CERVICAL CANCER: A PUBLIC HEALTH ISSUE IN ROMANIA

Cornelia Rada

Romanian Academy, Institute of Anthropology, Bucharest

Ileana Prejbeanu

University of Medicine and Pharmacy of Craiova
Public Health Authority of Dolj County

Decebal Hudita
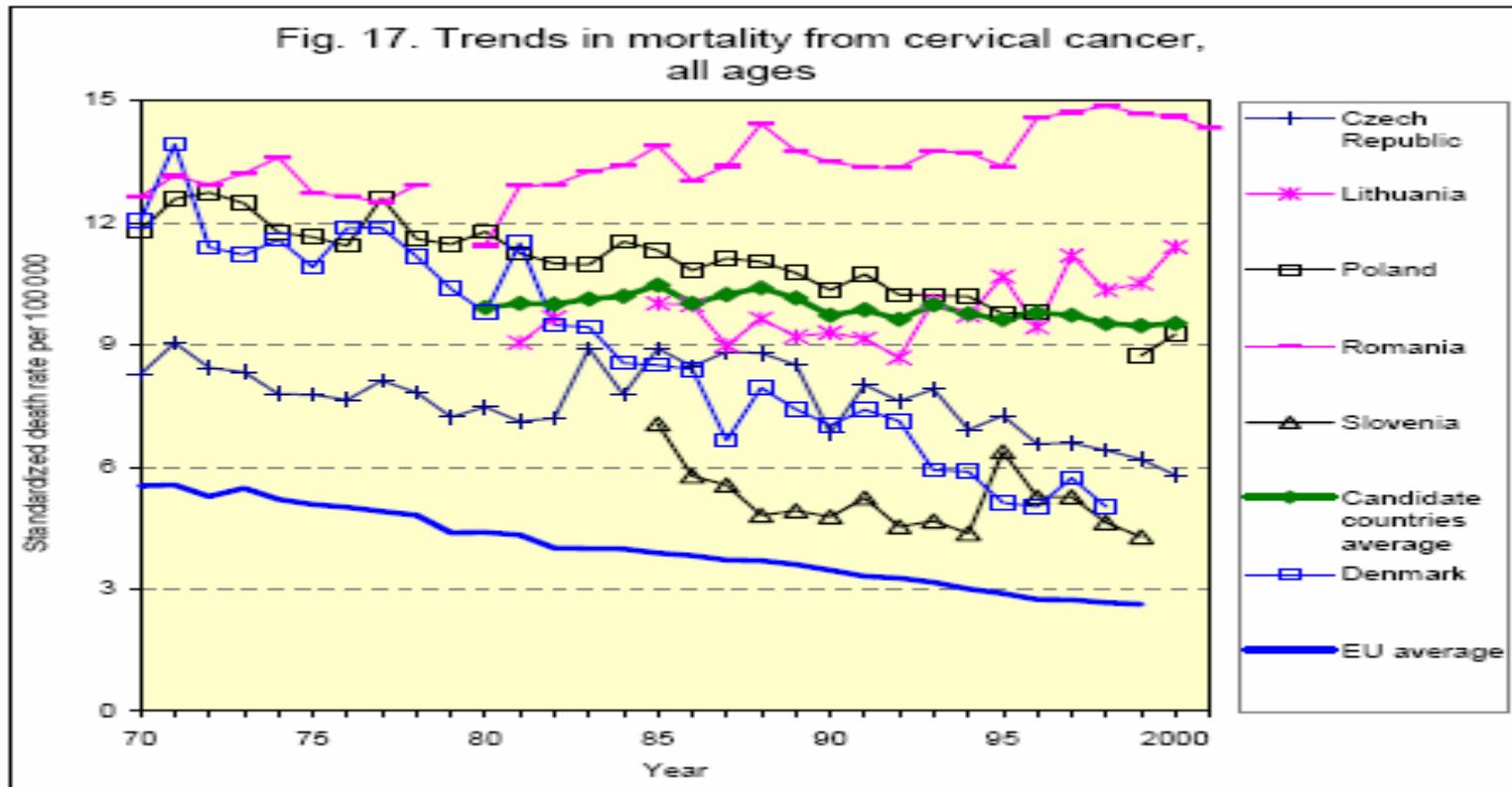
University of Medicine and Pharmacy of Bucharest, ROMANIA

