



Cultural and psychosocial barriers in the implementation of HPV vaccination in Romania

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Presentation outline

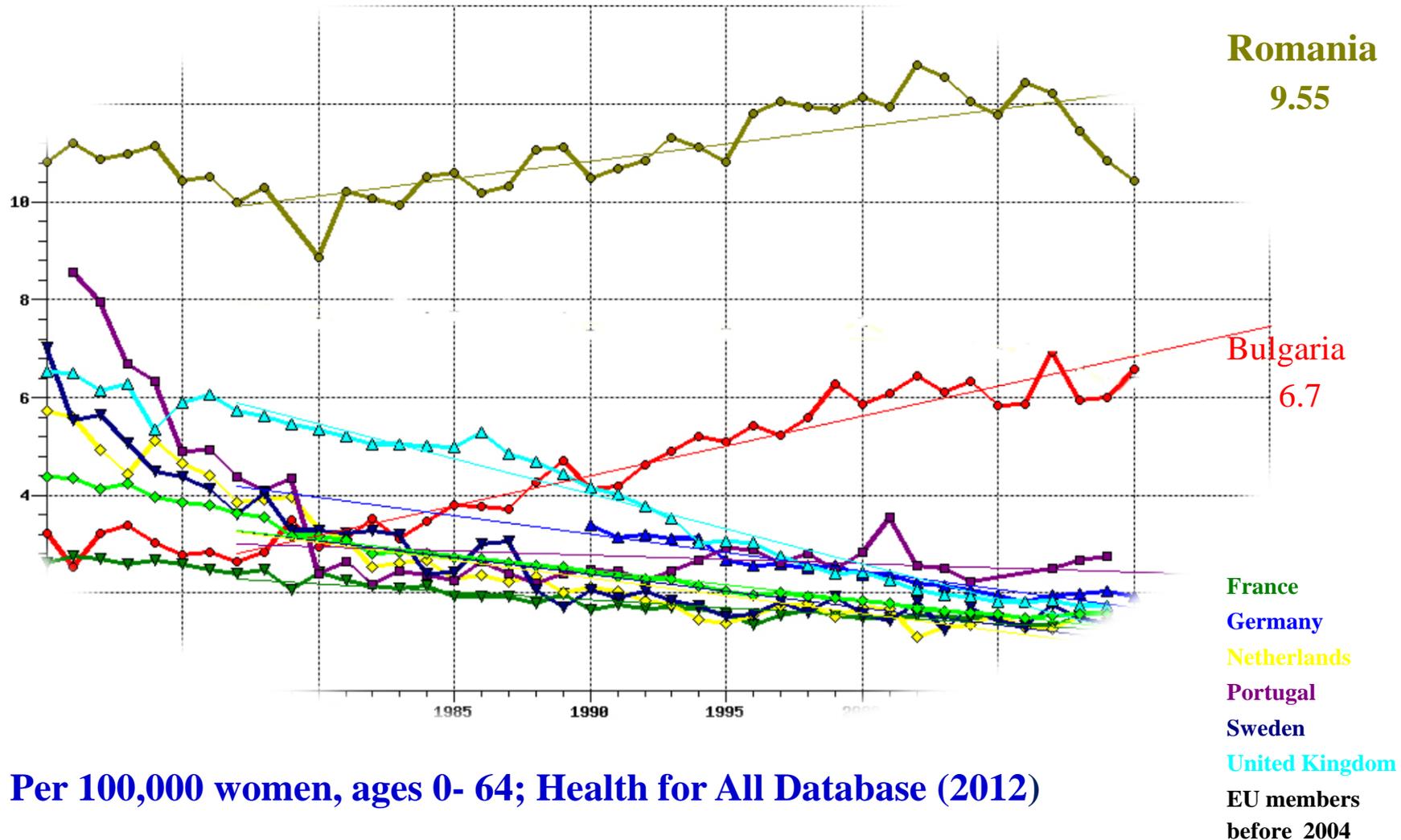
- **Background:** HPV vaccine introduction in Romania

