

CHAPTER 9

HEALTH BEHAVIORS

Cancer is a leading cause of death in women, in both the developed and developing world. Among reproductive system cancers, breast and cervical cancer are the most common. A substantial proportion of these cancers in Eastern Europe, the Caucasus, and Central Asia are detected at an advanced and incurable stage due to the low perception of being at risk, lack of awareness of the symptoms of the disease, a fatalistic attitude towards cancer generally, lack of information or mistrust about the possibility of a cure, lack of or inefficient screening services, and a low priority for women's health issues among the governments of the region. Generally, women of the region have limited access to preventive health services, mainly because of providers' failure to recommend them, and lack of awareness about screening. Among these services, cervical cancer screening is particularly deficient.

Other potential health risks for women include the use of tobacco and alcohol. In recent years transnational tobacco companies have focused many of their efforts, including manufacturing, distribution and advertising, in less developed countries and Eastern Europe, where smoking-related diseases are on the increase. The prevalence of smoking is rising most rapidly among young women in many countries, including those of Eastern Europe. A recent worldwide review estimated that smoking prevalence in Europe and Central Asia was the highest in the world at 34% overall (53% among males and 16% among females) (Jha P et al., 2002). As well as causing lung cancer and cardiovascular diseases, smoking poses risks specific to women. It increases both the risk of cervical cancer and the risks associated with taking the contraceptive pill. It also affects women's reproductive health by increasing the risk of

early menopause, miscarriage, and low birthweight babies.

To examine these health issues, the CDC-assisted Reproductive Health Surveys (RHS) and the DHS survey in Armenia included questions regarding health behaviors. In seven countries, the RHS contained questions about routine gynecologic visits and cigarette smoking. Questions about breast self-exam, cervical cancer screening, diagnosis or treatment of pelvic inflammatory disease, and self-reports of vaginal discharge or genital ulcers and alcohol use were included in most of the surveys. Trend data are available for Romania, where two RHS surveys were conducted, one in 1993 and the second in 1999. The 1999 RHS survey in Romania also included a sample of men of reproductive age and those data are presented as well.

9.1 Prevalence of Routine Gynecologic Visits

Patient attitudes and behaviors regarding health care visits are important determinants of whether they receive routine screening, including cervical and breast cancer screening. Important barriers that can reduce individual utilization of routine health visits include: low perception of being at risk, a fatalistic attitude toward cancer generally, low awareness about benefits of screening, perceived discomfort, and fear of positive results. Lack of knowledge about health-related issues, noncompliance with doctors' recommendations, miscommunication between patient and provider, and socio-economic and geographic factors are also potential barriers to preventive care. Other factors limiting access to preventive health care visits include limited resources within the health system, inadequate number and/or maldistribution of health providers, and physician barriers

(knowledge, attitudes, and beliefs regarding routine screening, lack of time or expertise, and restrictive hours of service availability).

In the U.S. and Western Europe, it is recommended that women have a routine gynecologic examination every year after age 18, or earlier if sexually experienced. In several countries of Eastern Europe and the Caucasus region, a substantial proportion of sexually experienced women reported that they had never had routine gynecologic exams, or, they did not have such exams in the last 12 months (Tables 9.1.1 and 9.1.2). In seven RHS surveys, 58% to 93% of sexually experienced women reported that a gynecologist had ever examined them during a routine exam, but only 22% to 70% had been examined in the previous 12 months. Prevalence of routine exams within the last year was highest in Eastern Europe (65%–70%), with the exception of Romania (36%). The Caucasus region had much lower rates, 22% in Azerbaijan and 30% in Georgia. Rural residents, younger women, never-married women, and those with lower levels of education were less likely to have had preventive gynecologic exams. Older women and, with the exception of Ukraine, rural women were less likely to have done so in the last year. The low prevalence of routine exams could have a substantial negative impact on screening, counseling, and health education.

Between 1993 and 1999 in Romania, more women adopted the practice of having a routine gynecologic exam, increasing from 56% to 70%, and about half of these women were using gynecologic preventive care services yearly (27% to 36%). The increase was visible throughout various subgroups but young adult women, particularly those never married, reported greater rates of increase in annual routine gynecologic exams (Serbanescu F et al., 2001).