MOTIVATION
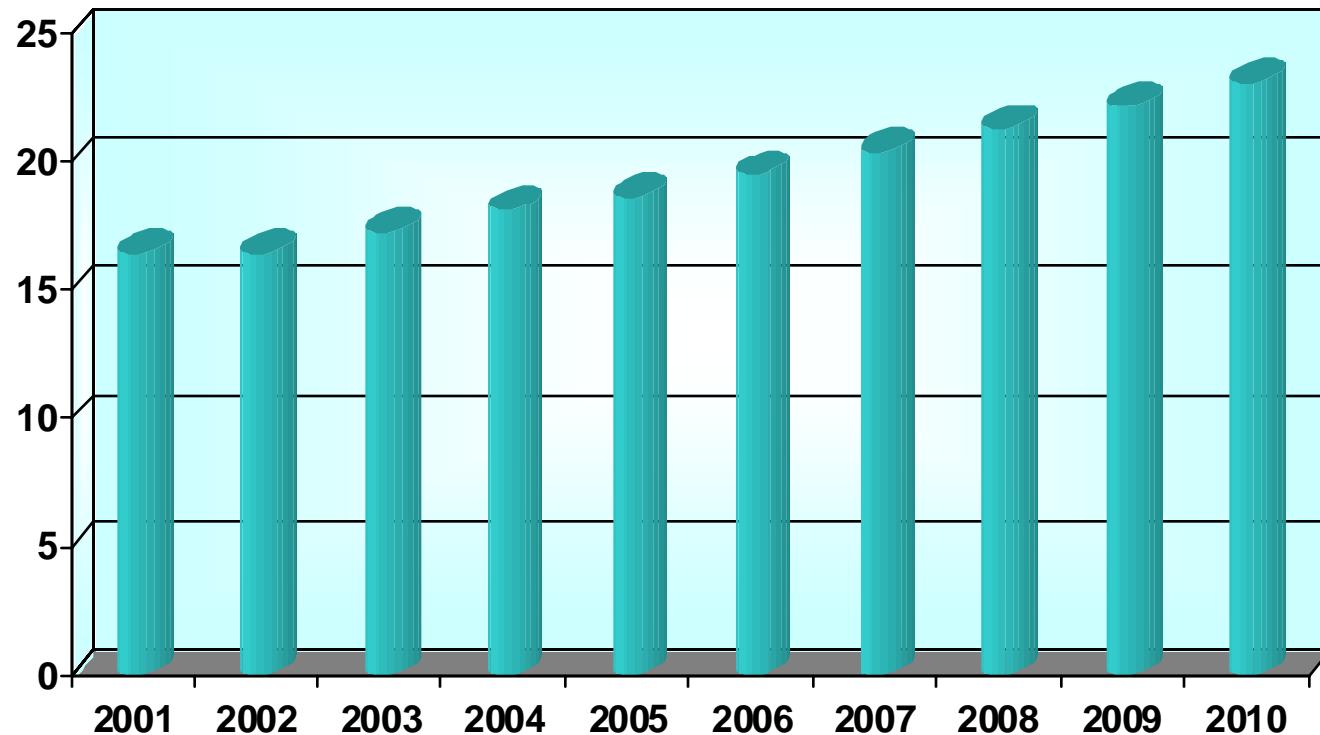
In Romania cervical cancer represents the most common cause of death for women at fertile age and registers the highest rate of mortality in Europe.

MOTIVATION

Fig. 17. Trends in mortality from cervical cancer, all ages

WHO, 2002 - *Health Status Overview for Countries of Central and Eastern Europe that are Candidates for Accesion to the European Union*

MOTIVATION

Prognosis of cervical cancer incidence (per 100,000 women) in Romania (linear regression method) – data from the Centre of Medical Statistics and Documentation

SUBJECTS AND METHODS

• 2005-2006 – a national study on the sexual education and family planning;

• 1902 subjects;

• two questionnaires (with 90 items for men and women and other 15 items for women) referring to:

> ➢ sexual activity, sexual education;
>
> ➢ family planning, abortion, number of children;
>
> ➢ STD, health risky behaviour, domestic violence;
>
> ➢ ante and post-partum care, new-born care, precocious detection of cervical and breast cancer (items for women);