- **Our studies:**
 1. Parents' perspectives on HPV vaccines
 2. Media discussions surrounding HPV vaccines
 3. Health professionals' views on HPV vaccines
 4. Determinants of vaccine acceptability in young adults

- **General conclusions**

Background

Mortality Rates from Cervical Cancer



Background

- For the last 20+ years, **Romania has had the highest cervical cancer mortality in Europe**, with rates ~ 6 times higher than the average of EU
- HPV vaccination - will achieve the desired reductions in cervical cancer rates only if coverage is high
- **HPV vaccination introduction in RO:**
 - November **2008** – launch of vaccination campaign, vaccines fully covered by national health authorities; target group 10-11-year old girls (after receiving parental consent). Vaccines were delivered mostly through school-based programmes –
 - Campaign was unsuccessful, **uptake rate was 2.57%!!**

Background

- ❑ November 2009 – 2010: re-launching of the vaccination campaign, target age 12-14, later extended such that **catch-up programme included target age group: 12-24** – delivered through public health/primary care doctors, school health services, private sector, public hospitals
- ❑ The **campaign was stopped** (low acceptance rates, many vaccines doses have expired)
- ❑ **Suboptimal communication/education strategy & implementation** may have negatively affected HPV vaccination campaign
- ❑ In Romania: **no recommendations for vaccinating boys.**

Study 1. Understanding the reasons why Romanian mothers decline HPV vaccination for their daughters (Craciun & Baban, 2012)

Objectives

- The study aimed to explore the experience of Romanian mothers with the HPV vaccine and to identify their perceptions & attitudes towards vaccine

Method

- 3 focus groups ($n = 16$) and 9 semi-structured interviews with women aged 30–50
- Thematic analysis was applied

Findings

- All participants have refused vaccination
- **The risky vaccine** – fear of side effects, particularly of **infertility**;
- **Who will take the responsibility for the possible negative effects?** – mothers “cannot take the risk” to accept vaccination for daughter
- **Conspiracy theory** - women suspicious because of the gratuity of the vaccine; fear of uncertain vaccine effects and hidden interests

- **Vaccine as experiment** serving the interest of pharmaceutical companies that would “do anything in order to sell their products”.
- **The vaccination campaign as the reflection on an ineffective health care system** - women complained about the ineffective health care system and the **lack of information** provided.

Study 2a. Dangerous Agent or Saviour? HPV Vaccine Representations on Online Discussion Forums in Romania

(Penta & Baban, 2014)

Aim and Method

- This paper aims to explore HPV vaccine-related conversations posted on discussion forums and to provide insight into people's perspectives, factors that restricted uptake and particularities of communication about the vaccine.
- 20 forums, with a total sample size of **2,240 comments** (2007–2012),
- We conducted thematic analysis

Findings

- **Information-seekers**—to vaccinate or not to vaccinate?
“should I believe doctors or rumors”?
- **Supporters** - how is the vaccine constructed as beneficial?
 - Helpful Discovery
 - “The Normal Thing to Do”
- **Opponents**—how is the vaccine constructed as harmful?
 - Dangerous Vaccine
 - Conspiracy Theories
 - Lack of trust, discontent with the National Health System
 - HPV Vaccine as “An Injectable Condom”
 - HPV Vaccine as Useless Technology

Conclusion

- Negative discourses focused on pseudo-scientific evidence, erroneous interpretation of medical reports and rejection of epidemiological Information.
- Vaccine opponents described vaccine as dangerous, disseminated conspiracy theories, considered that health system, pharmacologic companies and politicians are untrustworthy, raised moral concerns regarding promiscuity and made efforts to convince others that the vaccine was unnecessary.

Study 2b. Mass Media Coverage of HPV Vaccination in Romania: A Content Analysis

(Penta & Baban, 2014b)

Objective

- The study aims to explore the content and quality of HPV vaccine media coverage in Romania.

Methods

- Sample included 271 articles (from newspapers, magazines, videos, informational websites), published online between 1st November 2007 and 31 January 2012.

