

IMPLEMENTATION OF CxCa PREVENTION E-LEARNING COURSE IN GREECE

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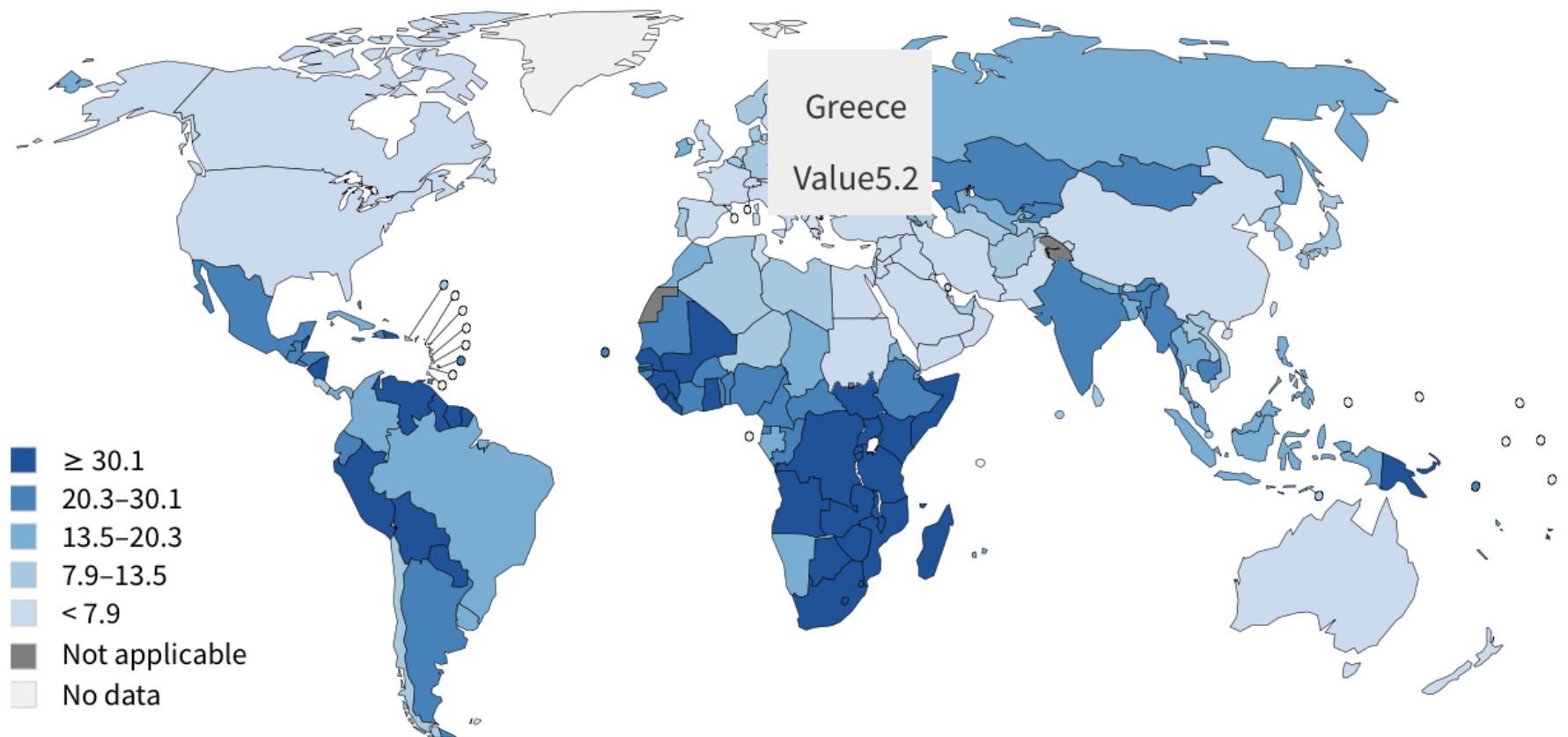
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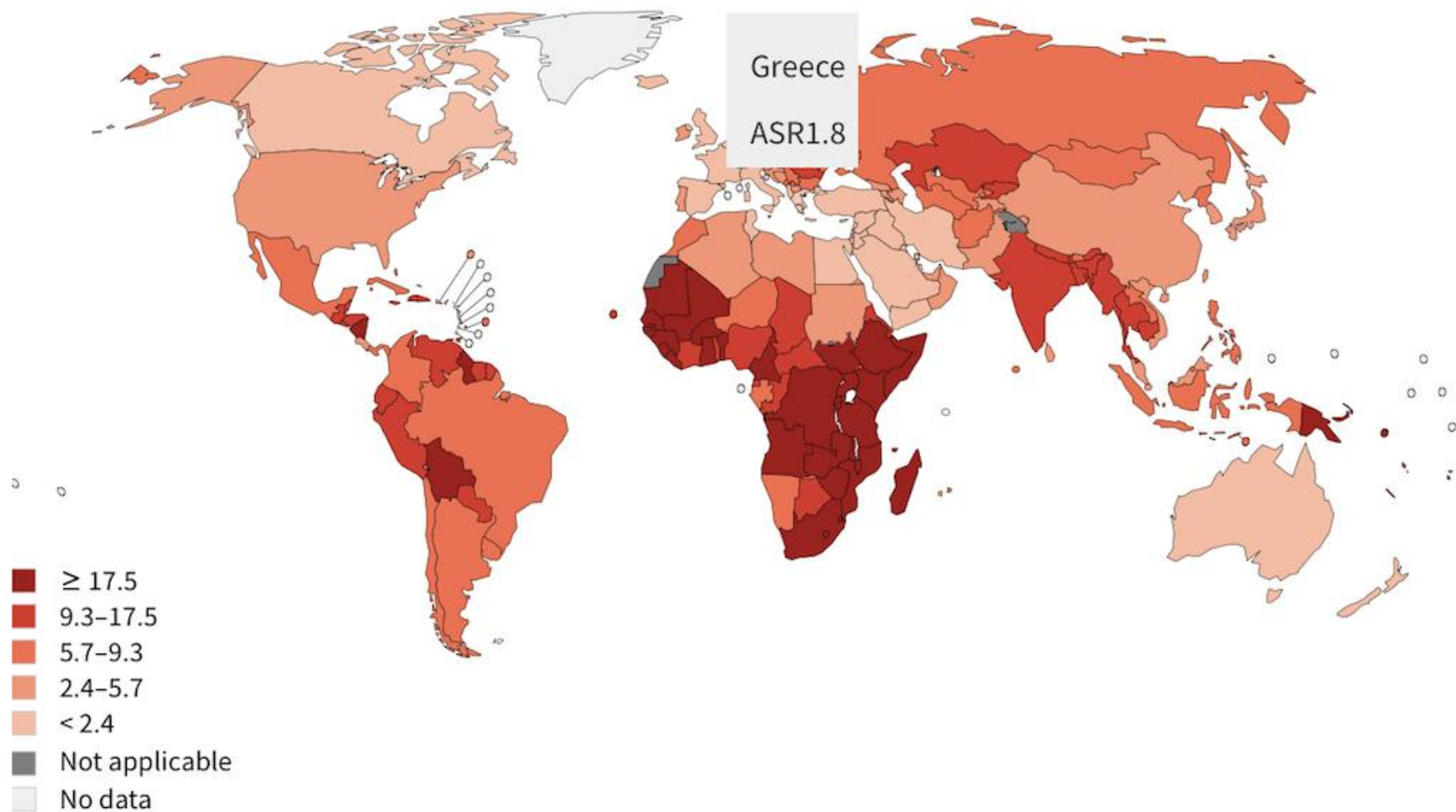
GLOBOCAN 2012