• 848 women over the age of 15, who started the sexual life, equally distributed by age groups, instruction level and residence region – eight cities, capitals of the eight traditional historical geographical regions of the country.
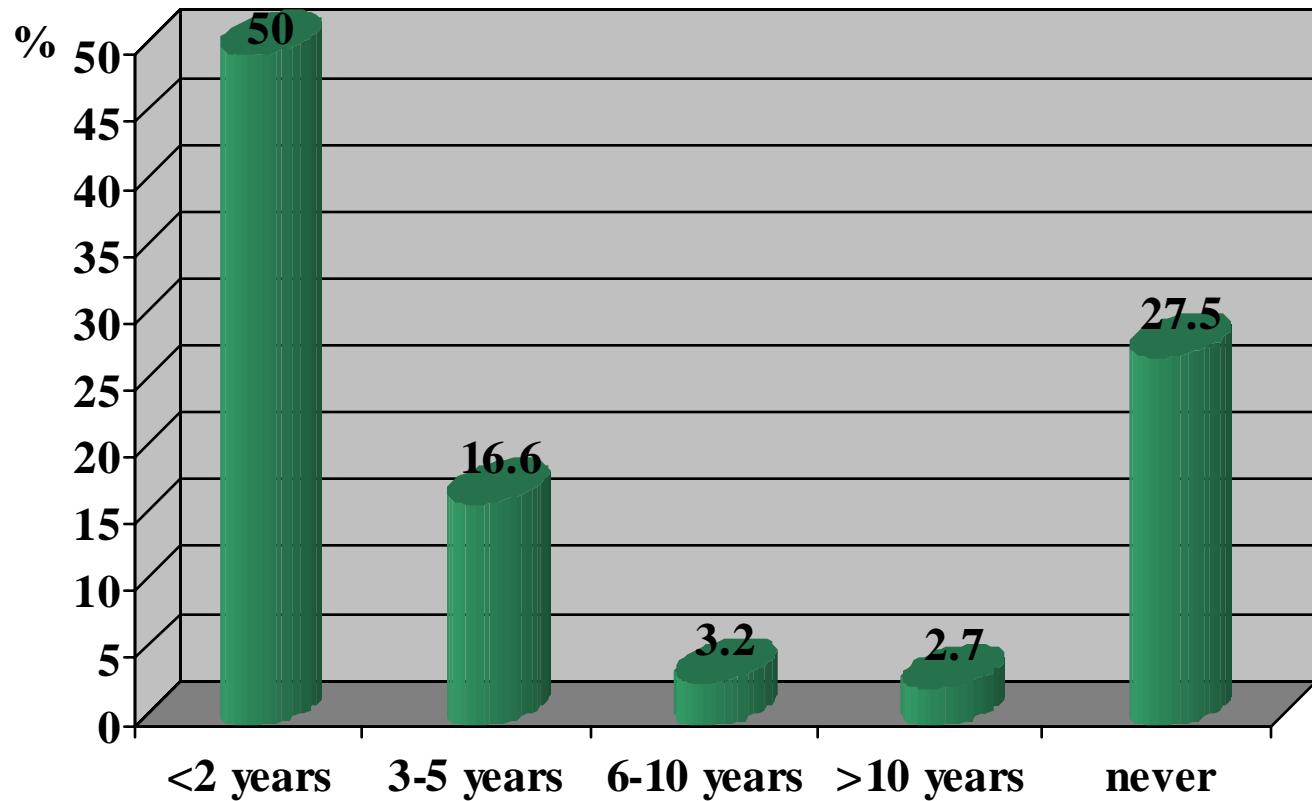
SUBJECTS AND METHODS

