic review was to explore caregiver barriers to Human Papillomavirus (HPV) vaccination in the African-American and Afro-Caribbean population. This knowledge can then guide the development of strategies to counteract existing obstacles to HPV vaccination. HPV is the most prevalent sexually transmitted infection (STI), causing around 79 million people in the United States (U.S.) to be currently infected with it, and an estimated new additional 14 million cases per year (Centers for Disease Control and Prevention, 2017). As such, not only can it cause physical manifestations at the site of sexual contact, like genital warts, but more importantly, it can lead to multiple types of cancers including cervical, vulvar, vaginal, penile, anal, and oropharyngeal cancers (Centers for Disease Control and Prevention, 2017). Despite recommendations by the Advisory Committee on Immunization Practices (ACIP) for vaccinating both girls and boys against HPV, there are still many challenges to reach appropriate immunization rates, particularly among minorities such as the African-American and Afro-Caribbean population. Furthermore, racial minorities such as African-Americans and Afro-Caribbean have been found to have higher risks for HPV and HPV-associated cancers when compared to their white counterparts (Hull et al., 2014).

**Methods:** A search was conducted on CINAHL and Medline, and a total 38 records were identified, eight of which met the inclusion criteria. An assessment of the full-text manuscripts was performed, and one study was excluded after quality appraisal, leaving seven manuscripts to be included in this systematic review.

Results: The literature has revealed that the African-American and Afro-Caribbean population has a broad spectrum of caregiver concerns regarding HPV vaccination that need to be addressed, including: insufficient knowledge about HPV and HPV vaccines (Cates, Ortiz, Shafer, Romocki, & Coyne-Beasley, 2012; Hull et al., 2014; Joseph et al., 2012; Joseph et al., 2015), and desire for more guidance from healthcare providers (Katz et al., 2016; Thompson, Arnold, & Notaro, 2012); apprehension about promoting earlier and/or riskier sexual practices (Cates et al., 2012; Hull et al., 2014; Joseph et al., 2013); vaccine safety concerns and distrust (Cates et al., 2012; Hull et al., 2014; Joseph et al., 2012; Joseph et al., 2015; Katz et al., 2016; Perkins et al., 2013; Thompson et al., 2012); and financial difficulties (Cates et al., 2012; Thompson et al., 2012).

**Conclusion:** Important health disparities exist between African-Americans and Afro-Caribbeans' and whites' HPV immunization rates, HPV infection incidence, and HPV-associated cancer rates, which are inequities that all nurses around the globe dealing with these populations should address. These health disparities should be confronted partly through ensuring that nurses are providing appropriate recommendations for the HPV vaccine to patients and their caregivers as a means to address caregiver fears or doubts, and to promote earlier and complete HPV immunization; as well as through the development of educational interventions to advocate for HPV vaccine uptake increase, targeted to the African-American and Afro-Caribbean community. These health promotion interventions should be tailored to the immunization barriers this community faces in order to increase their effectiveness, and have a greater impact in HPV-related disease prevention for this population. Further research will then be needed to determine if such educational programs tailored to educating caregivers in the African-

American and Afro-Caribbean population about all of the identified topics that prevent them from vaccinating their children with the HPV vaccines are effective in increasing HPV immunization rates.

Key words: Human Papillomavirus, immunization barriers, African-American and Afro-Caribbean.

### Title:

Caregiver Barriers to HPV Vaccination in the African American and Afro-Caribbean Population

# **Keywords:**

African-American and Afro-Caribbean, Human Papillomavirus and Immunization barriers

### References:

Cates, J.R., Ortiz, R., Shafer, A., Romocki, L.S., & Coyne-Beasley, T.(2012). Designing messages to motivate parents to get their preteenage sons vaccinated against human papillomavirus. *Perspectives on Sexual and Reproductive Health*, *44*(1): 39-47. doi: 10.1363/4403912

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Joseph, N.P., Clark, J.A., Bauchner, H., Walsh, J.P., Mercilus, G., Figaro, J., ...Perkins, R.B. (2012). Knowledge, attitudes, and beliefs regarding HPV vaccination: Ethnic and cultural differences between African-American and Haitian immigrant women. *Women's Health Issues, 22*(6): e571-e579. doi: 10.1016/j.whi.2012.09.003

Joseph, N.P., Shea, K., Porter, C.L., Walsh, J.P., Belizaire, M., Estervine, G., & Perkins, R. (2015). Factors associated with human papillomavirus vaccine acceptance among Haitian and African-American parents of adolescent sons. *Journal of National Medical Association*, *107*(2): 80-88. doi:http://dx.doi.org.ezproxy.fiu.edu/10.1016/S0027-9684(15)30028-6

Katz, I.T., Bogart, L.M., Fu, C.M., Liu, Y., Cox, J.E., Samuels, R.C., ... Schuster, M.A. (2016). Barriers to HPV immunization among blacks and latinos: A qualitative analysis of caregivers, adolescents, and providers. *BioMed Central Public Health*, *16*(1): 1-10. doi: 10.1186/s12889-016-3529-4

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Thompson, V.L., Arnold, L.D., & Notaro, S.R. (2012). African American parents' HPV vaccination intent and concerns. *Journal of Health Care for the Poor and Underserved, 23*(1): 290-301. Retrieved from http://df9uh2wc8b.search.serialssolutions.com/?genre=

article&issn=10492089&title=African%20American%20parents\%27%20HPV%20vaccination%20intent%20and%20concerns.&volume=23&issue=1&date=20120201&atitle=African%20American%20parents%27%20HPV%20vaccination%20intent%20and%20concerns.&spage=290&pages=290-301&sid=EBSCO:CINAHL%20Plus%20with%20Full%20Text&au=Thompson,%20Vetta%20L.%20Sanders

## **Abstract Summary:**

This systematic review explores caregiver barriers to HPV vaccination in the African-American and Afro-Caribbean population in order to guide health promotion strategies to counteract existing obstacles to HPV vaccination, particularly in this population who is disproportionately affected by higher rates of HPV and HPV-associated cancers than most others.