Age-standardized cervical cancer incidence rates



GLOBOCAN 2012

Age-standardized cervical cancer mortality rates



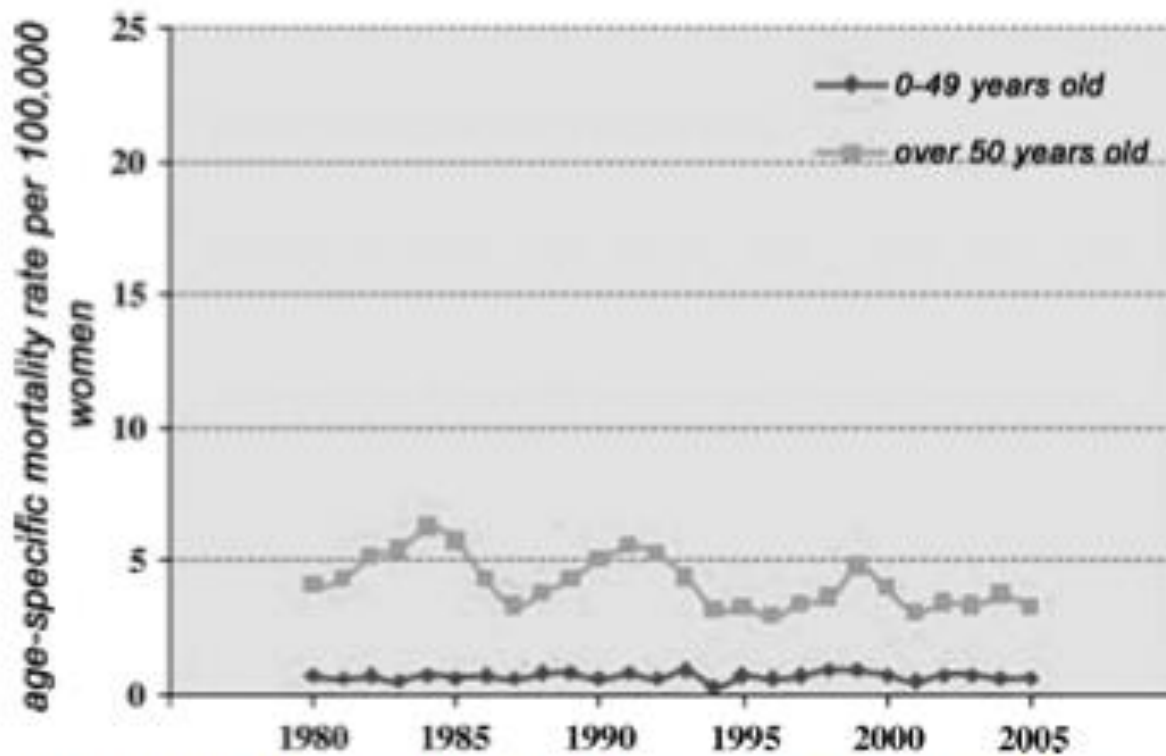


FIGURE 1. Time trends of age-specific cervical cancer mortality rates per 100,000 women, between 1980 and 2005, in Greece. The following age groups were analyzed: women 49 years or younger and women 50 years or older.



