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EXTENDED ABSTRACT

A18 Sources of information and knowledge about cervical cancer and human papilloma virus among young adolescents in a small region of the north of Portugal – a Correspondence Analysis

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Introduction:

Prevention of cervical cancer (CC) relies nowadays on Human Papilloma Virus (HPV) vaccination both in male and female adolescents (1). Portugal had started HPV vaccination among female adolescents with 13 years old back in October 2008. In 2017, the vaccination program started to include females 10 years old and introduced a nonavalent vaccine (2). For sexually transmitted diseases (STD) health literacy, which includes knowledge about prevention or disease dissemination, is also important not only for healthy behaviors but also for adherence to the vaccination programs (3).

The present study proposes describing the correspondence of the sources of information and the knowledge about HPV and prevention of CC in a female Portuguese sample, aged between 10-13 years old in the area covered by a Family Health Unit at Maia, Portugal (FHU–M).

Methods:

One hundred and seven (female) users of the FHU-M, aged between 10-13 years old participated in this study. For knowledge assessment, a 30-item questionnaire was developed, which included questions about CC risk factors, anatomy, HPV infection, vaccination scheme and eligibility, STD prevention methods. In addition, participants classified in a five points scale the frequency of use of sources for obtaining information about health issues. Beyond descriptive statistics, data examination included a correspondence analysis with symmetrical normalization (4) between information sources (marked as 'always' used) and knowledge level about CC and HPV, made with IBM SPSS 24.0 version software.

Results:

Cronbach's alpha obtained for the knowledge questionnaire was 0.701 with an average score of 18,3±4,33 (min-máx=[6 - 25]). In knowledge themes 'anatomy' and 'risk factors' obtained the highest scores. On other hand, the infection 'transmission modes' counted for the lowest scores.

Two dimensions account for 99.4% of the total inertia. Adding a third dimension adds only 0.5% to the accounted-for inertia. Both for simplicity and graphical representation, the analysis included two dimensions. All the sources except 'friends' were very well represented in the first dimension. Similarly, all the themes, except 'eligibility for vaccination' were represented in the first dimension.

Correspondence analysis revealed that most of the knowledge themes like 'prevention methods', 'risk factors', 'infection transmission or effects' or 'anatomy' were near to two main information sources: 'family nurse' and 'tv +net'. 'Friends' were close to 'eligibility for vaccination". The nearest theme for the source of information 'family' was 'vaccination scheme' - Figure 1.

Discussion:

Family nurses seem to play a crucial role in the knowledge level of CC and HPV in young adolescents in Portugal. This finding is of greater importance due to the influence that information sources such as the Internet have, allowing adolescents to share and complement doubts or fears that those information sources could lead them to. Friends seem to play an important role in information about 'who is eligible' for vaccination, which indicates an exchange of information between them about their own experiences, being also a source of reinforcement for preventive behaviors. Other sources of information, including teachers, appear to have a less relevant role. In the particular case of the family, its importance arises in monitoring compliance with the vaccination scheme.

Keywords:
cervical cancer prevention; HPV vaccination; knowledge attitude

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Table 1 - Correspondence table: source of information vs Knowledge theme

Theme	Source of information						
	Family	Friends	Teachers	Health professionals	Tv + Net	Family Nurse	Active Margin
Anatomy	56	55	14	38	85	103	351
Infection effects	54	51	14	38	74	90	321
Transmission	50	42	13	38	72	89	304
Prevention methods	96	92	25	63	138	170	584
Risk factors	37	38	11	27	62	68	243
Screening methods	37	32	9	26	52	63	219
Elegilbilty for vaccination	97	103	27	67	96	154	544
Vaccination scheme	184	40	32	9	25	55	345
Active Margin	611	453	145	306	604	792	2911

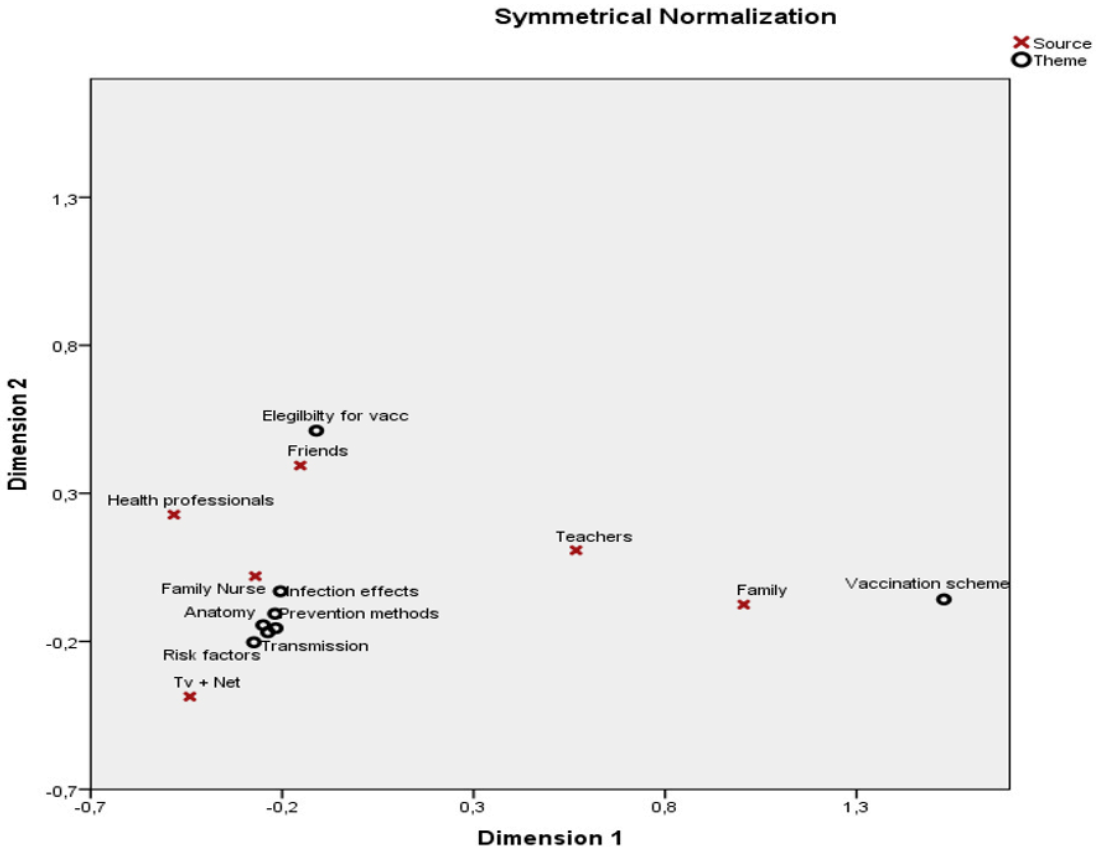

Figure 1 – Correspondence analysis between information sources and knowledge themes

Extending to other geographic areas could confirm the results of this study, as well as using another methodology that could deepen some of the thoughts described.

Ethics committee and informed consent:

An independent ethics committee (CES from ARS-Norte, 141/2018) approved the current research and subjects gave their informed consent before enrollment in the study.

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