



Proceedings Exploring Inequalities in HPV Vaccine Uptake among Cape Verdean Immigrant and Portuguese Native Women [†]

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Abstract: Based on data from the FEMINA study, this communication aims to explore inequalities in HPV vaccine uptake. Results highlighted differences between the Portuguese and the Cape Verdean women: 97% vs. 67% had heard about the HPV vaccine; 30% vs. 9% had been vaccinated, and 71% vs. 82% had reported a lack of medical recommendation as a major reason for not having been vaccinated. Further research on the mechanisms that operate in the production of health disparities is needed to promote equity-focused interventions.

Keywords: HPV vaccination; sexual health; health disparities; ethnicity

1. Introduction

The sociological understanding of the human papillomavirus (HPV) vaccination offers the possibility to better understand society, because the discourses on HPV vaccination are also about sexuality, gender, power, and identity. Social science research has pointed to the shifting processes by which individuals receive and accept medical definitions and interventions on their bodies, including professional claims of knowledge and increasing focus on risk mitigation through personal behavior [1–3]. Trust in one's doctor, in the healthcare system, and in the pharmaceutical industry are also part of this process that shapes healthrelated beliefs and influences HPV vaccine decision-making [4]. The Portuguese National Health System (NHS) is responsible for implementing the National Immunization Program in Portugal. People can be vaccinated in local primary healthcare centers, and vaccines that are included in the program are free for all NHS users. High levels of immunization are achieved in Portugal, including against HPV. However, information is missing regarding vaccination coverage among racial and ethnic groups.

2. Materials and Methods

Between March and September 2020, a cross-sectional computer-assisted telephone interviewing survey was conducted among a probabilistic sample of Cape Verdean immigrant and Portuguese native adult women residents in the Metropolitan Area of Lisbon. Survey design and data collection have previously been detailed [5]. The inclusion criteria included: (a) age—between 18 and 49 years; (b) born in Portugal or in Cape Verde; (c) both parents born in Portugal (for those born in Portugal) or both parents born in Cape Verde (for those born in Cape Verde); and (d) able to give informed consent to participate in the research. Participants were asked if they had been vaccinated or not and the multiple possible reasons for having been vaccinated or not having been vaccinated (list of different motives and possibility of indicating other non-listed motives).



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3. Results and Discussion

Cape Verdean women (n = 151) were younger (43.7% vs. 24.5% aged less than 30, p < 0.001) than the Portuguese women (n = 102), and their mothers had a lower educational level (64.9% vs. 35.5% with an education until the fourth grade, p < 0.001). Around 58% of the Cape Verdean women who had arrived in Portugal were aged more than 18. The results highlighted differences between Portuguese and Cape Verdean women regarding HPV knowledge (97% vs. 67% had heard about the HPV vaccine), HPV vaccine uptake (30% vs. 9% had been vaccinated), and underlying motives for both being vaccinated and not being vaccinated (71% vs. 82% had reported a lack of medical recommendation as a major reason for not having been vaccinated). Table 1 shows the distribution of HPV vaccine uptake and associated factors. Besides younger age and (higher) mothers' educational level, being a Portuguese native woman was a strong predictor for HPV vaccine uptake (aOR = 8.877, p < 0.001).

Table 1. HPV vaccine uptake and associated factors.

	HPV Vaccine Uptake	No HPV Vaccine Uptake	Crude OR * (p Value)	Model 1 ** Adjusted OR (<i>p</i> Value) Nagelkerke Pseudo R ² = 0.220	Model 2 *** Adjusted OR (<i>p</i> Value) Nagelkerke Pseudo R ² = 0.462
Age (years), mean	26.82	35.33	0.879 (<0.001)	0.890 (<0.001)	0.843 (<0.001)
Mothers' educational level,%					
Until fourth grade	5.97	94.03	1.00	1.00	1.00
Higher than the fourth grade	31.09	68.91	7.107 (<0.001)	6.371 (<0.001)	3.606 (=0.012)
Age at first intercourse (years), mean Country of birth, %	16.83	17.65	0.840 (=0.041)	0.869 (=0.184)	0.928 (=0.479)
Portugal	30.4	69.6	4.273 (<0.001)		8.877 (<0.001)
Cape Verde	9.3	90.7	1.00		1.00

* Odds ratio (ORs) were computed by comparing HPV vaccine uptake vs. no HPV vaccine uptake in logistic regression models; ** Model 1 is adjusted for age, mothers' educational level, and age at first intercourse; *** Model 2 is adjusted to all variables.

This was a small-scale study, designed to explore sexual and reproductive health in general and not specifically focused on HPV vaccination. Therefore, these exploratory findings on the HPV vaccine uptake are not generalizable for the Portuguese population or for migrant populations in Portugal. This study highlights health inequalities in Portugal between the Cape Verdean immigrant population (one of the oldest and most represented foreign populations) and the autochthonous population. Considering that some immigrants arrive after the recommend age for HPV vaccination, health professionals are recommended to adapt the HPV communication to immigrant families, in particular those from countries with no HPV vaccine coverage reported [6].

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Institutional Review Board Statement: The study was conducted according to the guidelines of the Declaration of Helsinki, and approved by the Ethics Committee of the Centro Académico de Medicina de Lisboa (466/18 approved on 14 May 2019).

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: To protect the confidentiality of research participants, data are not publicly available.

Conflicts of Interest: The authors declare no conflict of interest.

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