Cervical cancer screening program in Greece

- Non-population based program (no invitations to participate)
- It defines screening modality (pap test)

- New guidelines anticipated to replace pap test with co-testing

[Int J Cancer](#). 2018 Jan 1;142(1):44-56. doi: 10.1002/ijc.31043. Epub 2017 Oct 10.

Status of implementation and organization of cancer screening in The European Union Member States-Summary results from the second European screening report.

[Basu P](#)¹, [Ponti A](#)², [Anttila A](#)³, [Ronco G](#)², [Senore C](#)², [Vale DB](#)⁴, [Segnan N](#)², [Tomatis M](#)², [Soerjomataram I](#)⁵, [Primic Žakelj M](#)⁶, [Dillner J](#)⁷, [Elfström KM](#)⁸, [Lönnberg S](#)⁹, [Sankaranarayanan R](#)¹.

Table 3.2.1. Cervical cancer screening programmes in the EU member states:
general information, information on programme organization and mode of invitation to the participants for screening and further assessments

Member states	General information				Programme organization							Invitations for screening and further assessments			
	Year of programme initiation	Target age (years)	Screening interval (years)	Is there a population based programme?	Is there a national screening policy?	Is the policy documented as a law or an official recommendation?	Is there a team resp. for implementing the policy?	Is the programme publicly funded?	Is health insurance a source of funding?	Are the screening tests provided free of charge?	Are the diagnostic tests provided free of charge?	Does the programme issue individual invitations through the screening registries?	Are the invitations sent as letters?	Does the invitation include a fixed appointment date?	Does the programme actively invite the screen positives for further assessment?
Greece	NA	Sexual onset+	—	*	✓	OR	NA	NA	NA	NA	NA	NA	NA	NA	NA



Cancer Screening in the European Union (2017)

Report on the implementation of the Council
Recommendation on cancer screening

**Table 3.2.2. Cervical cancer screening programmes in the EU member states:
information on programme monitoring, quality assurance and requirements for consent**

Member states	Programme monitoring and quality assurance							Consent for screening	
	Is there a team responsible for quality assurance?	Are there screening registries?	Are screening data collected as individual data?	Are screening data linked with cancer registries?	Are programme performance reports published?	Is there an audit of the cancer cases?	Is there quality control of data collection?	Does the programme require signed informed consent?	Is written information on benefits and harms of screening provided?
Greece	NA	NA	NA	NA	NA	NA	NA	NA	NA



Cancer Screening in the European Union (2017)

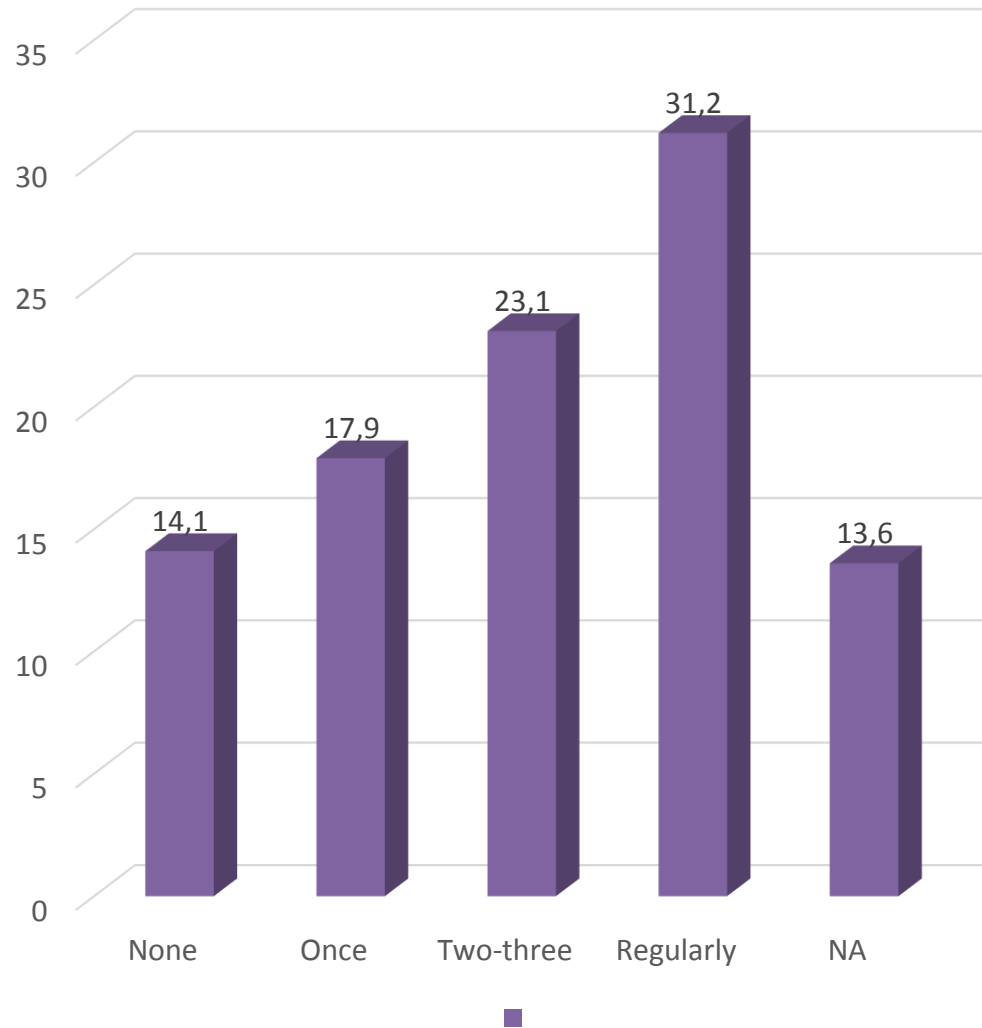
Report on the implementation of the Council
Recommendation on cancer screening