SPSS and Latent Gold :
- **classification tree analysis;**
- **latent class analysis;**
- **binary logistic regression analysis.**
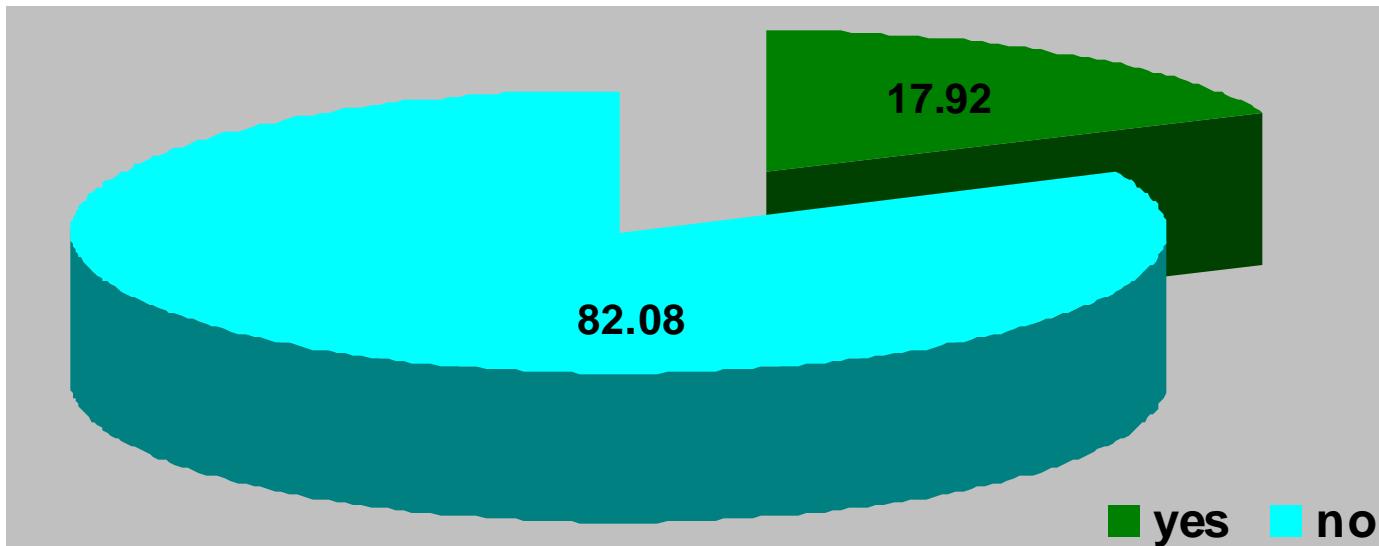
RESULTS (I)
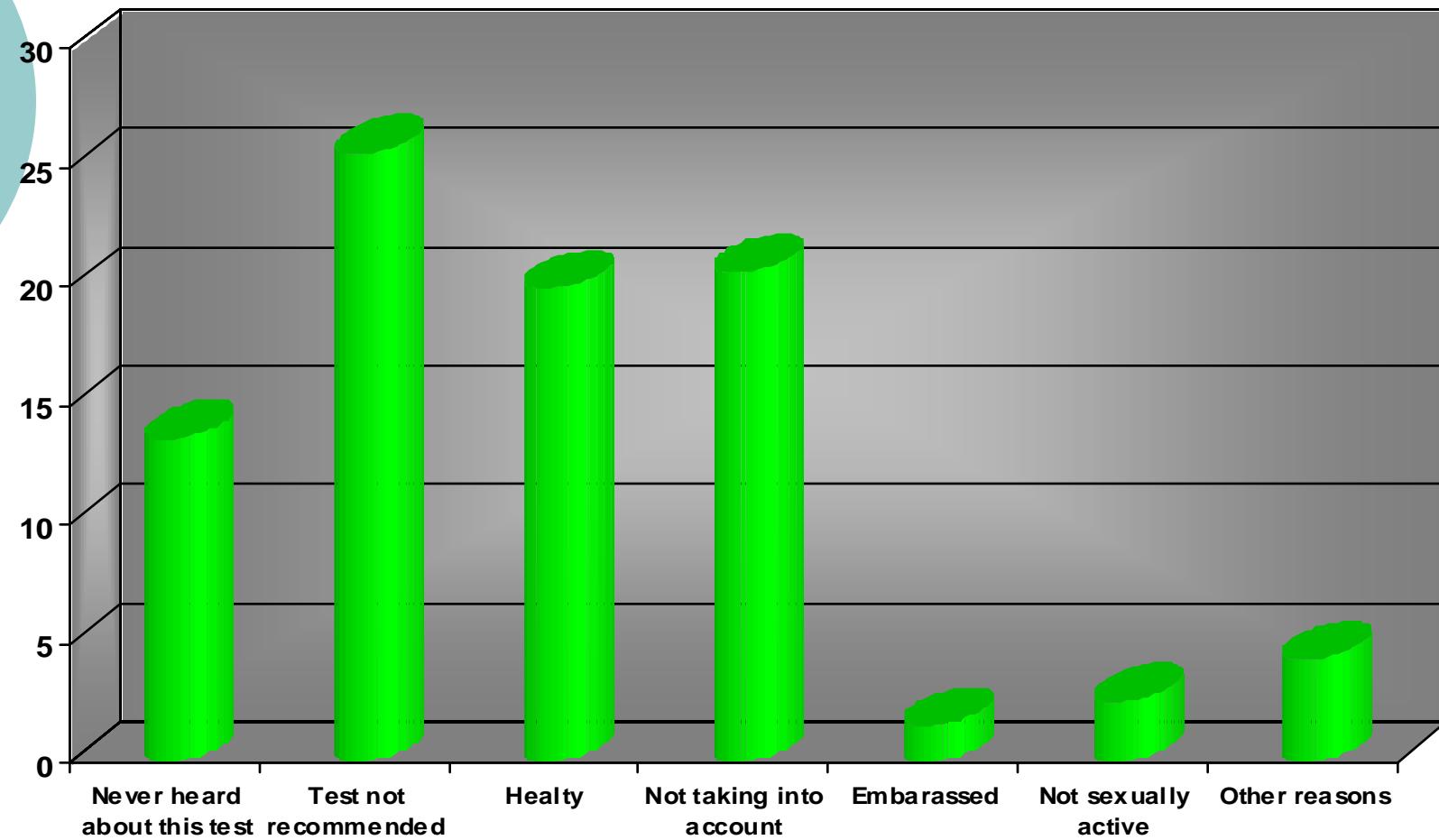
Statistical distribution (%) of women according to the time of the last gynaecologic exam

