

Knowledge of HPV and cervical cancer among women in Little Haiti



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DOI: 10.4103/0974-6102.92209

ABSTRACT

Haitian women in Little Haiti have a higher cervical cancer incidence rate than women of other ethnic groups in Miami, Florida. In our study, we surveyed 246 women about their Pap smear screening behavior, as well as their knowledge of human papillomavirus (HPV) and cervical cancer. Data was collected as part of an ongoing Community-Based Participatory Research project called '*Patnè en Aksyon*' ('Partners in Action'). From our results, we were able to conclude that study participants have limited knowledge of HPV and cervical cancer, and they infrequently participate in Pap smear screening. Therefore, it is vital that Little Haiti's female population learn more about HPV and cervical cancer in order to encourage disease prevention and reduce mortality rates.

Background

Cervical cancer is a disease that occurs when abnormal cells in the cervix multiply uncontrollably. Most cervical cancers are caused by a sexually transmitted infection called human papillomavirus (HPV).^[1] This disease is a growing cause of concern, particularly among ethnic minorities and medically deprived individuals. In the United States, Hispanic and Black women have the highest rates of cervical cancer. Among the country's black women, those who are American born or Haitian born have higher rates of cervical cancer than those from the English speaking Caribbean.^[2] In Miami, Florida, the incidence and mortality rates of cervical cancer are the highest among Haitian American women. Between 2000 and 2004, it was reported that about 38 out of 100,000 women were diagnosed with cervical cancer in Little Haiti. This number is about four times higher than the number of women diagnosed with cervical cancer in all of Florida during the same time period.^[3]

Disparities in cervical cancer survival rates among different ethnic groups are partly due to difficulties in accessing medical services, including Pap smear screenings.^[4] Pap smear screenings check for abnormal cervical cells, which may lead to cervical cancer,^[5] and in doing so, help prevent cervical cancer through early detection of the disease.^[6] Nearly 95% of women with cervical cancer have not had proper screenings before they are diagnosed with the disease. Immigrants, in particular, may have less opportunity to get regular Pap smear tests and therefore are not screened as often as American-born citizens.^[7] The data seen for Haitian Americans is in agreement with these statistics; about one third of Haitian women in Little Haiti have never had a Pap test. Among those that have, only 44% have been screened within the past three years, contrary to the recommendation given by the national guidelines.^[6]

The area of Little Haiti contains the highest concentration of Haitians in the United States. This community encompasses one of the largest groups

of people living at or below the national poverty line; the poverty rate, 30%, is almost double that of Miami-Dade County's, which is 18%.^[8] Many of its inhabitants have limited literacy in English, and many others have limited proficiency in reading or writing Creole, their native language; this is another obstacle Haitian immigrants must overcome to access medical knowledge and aid. These and other factors may contribute to the high incidence of cervical cancer in Little Haiti's community.^[8] Our study examined one such factor: The knowledge of HPV and cervical cancer.

Some theories suggest that a woman's decision to seek health information or participate in Pap smear screening may depend on her fear of risk taking, opinions about healthcare, cultural values, confidence, and any prior knowledge that she may have.^[4] The "health belief model" argues that if a person at risk of developing a certain health condition learns new information about it, he or she will attempt to prevent severe illness from occurring by methods that are necessary for prevention, such as check-ups and screenings.^[9] Our study examined knowledge of cervical cancer and HPV among Haitian women living in Little Haiti, a predominately Haitian neighbourhood in Miami, Florida. By understanding this group's current level of knowledge about HPV infection and cervical cancer, we were able to develop community based interventions to increase awareness about screening for cervical cancer and early detection of the disease.

Materials and Methods

The data for our study came from an ongoing Community-Based Participatory Research (CBPR) project, known as '*Patnè en Aksyon*' ('Partners in Action'), started in 2004 by the University of Miami and members of civic organizations in Little Haiti. The overall goal of the project is to reduce cancer disparities within the South Florida Haitian community. Community-Based Participatory Research is a collaborative research method where trained scientific investigators work together with local community members to conduct studies that are pertinent to the district.^[10] The co-operation of the scientific and local communities can help minimize health disparities.^[11]

Patnè en Aksyon supports multiple research projects to understand the excess burden of cervical cancer in Little Haiti. One of these projects examined known

risk factors for disease onset and progression. For our paper, we used data from this project to examine knowledge of cervical cancer and HPV. As discussed, we decided to focus on knowledge because increased awareness about cervical cancer risk factors and prevention may improve health outcomes among women in Little Haiti.

Data for the study came from in-depth interviews with Haitian women living in Little Haiti conducted by Community Health Workers (CHWs) of Haitian descent. These CHWs also spoke English and Haitian Creole fluently. There were two full time CHWs that were hired and trained to recruit participants and collect information using a standardised training manual created by a researcher active in *Patnè en Aksyon*. This manual instructed CHWs on how to recruit participants and how to gather and manage study data.