LYSISTRATA project

- 2005-2011
- 5.379 women who filled out anonymously a questionnaire participated
- 5.107 women underwent cervical HPV DNA testing and cytology



LYSISTRATA project



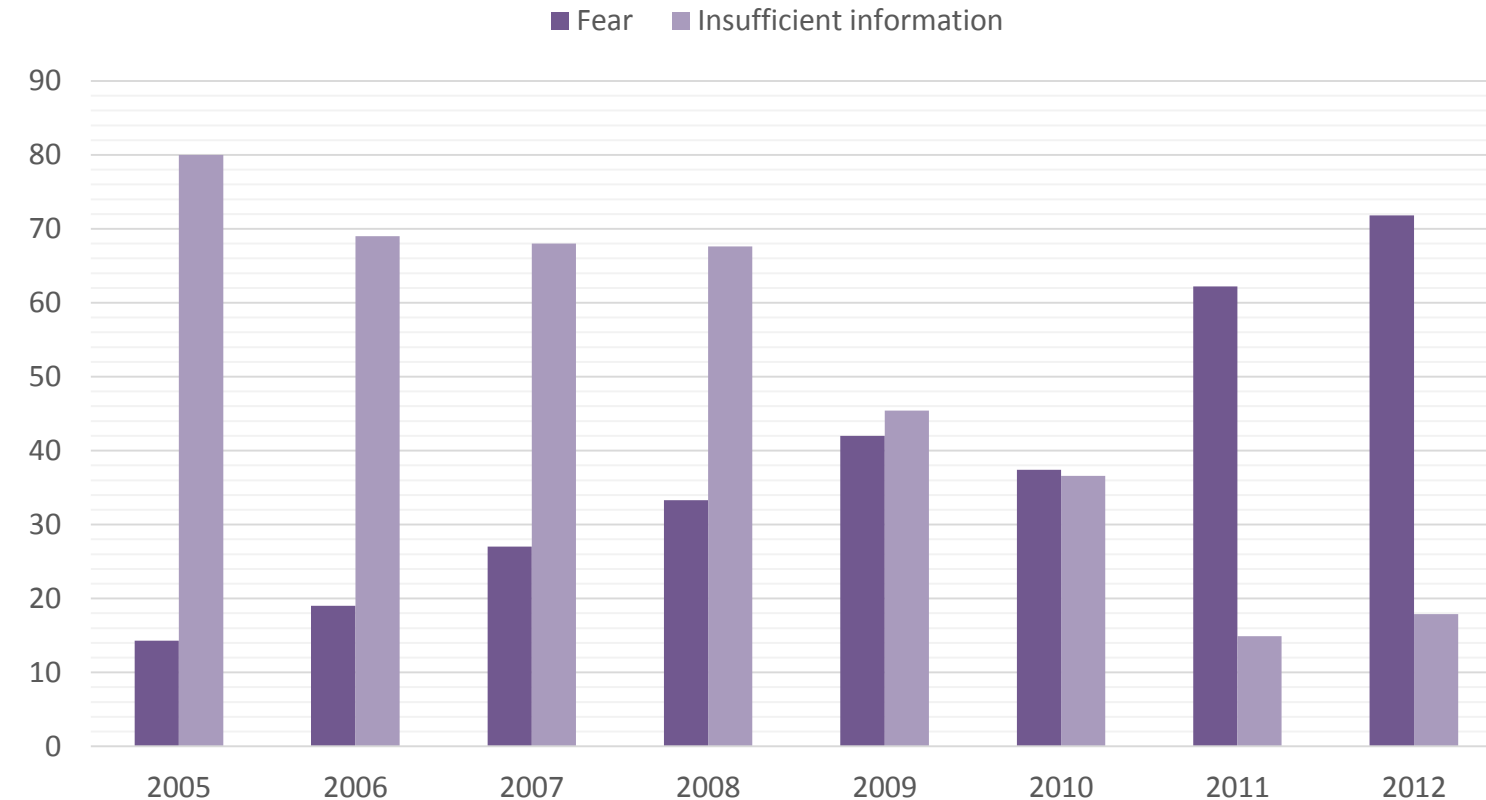
- How often do you have a pap test?

[Eur J Cancer Prev.](#) 2014 Sep;23(5):425-31. doi: 10.1097/CEJ.0000000000000060.

Epidemiology of HPV infection and current status of cervical cancer prevention in Greece: final results of the LYSISTRATA cross-sectional study.

[Agorastos T](#)¹, [Chatzistamatiou K](#), [Zafrakas M](#), [Siamanta V](#), [Katsamagkas T](#), [Constantinidis TC](#), [Lampropoulos AF](#); [LYSISTRATA study group](#).