RESULTS (II)

17.92

82.08

yes no

**Statistical distribution of women (%)
as a function of taking a PAP test**

RESULTS (III)

Reasons women have never taken a PAP test
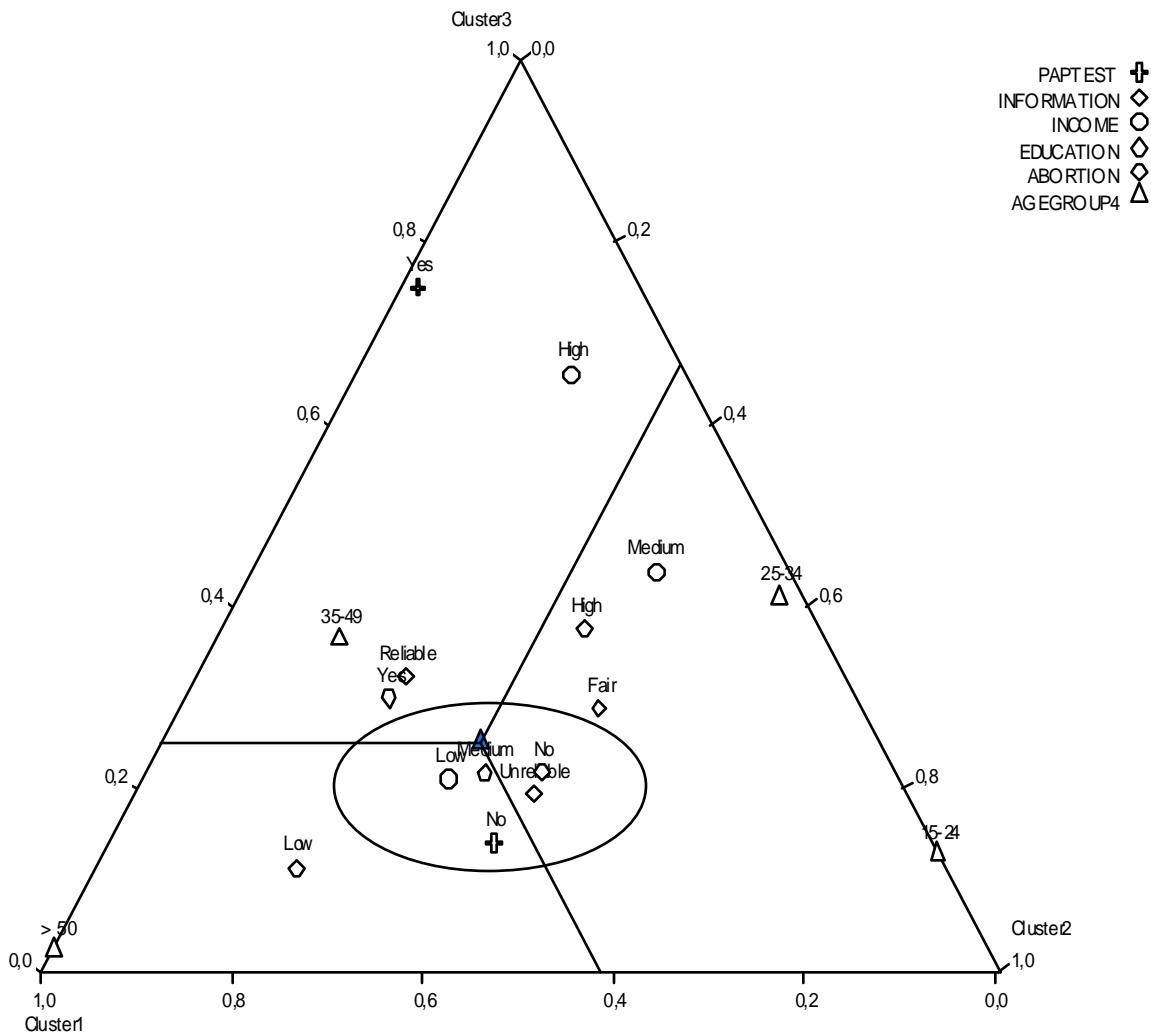
RESULTS (IV)