The CHWs approached Haitian women in many different locations who appeared to be 21 years of age or older and told them about the study. Women who met study eligibility criteria (21 years of age or older, no history of cancer, Haitian descent) and agreed to participate arranged a time to be interviewed by a CHW. The interviews occurred in places where the participant felt most comfortable. In most cases, the interviews took place in the participant's home or the home of a friend. The participants chose whether to have the interview in English or Haitian Creole.

Between September 2007 and March 2008, the CHWs approached 362 women. Of the 362 women, 297 decided to participate; 290 were eligible and 250 actually completed the interview. A small percentage of women (seven percent) who expressed initial interest in the study refused interview. Most women who refused, feared that signing the informed consent documents would somehow affect their own or their family members' immigration status. The interview took approximately one hour to complete and included questions about Pap smear screening history, risk factors for HPV infection, cervical cancer, and health in general. The questionnaire also incorporated HPV knowledge questions from the Health Information National Trends Survey, conducted by the National Cancer Institute twice each year.

All data from the questionnaires was entered into a statistical software program called Statistical Package for the Social Sciences (SPSS Statistics).

SPSS is used by commercial, government, and academic organizations to solve business and research problems.^[12] For our study, we used SPSS to generate descriptive statistics to test our hypothesis.

Results

Table 1 shows that 67.2% of the respondents in our study sample had a family income of \$15,000 or less per year. Nearly half (49.2%) of study participants had not received a high school diploma, and a staggering 44.3% were unemployed. The majority (54.1%) of inhabitants were recent immigrants, having come to the United States less than 10 years ago.

Pap smear screening is used to detect abnormal cells in the cervix which may lead to cervical cancer. Table 2 clearly indicates that most women in our sample (78.9%) had undergone Pap smear screening in their life time. However, only 60.2% of women in our sample had undergone one in the last three years. The American Cancer Society recommends that a woman is screened for cervical cancer every three years after she becomes sexually active.^[13] Many women in our study claimed to have been screened less frequently than the national average.^[14,15] Being screened routinely is the best method to detect early stages of cervical cancer and prevent mortalities from the disease.^[1]

Table 3 demonstrates the lack of knowledge surrounding cervical cancer among Haitian women in our study sample. A total of 68.7% of the women believed that being hit in your lower abdomen could cause cervical cancer. Most of the women (82.5%) also thought that if they are diagnosed with cervical cancer, they will die from the disease. Meanwhile, more than two thirds (72.8%) of the study sample incorrectly believed that multiple abortions can cause cervical cancer, and 76.8% of participants did not know that a high number of sexual partners increases your risk of this disease. The majority of the participants (77.6%) were also not aware women who smoke are more likely to develop cervical cancer than those who do not.

Among the 246 women from Little Haiti who participated in the study, more than three quarters (78%) of respondents had not heard of HPV. As shown in Table 4, 81.7% of our sample of Haitian women did not know that HPV could cause cervical cancer, and 81.3% did not think that HPV is a sexually transmitted infection. An even greater percentage of

Table 1: Socio-demographic characteristics of study sample

Characteristic	Percentage
Annual family income (<i>n</i> = 183)	
\$15,000 or less	67.2
More than \$15,000	32.8
Educational attainment	
Less than high school graduate	49.2
High school graduate and above	50.8
Health insurance coverage	
No	85.3
Yes	14.7
Employment status	
Unemployed	44.3
Employed part or Full time	55.7
Years in the United States	
10 Years or less	54.1
More than 10 years	45.9

Table 2: Pap smear screening

Variable	Percentage	
	Yes	No
Have you ever had a Pap smear?	78.9	21.1
Have you had at least one Pap smear in the last three years?	60.2	39.8

Table 3: Knowledge of cervical cancer

Variable	Participants who answered incorrectly (%)
Do you think that being hit in your lower abdomen can cause cervical cancer?	68.7
Do you think that most women diagnosed with cervical cancer die from the disease?	82.5
Do you think that multiple abortions can cause cervical cancer?	72.8
Do you think that having a high number of sexual partners increases your risk of cervical cancer?	76.8
Do you think that women who smoke are more likely to develop cervical cancer than non-smokers?	77.6

women (83.7%) incorrectly believed that HPV does not cause abnormal Pap smears.

As shown in Table 5, of the 192 women in our sample who had not heard of HPV, 98.4% were born in Haiti, compared with 92.6% of the 54 women who had heard of HPV. Participants who had heard of the virus had also lived in the United States longer; about 87% of the women who had heard of it had been living in the United States for more than five years, compared with 71.9% of the women who had not heard of HPV. Furthermore, most of the women informed of this infection had had a greater success in education, employment, and income. There was almost a 30% difference in high school graduation rates among participants who had heard of HPV (74.1%) and those who had not (44.3%).