Reason not to vaccinate (herself)



Fear: 2009-2010 = 46.7%

2011-2012 = 67.1%

P<0.0001

Info: 2009-2010 = 44.9%

2011-2012 = 16.4%

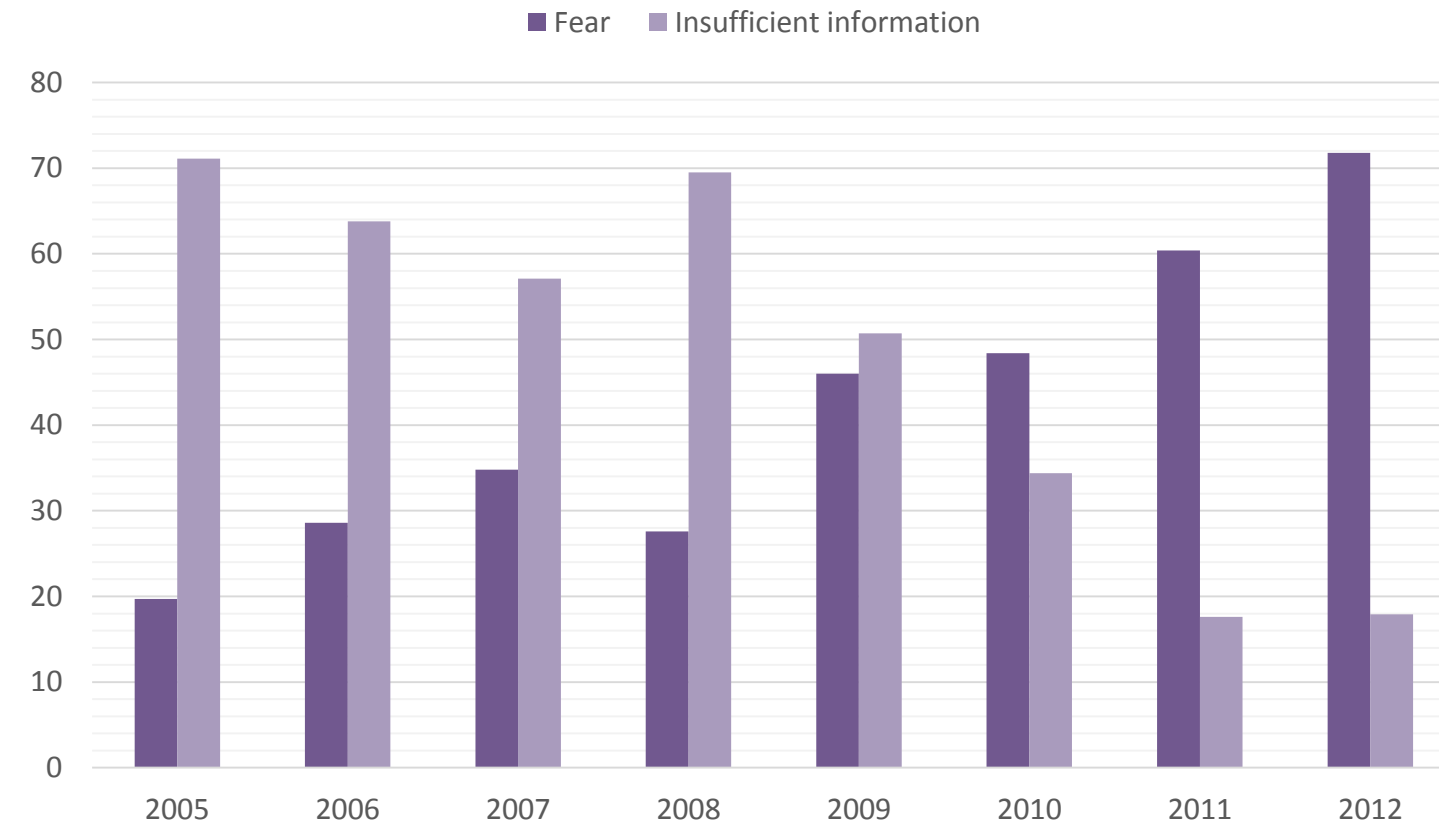
P<0.0001

Letter to the editor referring to the manuscript entitled: "Increasing fear of adverse effects drops intention to vaccinate after the introduction of prophylactic HPV vaccine" reported by Sotiriadis et al. (Arch Gynecol Obstet. 2012 Jun;285(6):1719-24).

[Chatzistamatiou K, Sotiriadis A, Agorastos T.](#)

Arch Gynecol Obstet. 2013 Aug 20. [Epub ahead of print]

Reason not to vaccinate (daughter)