Factors which influence women decision regarding the PAP test

Variables, labels and values		Count	%
PAPTEST	*No*	696	82.08%
PAP Test history	*Yes*	152	17.92%
INFORMATION	*Unreliable*	471	55.67%
Information sources	*Fair*	14	1.65%
regarding sexual health	*Reliable*	361	42.67%
INCOME	*Low*	711	83.84%
Income level	*Medium*	128	15.09%
	High	9	1.06%
EDUCATION	*Low*	176	20.75%
Education level	*Medium*	379	44.69%
	High	293	34.55%
ABORTION	*No*	501	59.08%
Abortion history	*Yes*	347	40.92%
AGE GROUP	*15-24*	129	15.21%
Age group (4 groups)	*25-34*	241	28.42%
	35-49	254	29.95%
	> 50	224	26.42%

RESULTS (V)
Latent class analysis
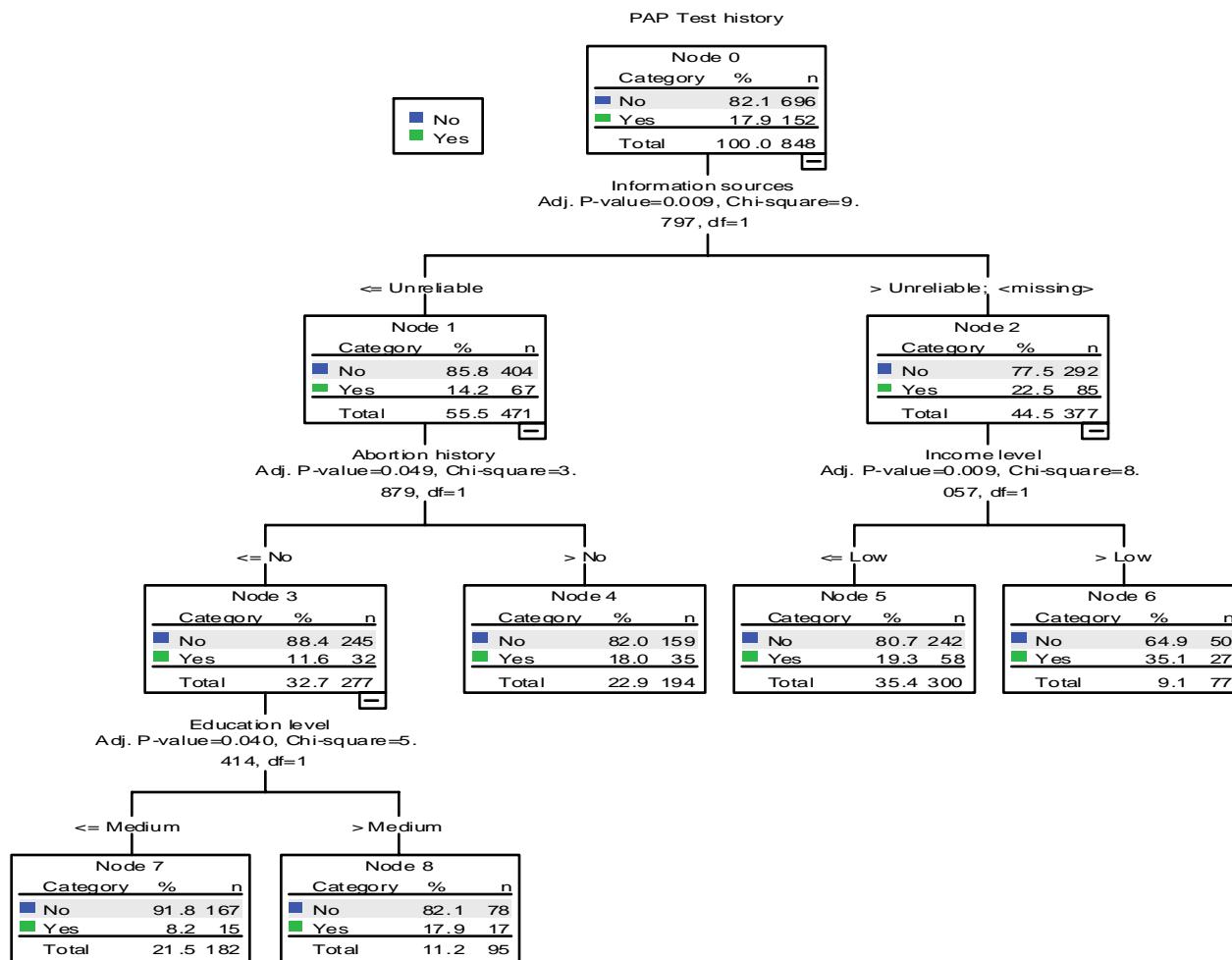
RESULTS (VI)
Binary logistic regression analysis