Table 9.1.1 Percentage of Women Who Ever Had a Routine Gynecologic Exam by Selected Characteristics Among Sexually Experienced Women Aged 15–44 Eastern Europe and Eurasia: A Comparative Report									
Characteristic	Eastern Europe			Caucasus					
	Czech Rep. 1993	Moldova 1997	Romania 1999	Russia 1999*	Ukraine 1999	Armenia 2000	Azerbaijan 2001	Georgia 1999	
Total	92	93	70	91	92	71	58	72	
Residence									
Urban	93	95	77	*	93	69	61	76	
Rural	91	91	59	*	91	74	53	67	
Age Group									
15–19	60	79	43	88	80	9	28	46	
20–24	89	90	59	89	89	52	46	65	
25–29	98	92	69	92	93	86	58	73	
30–34	98	95	74	90	95	94	57	73	
35–39	99	95	77	92	95	94	64	76	
40–44	98	95	80	93	95	93	63	77	
Marital Status									
Currently Married	97	93	72	91	93	98	57	72	
Previously Married	98	91	73	91	94	95	60	67	
Never Married	69	90	59	90	86	6	†	†	
Education Level									
Secondary Incomplete	90	90	64	87	85	U	51	54	
Secondary Complete	94	92	74	90	91	U	55	70	
Technicum	‡	95	‡	92	93	79	65	74	
Postsecondary	95	96	80	92	95	68	69	79	
Employment Status									
Currently Employed	94	93	77	92	94	U	64	76	
Not Currently Employed	86	91	63	89	89	U	55	70	

* Data for Russia pertain to three primarily urban areas as described in Chapter 2.

† Fewer than 25 cases in this category.

‡ Technicum, specific to former Soviet Union countries, does not exist in the Czech Republic or Romania.

U = Unavailable.

Table 9.1.2
Percentage of Women Who Had a Routine Gynecologic Exam Within the Last Year by Selected Characteristics
Among Sexually Experienced Women Aged 15–44
Eastern Europe and Eurasia: A Comparative Report

Characteristic	Eastern Europe					Caucasus		
	Czech Rep. 1993*	Moldova 1997	Romania 1999	Russia 1999†	Ukraine 1999	Armenia 2000	Azerbaijan 2001	Georgia 1999
Total	66	70	36	65	65	21	22	30
Residence								
<i>Urban</i>	67	71	41	†	65	19	26	33
<i>Rural</i>	62	68	27	†	65	24	17	26
Age Group								
15–19	47	66	31	74	66	6	21	35
20–24	70	76	40	67	69	32	26	45
25–29	74	73	39	65	68	39	26	37
30–34	69	72	40	64	66	32	22	30
35–39	64	68	35	61	63	20	21	25
40–44	64	61	29	65	59	15	17	16
Marital Status								
<i>Currently Married</i>	70	70	36	64	65	31	23	31
<i>Previously Married</i>	65	62	33	66	64	11	17	18
<i>Never Married</i>	48	73	39	70	65	2	‡	21
Education Level								
<i>Secondary Incomplete</i>	64	63	31	64	61	U	18	22
<i>Secondary Complete</i>	69	66	39	63	62	U	20	28
<i>Technicum</i>	§	76	§	67	66	23	26	28
<i>Postsecondary</i>	64	77	47	63	66	21	32	36
Employment Status								
<i>Currently Employed</i>	67	71	41	67	68	U	25	29
<i>Not Currently Employed</i>	62	65	31	60	57	U	21	30

* Data for Czech Republic are only for women who have been sexually active within the past 12 months and reported a routine gynecologic exam "yearly."

† Data for Russia pertain to three primarily urban areas as described in Chapter 2.

‡ Fewer than 25 cases in this category.

§ Technicum, specific to former Soviet Union countries, does not exist in the Czech Republic or Romania.

U = Unavailable.

9.2 Breast Self-Exam

Methods for early detection of breast cancer that can be used as screening tests include breast self-examination (BSE), clinical breast examination (CBE), and mammography (Last et al., 1986). While clinical trials have shown that mammographic screening can reduce breast cancer mortality in women over age 50 by 25%, there is insufficient evidence at the present time that BSE or CBE alone are effective in reducing mortality and morbidity from breast cancer (Latthe PM and Shafi MI, 2001). However, in populations where mammography is not readily available or is too

expensive (and thus unsuitable to be used in population-wide screening), BSE and CBE are responsible for detection of breast cancer in most women (Aubard Y et al., 2002; Rebentish DP et al., 1995). More studies are needed to assess if these screening tests should be promoted or not in settings where the majority of women lack access to mammography. BSE is a very simple self-care procedure that can detect early modifications of the breast and can be performed by women in the privacy of their homes after minimal instruction. Appropriate follow-up by a physician should be available and accessible for women who detect breast changes through self-examination.