Fear: 2009-2010 = 46.2%

2011-2012 = 60.3%

P=0.001

Info: 2009-2010 = 45.2%

2011-2012 = 17.7%

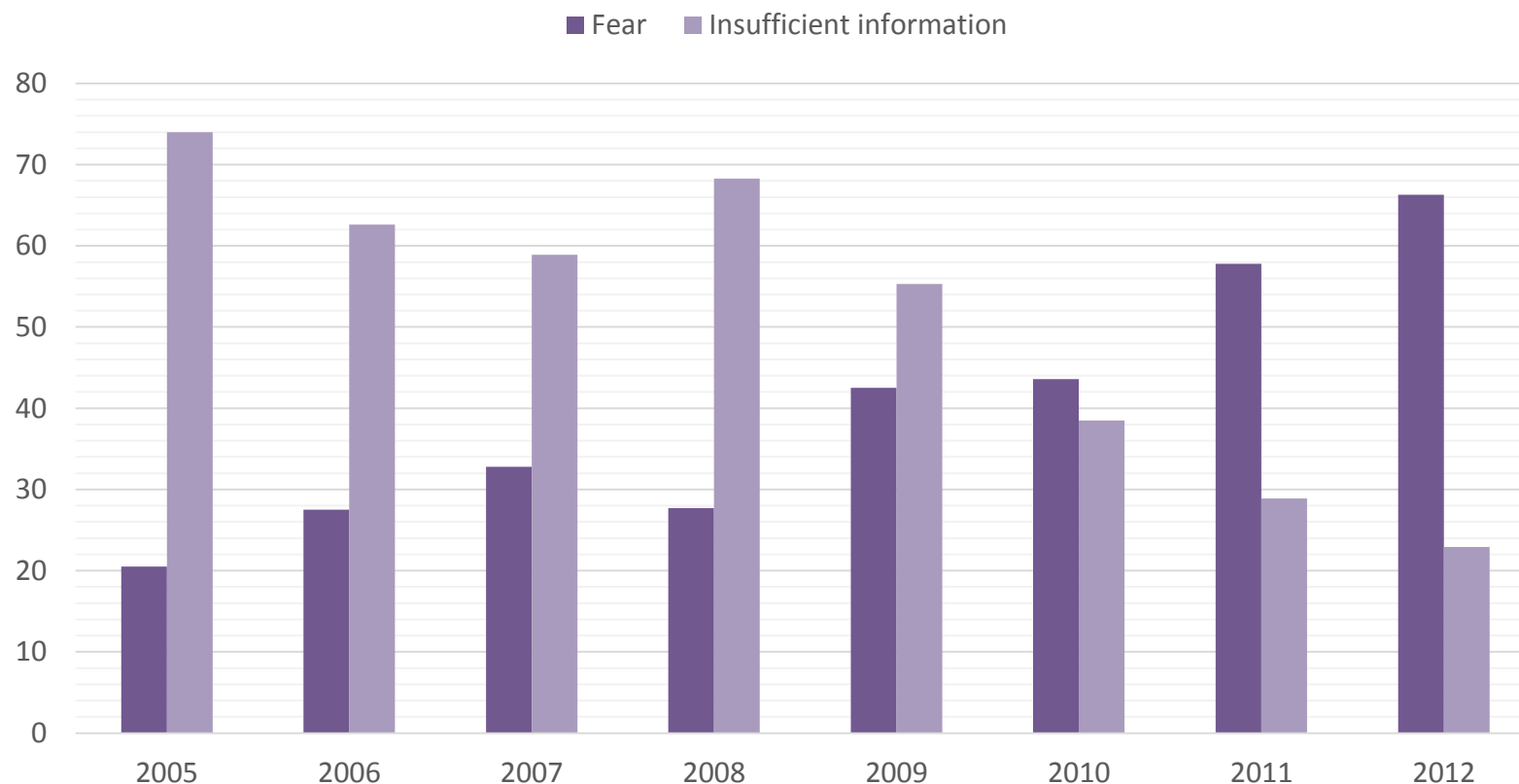
P<0.0001

Letter to the editor referring to the manuscript entitled: "Increasing fear of adverse effects drops intention to vaccinate after the introduction of prophylactic HPV vaccine" reported by Sotiriadis et al. (Arch Gynecol Obstet. 2012 Jun;285(6):1719-24).

[Chatzistamatiou K, Sotiriadis A, Agorastos T.](#)

Arch Gynecol Obstet. 2013 Aug 20. [Epub ahead of print]

Reason not to vaccinate (son)



Fear: 2009-2010 = 47.9%

2011-2012 = 62%

P<0.0013

Info: 2009-2010 = 44.9%

2011-2012 = 25.9%

P<0.0001

Letter to the editor referring to the manuscript entitled: "Increasing fear of adverse effects drops intention to vaccinate after the introduction of prophylactic HPV vaccine" reported by Sotiriadis et al. (Arch Gynecol Obstet. 2012 Jun;285(6):1719-24).

[Chatzistamatiou K, Sotiriadis A, Agorastos T.](#)

Arch Gynecol Obstet. 2013 Aug 20. [Epub ahead of print]

Cervical cancer prevention in Greece

1

Opportunistic cervical cancer screening

2

Misinformation on HPV vaccination

Hellenic HPV Society



Hellenic HPV Society

A non profit scientific organization aiming to:

- promote research on HPV
- to inform the public and health professionals in Greece about new developments regarding HPV associated diseases and vaccination.

