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Abstract Title: SOCIODEMOGRAPHIC AND HEALTH FACTORS ASSOCIATED WITH HIGH-RISK HUMAN PAPILLOMAVIRUS (HRHPV) INFECTION AMONG WOMEN LIVING IN RIGA, LATVIA

Dear Ms. Viola Daniela Kiselova,

Thank you for your abstract submission for the upcoming **36th International Papillomavirus Conference** which will take place in-person & online from **November 12-15, 2024, in Edinburgh, UK**.

On behalf of the IPVC 2024 Scientific Committee, we are pleased to inform you that your abstract has been accepted for **Poster Viewing**.

You will be requested to **print your poster** for onsite poster viewing **AND** prepare a **PDF ePoster format** for the IPVC Virtual Platform.

Topics:
Public Health, Epidemiology and Implementation Science
Epidemiology: Natural History/Risk Factors (female)

Title:

SOCIODEMOGRAPHIC AND HEALTH FACTORS ASSOCIATED WITH HIGH-RISK HUMAN PAPILLOMAVIRUS (HRHPV) INFECTION AMONG WOMEN LIVING IN RIGA, LATVIA

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Key words: high risk papilloma virus infection, cervical smear, HPV screening

Introduction

Although >90% of high-risk human papillomavirus (hrHPV) infections resolve spontaneously, the rest can progress to cervical cancer. The knowledge on sociodemographic and general health factors associated with hrHPV infection, crucial for cancer prevention, is sparce for Baltic countries. Here, we aimed to delineate the factors associated with hrHPV infection in healthy females residing in Latvia.

Methods

Females (n=83; 42.2±10.1 years) were examined by on-line questionnaire collecting sociodemographic data and general health information. Quest was followed by

observation by gynecologist. Cervical smears were collected and analysed for hrHPV DNA by PCR (Anyplex HPV14, Seegene, South Korea), 18 (21.2%) were hrHPV-positive (HPV(+)). Statistical analysis was performed using Chi-square and Fisher's exact tests.

Results

Majority were married or had stable partners (81.9 %, n=68) and children (86.6 %, n=71). All had completed secondary, most, also higher education (62.7 %, n=52). Most were employed (91.6 %, n=76), although 28.9 % did not feel socially secure, and only 56.4 % were satisfied with their earnings. In contrast to earlier findings, no associations were found between hrHPV(+)-status and any of the sociodemographic factors (Table 1). Also, HPV prevalence did not differ in those undergoing or not cervical screenings ($p>0.05$). As expected, hrHPV infection was more prevalent among women who used other contraceptives than condoms and IUD or no contraceptives ($p<0.05$), and those with no knowledge of HPV vaccination ($p=0.008$; Table 2). Unexpectedly, hrHPV infection was significantly more prevalent in females who reported no diseases or health-disturbing problems ($p=0.008$; Table 3).

Conclusions

High HPV prevalence is significantly associated with a healthy status, ineffective protection/contraception, and absence of knowledge on HPV infection/vaccination. Prevention of hrHPV infection can at large be achieved through education and regular screenings in general population, irrespective of indications. Latvian Science Fund project LZP2021/1-0484 is acknowleded for support.

Tables

Table 1. Association of sociodemographic factors with hrHPV infection

	hrHPV infection		
	hrHPV positive	**hrHPV negative**	**p-value**
Age, years (mean ± SD)	39.3 ± 9.9	43.1 ± 10.1	0.197
Nationality			
Latvian	n=12 (66.7%)	n=44 (68.8 %)	0.667
Russian	n=4 (22.2 %)	n=11 (17.2 %)	
Lithuanian	n=0 (0.0%)	n=3 (4.7 %)	
Ukranian	n=2 (11.1%)	n=3 (4.7 %)	
Belarusian	n=0 (0.0%)	n=3 (4.7 %)	
Higher education			
Yes	n=15 (78.9 %)	n=37 (57.8 %)	0.094
No	n=4 (21.1 %)	n=27 (42.2 %)	
Employment			
Employed	n=18 (94.7 %)	n=58 (90.6 %)	1.00
Unemployed	n=1 (5.3 %)	n=6 (9.4 %)	
Satisfaction with earnings			
Satisfied	n=12 (66.7 %)	n=32 (53.3 %)	0.317

Not satisfied	n=6 (33.3 %)	n=28 (46.7)	
Social protection			
Feel socially protected	n=15 (78.9 %)	n=44 (68.8 %)	0.389
Not socially protected	n=4 (21.1 %)	n=20 (31.2 %)	
Number of interrupted pregnancies (median, (IQR))	0 (0-1)	1 (0-1)	0.389
Number of children (mean ± SD)	1.6 ± 1.2	1.3± 1.0	0.285

Table 2. Association of knowledge about HPV vaccine protecting from cancer with hrHPV infection

		Knowledge about HPV vaccine		
		No	Yes	
hrHPV				
HPV negative	Count	4	60	
	% within row	6.3 %	93.8 %	
				p=0.008
HPV positive	Count	6	13	
	% within row	31.6 %	68.4 %	

Table 3. Association of self-reported health problems or diseases with hrHPV infection

		Self-reported health problems or diseases		
hrHPV		No	Yes	
HPV negative	Count	35	29	
	% within row	54.7 %	45.3 %	
				p=0.008
HPV positive	Count	16	2	
	% within row	88.9 %	11.1 %	