■ **Coding instrument**

- included selected codes from previous media analyses (Calloway et al., 2006; Habel et al., 2009; Hilton et al., 2010; Kelly et al., 2009) and codes created by the authors.
- The coding instrument tracked: the emotional valence of the article, vaccine label, information about HPV infection, cervical cancer and HPV vaccines, potential concerns regarding the vaccine, direct recommendation, focus on personal stories, readability of the article, sources cited
- We conducted a content analysis.

Findings

Tone:

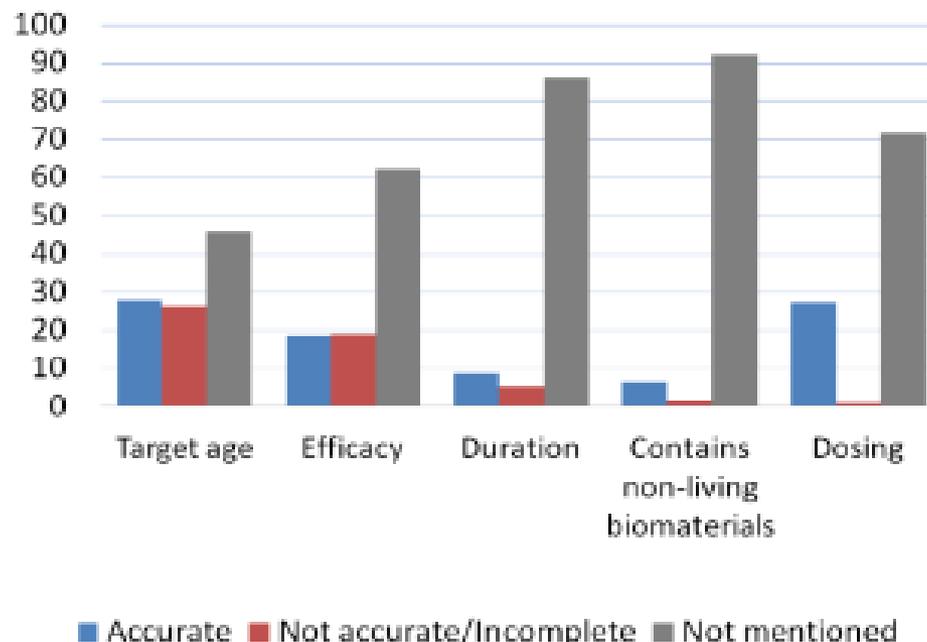
- 31.4% of the articles were neutrally disposed toward the vaccine, 17% were mixed, 28.1% were negative or extremely negative and 23.6% were positive. The discourses become predominantly negative with the introduction of the free national vaccination programme.
- Some titles include : “Adolescent girl died after getting cervical cancer vaccine” or “Gardasil: poison for Romanian people. The vaccine is involved in girls’ sterilization”.

- Information about HPV transmission, asymptomatic nature and limited effectiveness of condoms in preventing HPV - seldom represented (Table 1).
- References regarding vaccine efficacy and target age were likely to provide biased or incomplete information (Fig 2)

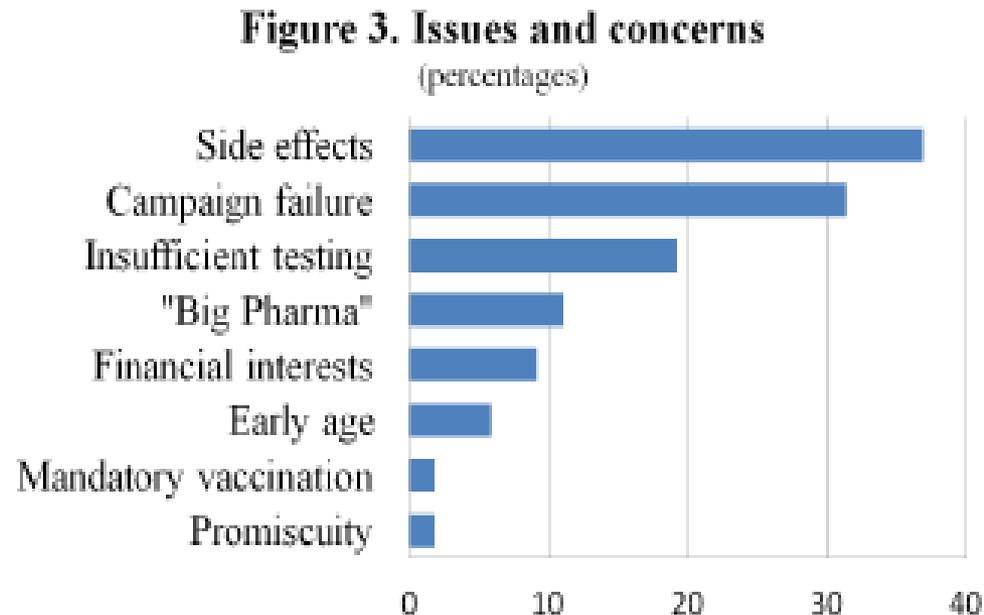
Table 1. HPV and cervical cancer information