Five RHS and one DHS surveys explored the level of awareness about BSE and how often the exam was performed. Overall, more than 60% of sexually experienced women in Eastern Europe had ever heard about this technique, but far fewer had ever performed BSE (Table 9.2). Levels of both awareness and usage were lower in the Caucasus; women in the Czech Republic (78%) were the most likely to have heard of BSE, while women in Azerbaijan (30%) were the least likely to have done so.

Awareness of BSE was slightly higher among urban than among rural residents and among women with complete secondary or postsecondary education. Awareness of BSE was higher among women who underwent routine gynecological exams compared to those who had never made such visits.

Overall, only 10% to 50% of women practiced BSE. The practice of BSE was most common among women in the Czech Republic and least

Table 9.2
Percentage of Women Who Are Aware of and Use Breast Self Exam by Selected Characteristics
Among Sexually Experienced Women Aged 15–44
Eastern Europe and Eurasia: A Comparative Report

Characteristic	Eastern Europe						Caucasus					
	Czech Rep. 1993		Moldova 1997		Romania 1999		Armenia 2000		Azerbaijan 2001		Georgia 1999	
	% Aware	% Ever Used	% Aware	% Ever Used	% Aware	% Ever Used	% Aware	% Ever Used	% Aware	% Ever Used	% Aware	% Ever Used
Total	78	50	69	48	61	39	15	9	30	10	47	23
Residence												
Urban	79	52	73	51	71	48	17	9	37	13	56	29
Rural	77	48	65	45	43	23	13	8	21	6	36	16
Age Group												
15–19	41	12	44	18	40	23	4	2	11	3	19	2
20–24	64	32	58	36	52	30	13	6	20	4	31	9
25–29	81	48	71	50	60	37	17	10	27	9	43	18
30–34	85	58	73	52	66	44	16	11	31	11	51	24
35–39	91	66	73	51	68	44	21	12	36	11	52	28
40–44	92	70	77	57	66	44	18	11	32	15	58	34
Marital Status												
Currently Married	83	56	71	50	60	39	18	11	30	10	47	23
Previously Married	83	54	67	42	60	35	17	11	28	8	47	22
Never Married	53	24	57	29	70	41	8	3	*	*	*	*
Education Level												
Secondary Incomplete	70	43	55	35	44	24	U	U	20	5	16	6
Secondary Complete	87	59	65	41	72	48	U	U	26	8	37	14
Technicum	†	†	78	59	†	†	18	11	36	13	54	26
Postsecondary	91	63	84	64	92	68	25	13	51	24	64	36
Employment Status												
Currently Employed	82	54	72	51	73	48	U	U	39	15	62	35
Not Currently Employed	67	39	62	40	49	29	U	U	27	9	42	19
Routine Gynecologic Exam												
Ever Had	81	53	71	49	68	46	U	U	34	13	50	26
Never Had	46	21	51	31	46	24	U	U	24	6	39	16

* Fewer than 25 cases in this category.

† Technicum, specific to former Soviet Union countries, does not exist in the Czech Republic or Romania.

U = Unavailable.

common among Azeri women. Women living in rural areas, those with less than complete secondary education, and young adults were less likely to practice BSE. Prevalence of BSE was higher among those who underwent routine gynecologic exams, compared with women without routine visits to a gynecologist. However, the fact that from 47% to 87% of women who had at least one routine gynecological visit did not report routine BSE suggests that health care providers did not adequately cover this preventive practice.

For Romania, between 1993 and 1999, the proportion of women who reported ever having done BSE increased by at least a third (from 23% to 39%). The rate of increase did not vary significantly by background characteristics.

9.3 Cervical Cancer Screening

Cervical cancer is the second most common cancer of women, with almost 450,000 new cases diagnosed each year worldwide (WHO, 1993). It is the most frequent cancer of women in developing countries, where 80% of cervical cancers are diagnosed (Parkin DM et al., 1993). Age-adjusted incidence rates range from 5–42 cases per 100,000 women, with high rates in Latin America, Africa, and Southeast Asia and lower rates in North America, Western Europe, Australia, and Israel. For 1994–1997, the age-adjusted mortality due to cancer of the cervix in Romania was 10.5 per 100,000, the highest rate in Europe and the fourth highest among 45 countries that report cancer statistics to the WHO, surpassed only by cervical cancer mortality reported by Mexico, Venezuela, and Chile (WHO, 1999).