Table 4: Knowledge of human papillomavirus (HPV)

Variable	Participants who answered incorrectly (%)
Do you think HPV causes cervical cancer?	81.7
Do you think that HPV is a sexually transmitted disease?	81.3
Do you think that HPV can cause abnormal Pap smears?	83.7

Table 5: Differences among Haitian women who reported having heard of human papillomavirus (HPV) and those who had not

Heard of HPV	Yes (Total 54) Participants (%)	No (Total 192) Participants (%)
Age		
18-25	9 (16.7)	6 (3.1)
26 and older	45 (83.3)	186 (96.9)
Born in the United States		
No	50 (92.6)	189 (98.4)
Yes	4 (7.4)	3 (1.6)
Years Lived in the United States		
Five years or less	7 (13)	54 (28.1)
More than five years	4 (87)	138 (71.9)
Education		
Less than high school graduate	14 (25.9)	107 (55.7)
High school graduate and above	40 (74.1)	85 (44.3)
Income		
\$15,000 or less	22 (48.9)	101 (73.2)
More than \$15,000	23 (51.1)	37 (26.8)
Language-Monolingual Creole speaker		
No	46 (85.2)	100 (52.1)
Yes	8 (14.8)	92 (47.9)
Screening ever had a Pap smear		
No	6 (11.1)	46 (24)
Yes	48 (88.9)	146 (76)
Pap smear within the past three years		
No	14 (25.9)	84 (43.8)
Yes	40 (74.1)	108 (56.3)

A total of 51.1% of the people who responded “yes” to having known about HPV earned more than \$15,000 annually, and only 26.8% of the people who responded “no” earned more than \$15,000, which is well below Florida’s median family income.^[16] Many of the women (47.9%) who did not know about HPV were monolingual Creole speakers, compared with just 14.8% of the women who claimed to have heard of HPV. When the respondents were asked if they had ever had a Pap smear, almost one quarter (24.0%) of the sample that was not aware of HPV responded “no”. Only 11.1% of those, who were aware of HPV, had not had a Pap test. Out of the women from the study sample who had not heard of HPV, 56.3% had been tested within the past three years, compared with 74.1% that had previously heard of HPV.

Discussion

Haitian American women living in Little Haiti, Miami, Florida, have an increased risk of developing and dying of cervical cancer. One reason that may account for this is the fact that many women living in Little Haiti may not be screened for cervical cancer as often as recommended by the national guidelines. The purpose of this study was to examine the knowledge of cervical cancer and HPV among Haitian women residing in Little Haiti. Our results suggest that a large portion of women who participated in the study are monolingual Haitian Creole speakers, have limited formal education, and are economically disadvantaged. Most of the women in the sample also falsely believed, perhaps influenced by their cultural and traditional backgrounds, that physical trauma may lead to diseases such as cervical cancer. Results from the study also indicate that many Haitian women residing in Little Haiti have limited knowledge of Pap smears, HPV, and cervical cancer. These linguistic, economic, social, and cultural barriers may make it more difficult for Haitian women living in Little Haiti to access or understand health related information about cervical cancer risk factors and disease prevention.

This research was limited to the area of Little Haiti, thus the size of the sample was relatively small (246 participants) considering that Little Haiti is home to the largest population of Haitian immigrants in the United States. The majority of respondents had never heard of HPV, so only 22.0% were able to answer the remainder of questions on the survey concerning HPV. However, despite these limitations, study results clearly show that the majority of Haitian women in our sample had limited or incorrect knowledge about HPV and cervical cancer. There were also significant socioeconomic differences among those women who had not heard of HPV and those that had.

Findings from this study may encourage community-based interventions to increase knowledge about HPV and cervical cancer in Little Haiti, and other similar immigrant communities trying to tackle the problem. This knowledge may encourage women to take preventative action, including participating in routine screenings for cervical cancer, and ultimately reduce the number of women who die from this disease.

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About the Author

Paula-Suzanne Lapciuc and Nadia Willy attend Ransom Everglades School and Miami Northwestern Senior High respectively. Both enjoy taking part in their school's sports teams and actively read around their chosen subjects. In the summer of 2009, Paula Suzanne and Nadia were interns at the Department of Epidemiology at the University of Miami, where they conducted research on cervical cancer.

Paula-Suzanne Lapciuc is 19 years old, she was born and raised in Miami, Florida, but currently lives in New York City and attends Columbia University. Throughout her life, she has had a passion and excitement for learning about different cultures and exploring public health effects among various communities. At 16, she went to Tanzania and lived amongst an impoverished community in the outskirts of Arusha. The atrocious health conditions left her with a desire to help those in distress. The next year she interned in the University of Miami's Howard Hughes Medical Institute at the Department of Epidemiology. Under Dr. Erin Kobetz and her team, she studied and observed the effect of cervical cancer among the Haitian women in the community. These experiences have led her to pursue a major in epidemiology and human nutrition.