Cervical cancer prevention course

e-oncologia.org

The screenshot shows a web browser window with the address bar displaying "e-oncologia.org". The browser's tab bar shows several tabs, including "Cervical Cancer Prevention". The website's header features the "e-oncologia" logo, the text "Virtual training specializing in cancer", a green button labeled "Login to the virtual classroom", and the "ICO Institut Català d'Oncologia" logo. Below the header is a navigation bar with orange buttons for "Home", "Who we are", "Educative offer", "Projects", and "Contact". A search bar with the text "Find a course" and a magnifying glass icon is also present. The main content area is titled "Cervical Cancer Prevention" and includes a "Back to Cervical Cancer Prevention Program" link. Below the title, course details are listed: "Start: 21/07/2017", "Enrollment: Open", and "Tuition: No Cost". A toolbar with various icons (eye, magnifying glass, person, gear, calendar, document, pencil, and house) is visible. The "INTRODUCTION" section begins with the text "prevention. The introduction of a new vaccine targeting women worldwide requires that literally tens of thousands of health professionals and decision makers understand its value and mode of use. In turn, they should be able to explain it properly to millions of families living in environments with diverse communities in cultures, beliefs, and languages." It then states "Please follow next steps for enrollment:" and lists "1. Click on 'Online registration'". To the right of the text is a microscopic image of a cell.

e-oncologia Virtual training specializing in cancer Login to the virtual classroom ICO Institut Català d'Oncologia

Find a course

Home Who we are Educative offer Projects Contact

Back to Cervical Cancer Prevention Program

Cervical Cancer Prevention

Start: 21/07/2017 **Enrollment:** Open **Tuition:** No Cost

INTRODUCTION

prevention.
The introduction of a new vaccine targeting women worldwide requires that literally tens of thousands of health professionals and decision makers understand its value and mode of use. In turn, they should be able to explain it properly to millions of families living in environments with diverse communities in cultures, beliefs, and languages.

Please follow next steps for enrollment:

1. Click on "Online registration"

Cervical cancer prevention in Greece



Key Findings in HPV Associated Cancer

Bridging the Gap between Research and Practice

Congress Presidents: Thomas Iftner (Germany), Elmar Joura (Austria)



Download the
EUROGIN 2016 Congress App
for full information,
including conference program
and individual search functions



EUROPEAN RESEARCH ORGANIZATION ON GENITAL INFECTION AND NEOPLASIA

Cervical cancer prevention course

Greek edition – Greek team

1

Translation of the course's contents

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      <titolAsset>Βοήθεια</titolAsset>
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DONE

Cervical cancer prevention course

Greek edition - ICO team

2

Course virtualization and final testing

3

Virtual classroom configuration: Design - Evaluation & certificates - Satisfaction survey

4

- Academic management
- Tutors training
- Students & teachers technical support

5

First edition delivery

6

Platform maintenance

TO BE DONE

Cervical cancer prevention course

Greek edition – Greek team

7

Final translation - Contents & additional materials

8

Final testing

9

Local Faculty selection.

10

Local accreditation from universities and scientific societies.

11

Additional material: epidemiology and local prevention programs.

12

Dissemination

13

Funding

Cervical cancer prevention course

Greek edition – Greek team

7

Final translation - Contents & additional materials

8

Final testing

After the upload of the translated material in the online platform:

- Check the whole course to finalize the translation of the main document and of the additional materials
- Check the online functionality of the course

TO BE DONE

Cervical cancer prevention course

Greek edition – Greek team

9

Local Faculty selection.

There has to be a local Faculty in charge of the Greek edition of the Course, collaborating with ICO.

Hellenic HPV Society

A non profit scientific organization aiming to:

- promote research on HPV
- to inform the public and health professionals in Greece about new developments regarding HPV associated diseases and vaccination.



- **Dr. Kimon Chatzistamatiou** - course updates, fora, and tutorship
- **Prof Theodoros Agorastos** - scientific consultation (gynecological oncology)
- **Prof Theodoros C Constantinidis** - scientific consultation (epidemiology)

DONE

Cervical cancer prevention course

Greek edition – Greek team

10

Local accreditation from universities and scientific societies.



Aristotle University of Thessaloniki



Medical School



1st Department of Obstetrics and Gynecology



4th Department of Obstetrics and Gynecology



Hellenic Society of Obstetrics and Gynecology

DONE

Cervical cancer prevention course

Greek edition – Greek team

11

Additional material: epidemiology and local prevention programs.

Research conducted by the Hellenic HPV Society

LYSISTRATA study ^{1,2,3}

HPV epidemiology and cervical cancer prevention in Greece

HERMES study ^{4,5,6}

Primary HPV screening (COBAS HPV test)

PIPAVIR study ^{7,8,9,10}

Primary HPV screening and triage of HPV+ with E7 detection

GRECOSELF study ¹¹

HPV primary screening with self sampling (COBAS HPV test)

TO BE DONE

Cervical cancer prevention course

Greek edition – Greek team

12

Dissemination

Meeting with representatives from all the Greek Scientific Societies related to cervical cancer prevention and presentation of the course

TO BE DONE

Cervical cancer prevention course

Greek edition – Greek team

13

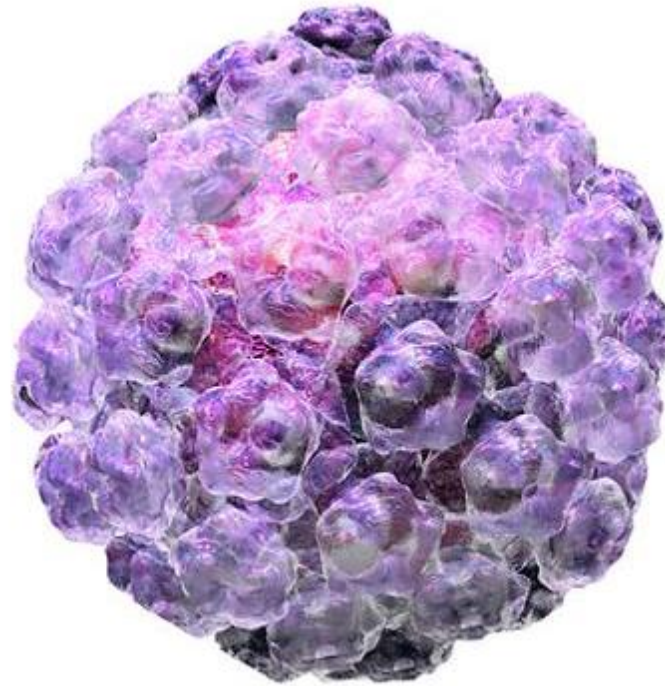
Funding

- Funding has been agreed with two major cervical cancer prevention related companies.
- The agreement will be formalized during an upcoming meeting (Athens, Greece, 17th of May 2018)