### **Content Outline:**

#### I. Introduction

A. HPV is the most prevalent sexually transmitted infection (STI), causing around 79 million people in the United States (U.S.) to be currently infected with it, and an estimated new additional 14 million cases per year (Centers for Disease Control and Prevention, 2017).

B. Despite recommendations by the Advisory Committee on Immunization Practices (ACIP) for vaccinating both girls and boys against the Human Papillomavirus (HPV), there are still many challenges to reach appropriate immunization rates, particularly among minorities such as the African-American and Afro-Caribbean population.

## II. Body

- A. Several studies showed that caregiver knowledge barriers and the need for increased healthcare provider guidance were significant factors inhibiting HPV vaccination in the African-American and Afro-Caribbean community.
- 1. For example, Joseph et al. (2012) studied African-American and Haitian female caregivers of preteen and teenage girls, and found that there was limited awareness about HPV, with only 65% of Haitian mothers and 89% and African-American mothers having heard about it, respectively. In addition, their average knowledge scores regarding HPV were as low as 67% and 42% for African-American and Haitian caregiver women respectively (Joseph et al., 2012).
- 2. Hull et al. (2014) found that African-American mothers who refused to vaccinate their daughters against HPV felt they did not know enough about the vaccine. In addition, both Katz et al. (2016) and Thompson et al. (2012) found that caregivers expressed a need for guidance from healthcare providers about the importance of these vaccines, since they admitted they lacked the necessary information to make an informed decision about HPV immunization.
- B. On the other hand, another common finding as a caregiver barrier to HPV vaccination in the African-American and Afro-Caribbean population was apprehension regarding the promotion of earlier/riskier sexual practices.

- 1. This finding was exhibited in the studies by Joseph et al. (2012) and Perkins et al. (2013), in which participants had the perception and fear that the vaccine would promote earlier sexual activity.
- 2. Furthermore, even when parents did not specifically mention a concern regarding the vaccine promoting earlier sexual activity, many still felt that it was unnecessary due to the belief that their children were not sexually active, or were supposed to be abstinent until marriage (Cates et al., 2012; Hull et al., 2014; Joseph et al., 2012; Joseph et al., 2015).
- C. In addition, another major caregiver barrier for HPV vaccination in the African-American and Afro-Caribbean community related to concerns regarding vaccine safety and mistrust of vaccines.
- 1. Some studies found vague and general worry regarding the safety, side effects, and long-term effectiveness of the vaccine (Cates et al., 2012; Joseph et al., 2012).
- 2. Additionally, other researchers found more specific concerns, such as Katz et al. (2016), who noticed that African-American and Afro-Caribbean caregivers had significant concerns related to the newness of the vaccine and feeling that this meant it was potentially an untested immunization.
- D. The other significant barrier found was related to financial concerns regarding HPV vaccines.
- 1. For example, Thompson et al. (2012) found that the main barrier caregivers identified as the hardest to overcome in order to immunize their children with the HPV vaccine was the cost of the vaccines and the lack of health insurance to cover them.
- 2. Similarly, participants in the study conducted by Cates et al. (2012) worried that since the HPV vaccines consist of a multiple dose series, immunization against HPV might be too expensive.

### III. Conclusion

A. Important health disparities exist between African-Americans and Afro-Caribbeans' and whites' HPV immunization rates, HPV infection incidence, and HPV-associated cancer rates, which are inequities that all nurses around the globe dealing with these populations should address – partly through providing appropriate recommendations for the HPV vaccine to patients and their caregivers as a means to address caregiver fears or doubts, and to promote earlier and complete HPV immunization, and partly through educational interventions targeted to the African-American and Afro-Caribbean

B. These health promotion interventions should be tailored to the immunization barriers this community faces in order to increase their effectiveness.

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**Professional Experience:** 04/2017 – Present Family Nurse Practitioner, Board Certified; Cynthia Michel-Knowles DO., PA; Plantation, Florida 08/2013 – 01/2017 RN Level III, Maternity Unit; Broward Health Medical Center; Ft. Lauderdale, Florida Principal writer, investigator, and/or presenter at multiple scientific conferences. Gabriella Riccio is a recent graduate from her Doctor of Nursing Practice (DNP) degree in December of 2017, in which her DNP project was completed on the topic of "Caregiver Barriers to HPV Vaccination in the African-American and Afro-Caribbean Population."

**Author Summary:** Gabriella Riccio is a board certified Family Nurse Practitioner, and is a recent graduate from Florida International University Nicole Wertheim College of Nursing & Health Sciences Doctor of Nursing Practice program. Her DNP project explored Caregiver Barriers to HPV Vaccination in the African-American and Afro-Caribbean Population, and she has presented multiple times through Sigma Theta Tau International in the past.

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