In developed countries the incidence of in situ cervical cancer is increasing, whereas invasive cancer and cervical cancer mortality are declining. Much of the decline in mortality has been attributed to widespread use of

cervical cancer screening (Papanicolaou smear test), resulting in detection at an earlier and therefore more curable stage with the treatment of premalignant lesions. Data from large screening programs have shown that annual Pap smear screening reduces the probability of developing invasive cancer by 93%, whereas screening every 3 years reduces the probability by 91%, and screening every 5 years reduces it by 84% (Miller AB, 1986). Based on these estimates, experts recommend that women who are sexually active, or at least 18 years old, should have a Pap test annually or at least once every three years. Women over age 65 who have been regularly screened with normal results have the option of reducing the frequency of screening (ACOG, 1995; U.S. Preventive Services Task Force, 1996).

Risk factors for cervical cancer include a history of multiple sexual partners, early onset of sexual intercourse, smoking, infection with the human immunodeficiency virus, and infection with a certain serotype of the human papilloma virus.

Although the validity of self-reported rates of Pap testing cannot be established without examining medical records, survey results are often used to estimate the extent of cervical screening in the general population. The RHS surveys for Georgia, Moldova, Azerbaijan, and Romania included a series of questions for female respondents regarding Pap test history to determine if they had ever had a Pap test and, if so, when they had their most recent test.

As shown in Table 9.3 and Figure 9.3.1, among sexually experienced women the percentages who reported ever having a Pap test were low, ranging from 43% in Moldova to just 2% in Azerbaijan. Levels in Georgia and Romania were 4% and 17% respectively. The prevalence of cervical cancer screening was generally very low and does not allow the study

of potential determinants of preventive practices in the Caucasus region. In Romania and Moldova, Pap smear prevalence was higher among women who were ever married or employed, and increased slightly with level of education. It is worth noting, however, that, of women who have ever had gynecologic check-ups, few were ever screened for cervical cancer: 3% in Azerbaijan, 5% in Georgia, 23% in Romania, and 46% in Moldova. Routine gynecologic visits should be viewed as opportunities to educate patients about

healthy lifestyle choices and to promote appropriate screening for preventable diseases, such as cervical cancer.

In general, employed women, those residing in urban areas, and those with postsecondary education were more likely to report having had a Pap test within the past year than other subgroups. The exception is Moldova, where rural women were slightly more likely to report having had a Pap test in the last year.

Table 9.3 Percentage of Women Who Had Cervical Cancer Screening History by Selected Characteristics Among Sexually Experienced Women Aged 15–44 Eastern Europe and Eurasia: A Comparative Report								
Characteristic	Eastern Europe				Caucasus			
	Moldova, 1997		Romania, 1999		Azerbaijan, 2001		Georgia, 1999	
	% Within Last Year	% Ever	% Within Last Year	% Ever	% Within Last Year	% Ever	% Within Last Year	% Ever
Total	23	43	7	17	1	2	1	4
Residence								
Urban	22	45	9	21	1	2	2	5
Rural	25	41	4	10	*	1	1	3
Age Group								
15–19	9	11	3	4	0	0	*	*
20–24	18	24	4	6	1	1	1	2
25–29	23	40	7	15	1	1	1	3
30–34	25	50	9	19	1	2	1	4
35–39	23	50	10	23	1	2	2	5
40–44	30	55	8	27	1	3	1	5
Marital Status								
Currently Married	24	44	8	19	1	2	1	4
Previously Married	18	46	6	14	1	2	1	4
Never Married	11	16	5	8	†	†	†	†
Education Level								
Secondary Incomplete	20	34	5	12	*	1	0	*
Secondary Complete	20	40	8	19	*	1	1	3
Technicum	29	50	‡	‡	1	2	1	4
Postsecondary	26	48	14	27	2	4	2	6
Employment Status								
Currently Employed	25	46	10	22	1	3	2	6
Not Currently Employed	17	34	5	12	1	2	1	3
Routine Gynecologic Exam								
Ever Had	25	46	10	23	1	3	2	5
Never Had	1	6	*	3	0	0	0	*

* Less than 0.5%

† Fewer than 25 cases in this category.