TO BE DONE

References

1. Agorastos T, Chatzistamatiou K, Zafrakas M, Siamanta V, Katsamagkas T, Constantinidis T, et al. Distinct demographic factors influence the acceptance of vaccination against HPV. *Arch Gynecol Obstet*. 2015;292(1):197-205. doi: 10.1007/s00404-015-3614-4. PubMed PMID: 25588329.
2. Agorastos T, Chatzistamatiou K, Zafrakas M, Siamanta V, Katsamagkas T, Constantinidis TC, et al. Epidemiology of HPV infection and current status of cervical cancer prevention in Greece: final results of the LYSISTRATA cross-sectional study. *Eur J Cancer Prev*. 2014;23(5):425-31. doi: 10.1097/CEJ.0000000000000060. PubMed PMID: 24977385.
3. Chatzistamatiou K, Sotiriadis A, Agorastos T. Letter to the editor referring to the manuscript entitled: "Increasing fear of adverse effects drops intention to vaccinate after the introduction of prophylactic HPV vaccine" reported by Sotiriadis et al. (*Arch Gynecol Obstet*. 2012 Jun;285(6):1719-24). *Arch Gynecol Obstet*. 2014;289(3):471-2. doi: 10.1007/s00404-013-3010-x. PubMed PMID: 23959094.
4. Agorastos T, Chatzistamatiou K, Katsamagkas T, Koliopoulos G, Daponte A, Constantinidis T, et al. Primary screening for cervical cancer based on high-risk human papillomavirus (HPV) detection and HPV 16 and HPV 18 genotyping, in comparison to cytology. *PloS one*. 2015;10(3):e0119755. doi: 10.1371/journal.pone.0119755. PubMed PMID: 25793281; PubMed Central PMCID: PMC4368762.
5. Chatzistamatiou K, Katsamagkas T, Zachou K, Orologa A, Fitsiou F, Theodoridis T, Konstantinidis T, Konstantinidis T C, , T A. Smoking and genital human papilloma virus infection in women attending cervical cancer screening in Greece. *World J Obstet Gynecol*. 2013;2(3):53. doi: 10.5317/wjog.v2.i3.53.
6. Chatzistamatiou K, Moysiadis T, Moschaki V, Panteleris N, Agorastos T. Comparison of cytology, HPV DNA testing and HPV 16/18 genotyping alone or combined targeting to the more balanced methodology for cervical cancer screening. *Gynecologic oncology*. 2016;142(1):120-7. doi: 10.1016/j.ygyno.2016.04.027. PubMed PMID: 27126005.
7. Agorastos T, Chatzistamatiou K, Moysiadis T, Kaufmann AM, Skenderi A, Lekka I, et al. Human papillomavirus E7 protein detection as a method of triage to colposcopy of HPV positive women, in comparison to genotyping and cytology. Final results of the PIPAVIR study. *International journal of cancer Journal international du cancer*. 2017. doi: 10.1002/ijc.30761. PubMed PMID: 28470689.
8. Chatzistamatiou K, Moysiadis T, Angelis E, Kaufmann A, Skenderi A, Jansen-Duerr P, et al. Diagnostic accuracy of high-risk HPV DNA genotyping for primary cervical cancer screening and triage of HPV-positive women, compared to cytology: preliminary results of the PIPAVIR study. *Arch Gynecol Obstet*. 2017. doi: 10.1007/s00404-017-4324-x. PubMed PMID: 28337594.
9. Chatzistamatiou K, Moysiadis T, Vryzas D, Chatzaki E, Kaufmann AM, Koch I, et al. Cigarette Smoking Promotes Infection of Cervical Cells by High-Risk Human Papillomaviruses, but not Subsequent E7 Oncoprotein Expression. *Int J Mol Sci*. 2018;19(2). doi: 10.3390/ijms19020422. PubMed PMID: 29385075.
10. Metzger C, Pittl A, Kaufmann AM, Agorastos T, Chatzistamatiou K, Bocher O, et al. A New Sandwich ELISA Test Simultaneously Detecting E7 Proteins of HPV-16, 18 and 45 in Cervical Smears. *Clinical Microbiology: Open Access*. 2016;05(05):260. Epub September 21, 2016. doi: 10.4172/2327-5073.1000260.
11. Chatzistamatiou K, Chatzaki E, Constantinidis T, Nena E, Tsertanidou A, Agorastos T. Self-collected cervicovaginal sampling for site-of-care primary HPV-based cervical cancer screening: a pilot study in a rural underserved Greek population. *Journal of obstetrics and gynaecology : the journal of the Institute of Obstetrics and Gynaecology*. 2017;1-6. doi: 10.1080/01443615.2017.1323197. PubMed PMID: 28631511.



Thank you for your attention...