HPV and cervical cancer facts	Mentioned	
	N	%
Link HPV-cervical cancer	144	53.1
Statistics cervical cancer	110	40.6
HPV sexual transmission	78	28.8
HPV Types	60	23.2
HPV Prevalence	45	16.6
Pap test still necessary	44	16.2
HPV short-lived	25	9.2
Other means of transmission	16	5.9
HPV asymptomatic	13	4.8
Condom limited effectiveness	12	4.4

Figure 2. Accuracy of vaccine information (percentages)



- **Personal stories:** 25 articles focused on vivid testimonies. Of them, 22 presented particular cases of girls from several countries that suffered serious side effects after receiving the vaccine, such as paralysis or death.
- **Concerns:** The main concerns were related to side effects (Figure 3).



Conclusions

- Readers were provided mainly with neutral and negative stories about the vaccine, with some articles being outstandingly negative, which is an unhelpful aspect, as such reports might act as fear-eliciting messages. Furthermore, most stories failed to provide comprehensive information on HPV and vaccine.
- Findings support the necessity of more rigorous standards when presenting vaccine information via media channels and highlight the importance of improving communication between the medical community and the media.

Study 3. Providers' perspectives on HPV vaccines

Objective and Method

- To identify the attitudes of providers toward vaccination and providers' experiences with patients in relation to vaccination
- Semi-structured individual interviews with 12 health professionals (3 general practitioners, 3 obstetrician-gynaecologists, 6 school doctors)

Findings

- Doctors' opinions - on a continuum between vaccine acceptance and strong vaccine resistance.
- The majority recommend vaccination on grounds of **benefits of vaccination: effectiveness and utility.**
- Activists had negative feelings related to the low uptake - disappointment, regret, blame (for not being able to convince about vaccine benefits), indignation

- But there was **notable hesitancy** - those reluctant about vaccination cited **insufficient information** regarding long term effects and **vaccination risks** (“You start wondering whether or not you were the one being narrow-minded”)
- **tendency to defer responsibility**: “when asked, our role is to inform, not to convince”.
- Physicians who clearly opposed vaccination (n=2) invoked serious side effects due to adjuvant substances and considered vaccine as useless and ineffective.
- **! Issues of anti-vaccine doctors who publicly disapprove vaccination / who are **hesitant****

- Some believed that **vaccinating at ages 9-11 is too early**
- **Gendered issues** - doctors who were in favour of vaccinating girls considered that vaccinating boys would be useful, but felt that it would **not be cost-effective/not realistic** to incorporate it into funded vaccination programs.
- Some physicians **weren't equipped with comprehensive information on vaccine** benefits, trials and guidelines.

Study 4. Determinants of HPV vaccine acceptability in young adults

Objectives

- This study uses an extended model of Health Belief Model and aims to explore which factors predict intentions to get the HPV vaccine in a sample of young adults

Methods

Participants

- College students ($n = 310$, 80% females), aged 18 to 26 ($M = 23.1$, $SD = 2.06$), completed a theory-based survey.