Variables	B	S.E.	Wald	df	Sig.	Exp(B)	95.0% C.I. for EXP(B)	
							Lower	Upper
INFORMATION			7.042	2	.030			
INFORMATION(1)	.459	.691	.442	1	.506	1.583	.409	6.127
INFORMATION(2)	.490	.186	6.942	1	**.008**	**1.632**	**1.134**	**2.348**
INCOME			3.997	2	.136			
INCOME(1)	.306	.239	1.649	1	.199	1.358	.851	2.168
INCOME(2)	1.147	.702	2.673	1	.102	3.150	.796	12.467
ABORTION(1)	.390	.184	4.495	1	**.034**	**1.477**	**1.030**	**2.120**
EDUCATION			5.687	2	.058			
EDUCATION(1)	.365	.273	1.784	1	.182	1.441	.843	2.461
EDUCATION(2)	.653	.281	5.390	1	**.020**	**1.922**	**1.107**	**3.335**
Constant	-2.413	.268	80.798	1	.000	.090		

RESULTS (VII)
Classification tree analysis

PAP Test history

Node 0

Category	%	n
■ No	82.1	696
■ Yes	17.9	152
Total	100.0	848

Legend:
■ No
■ Yes

Information sources
Adj. P-value=0.009, Chi-square=9.
797, df=1

<= Unreliable

Node 1

Category	%	n
■ No	85.8	404
■ Yes	14.2	67
Total	55.5	471

> Unreliable; <missing>

Node 2

Category	%	n
■ No	77.5	292
■ Yes	22.5	85
Total	44.5	377

Abortion history
Adj. P-value=0.049, Chi-square=3.
879, df=1

Income level
Adj. P-value=0.009, Chi-square=8.
057, df=1

<= No

Node 3

Category	%	n
■ No	88.4	245
■ Yes	11.6	32
Total	32.7	277

> No

Node 4

Category	%	n
■ No	82.0	159
■ Yes	18.0	35
Total	22.9	194

<= Low

Node 5

Category	%	n
■ No	80.7	242
■ Yes	19.3	58
Total	35.4	300

> Low

Node 6

Category	%	n
■ No	64.9	50
■ Yes	35.1	27
Total	9.1	77

Education level
Adj. P-value=0.040, Chi-square=5.
414, df=1

<= Medium

Node 7

Category	%	n
■ No	91.8	167
■ Yes	8.2	15
Total	21.5	182

> Medium

Node 8

Category	%	n
■ No	82.1	78
■ Yes	17.9	17
Total	11.2	95

CONCLUSIONS

• **most probably, the high cervical cancer incidence and mortality are due to the women non-participation in screening programmes for early cancer detection**;
• **their information and education in order to participate in these programmes is urgently necessary.**