Measures

- **Demographic** and health-related variables
- **Attitudes** toward vaccines - assessed using 6 items
- **HPV and HPV vaccine awareness and knowledge**, assessed with a 18-item scale adapted from past studies (Fazekas, Brewer, & Smith, 2008; McRee et al., 2010).
- **Vaccine-related beliefs and emotions** (perceived susceptibility to infection, perceived severity of infection, perceived effectiveness and safety of vaccines, anticipated inaction regret, anticipated worry about being infected and about transmitting disease)
- **Interest in learning more about vaccines**
- **Behavioral intention**

Findings

General

- 24% reported a history of vaccine refusal
- 16% considered that vaccines are not needed as the body naturally protects itself against diseases
- 20% claimed that vaccines cause dangerous side effects
- 7% considered that vaccines cause autism, 28% were unsure

HPV

- 2.9% reported having received the HPV vaccine
- 91% reported low/very low perceived susceptibility to HPV
- 30% believed the vaccine is not effective

- 25% believed the HPV vaccine could have serious side effects, 60% were unsure
- Only 23% believed the vaccine is safe
- Only 8% reported that their GP recommended HPV vaccination
- 7.8% reported that it would be very difficult to get to a provider
- 46% reported they would regret if they declined vaccination and later contracted infection
- 50.5% reported they would probably get vaccinated if the vaccine is free of charge, 39% would be probably willing to get the vaccine if they have to pay for it, and 17% said they would probably get vaccinated in the coming 12 months.

HPV knowledge items (Accurate response)	“True” (Participant response–percentages)
HPV can cause genital warts (T)	33.5
HPV can cause cervical cancer (T)	64.0
Only women can have HPV (F)	18.0
HPV can cause cancer in men (T)	32.5
The best way to prevent disease caused by HPV is to have Pap smears performed (T)	73.6
Most sexually active people will get HPV at some point in their life (T).	21.1
In most cases, HPV goes away on its own (T)	5.5
Condoms provide complete protection against HPV (F)	23.5
One can have HPV without knowing (T)	55.0
Only people with many sexual partners can get HPV (F)	8.5

Predictors of vaccine acceptability

Predictors of vaccination intentions were:

- anticipated regret ($t=4.587$, $p<.001$)
- perceived susceptibility ($t=2.229$, $p<.05$)
- perceived severity of HPV ($t=2.460$, $p<.05$)
- perceived vaccine safety ($t=2.297$, $p<.05$).

General conclusions

- The HPV vaccine highlights factors such as mistrust, fear, uncertainty, responsibility, inadequate public understandings of science, national health system issues
- **Contextual/local barriers:** general mistrust, dissatisfaction towards health system, suboptimal education/communication campaign, negative media exposure + lack of comprehensive information, lack of doctor recommendation or inconsistent advice, conspiracy theories
- **Individual/ group barriers include:** low anticipated inaction regret, low perceived vaccine safety and effectiveness, low perceived susceptibility to HPV, high risks, lack of accurate information, issues of trust, negative attitudes, beliefs that vaccine is not needed

General conclusions

- Overall, findings indicate that effective vaccination-promoting interventions are needed
- Many of the identified barriers and correlates of HPV vaccine acceptability are modifiable and offer potential targets for future research and for future vaccination campaigns.

Related publications

- Craciun, C. & Băban, A. (2012). "Who will take the blame?": Understanding the reasons why Romanian mothers decline HPV vaccination for their daughters. *Vaccine*, 30, 6789-93.
- Pența, M. A. & Băban, A. (2014a). Dangerous agent or saviour? HPV vaccine representations on online discussion forums in Romania. *International Journal of Behavioral Medicine*, 21(1), 20-8.
- Pența, M. A. & Băban, A. (2014b). Mass Media Coverage of HPV Vaccination in Romania: A Content Analysis. *Health Education Research*.
- Todorova, I., Băban, A., et al. (2009). Inequalities in cervical cancer screening in Eastern Europe: perspectives from Bulgaria and Romania. *International Journal of Public Health*, 54, 1–11.
- ECDC TECHNICAL REPORT (2015). Vaccine hesitancy among healthcare workers and their patients in Europe A qualitative study.



Thank you!

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