‡ Technicum, specific to former Soviet Union countries, does not exist in Romania.

Figure 9.3.1
Prevalence of Cervical Cancer Screening (Pap Test)
Sexually Experienced Women Aged 15–44—Selected RHS Surveys
Eastern Europe and Eurasia: A Comparative Report

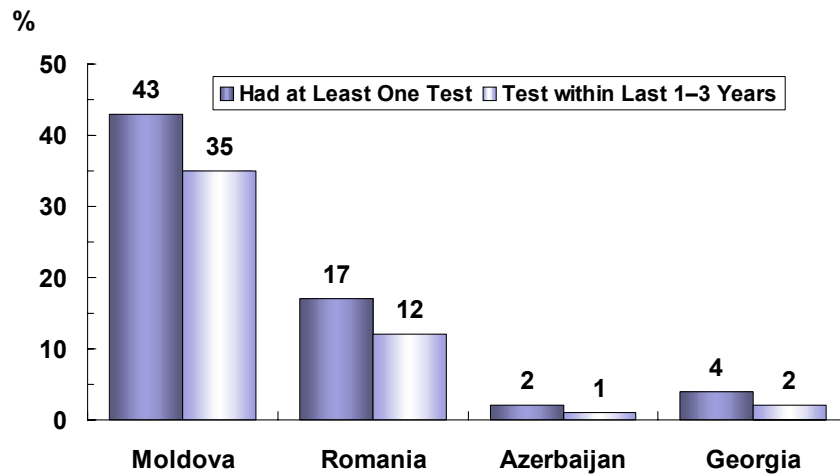
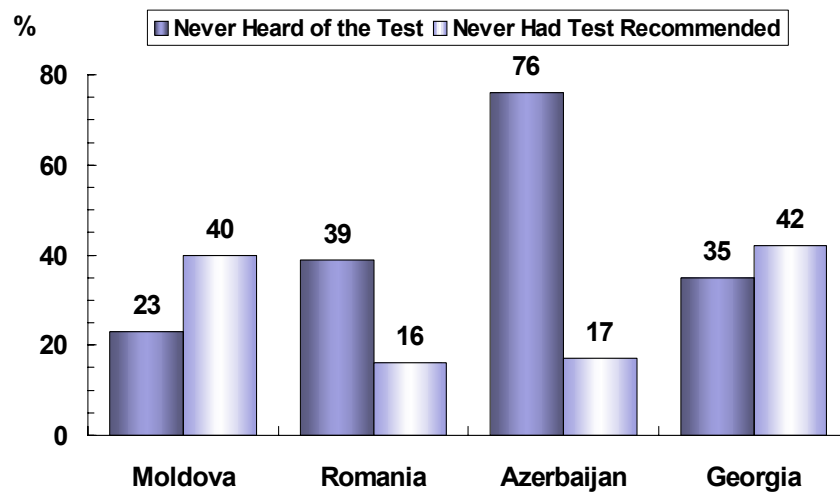


Figure 9.3.2
Main Reasons for Never Having a Cervical Cancer Screening (Pap Test)
Sexually Experienced Women Aged 15–44—Selected RHS Surveys
Eastern Europe and Eurasia: A Comparative Report



The most commonly given reasons for not having a test were lack of awareness (23%–70%) and lack of recommendation of the test by a health provider (16%–42%) (Figure 9.3.2). These findings reinforce the perception that there is a lack of awareness of gynecologic screening procedures among reproductive age women in Eastern Europe and the Caucasus, and a need for sustained educational campaigns for the public and changes in the practice of health care providers.

The proportion of sexually experienced women in Romania who reported at least one cervical cancer-screening test actually decreased between 1993 and 1999 from 28% to 17%. The proportion of women recently tested (within the past year) also decreased (from 13% to 5%). Although the proportion of respondents who reported recent gynecologic exams (within the past 3 years) increased recently from 35% to 50%, the content of these visits, at least with regard to pap-smear practices, did not improve (data not shown). On the contrary, cervical cancer screening deteriorated and lack of awareness of the Pap smear test appears to be a major determinant of this decline. Health information campaigns aimed at increasing public awareness about cervical cancer danger and its risk factors may help substantially to increase the demand for screening, even in the absence of provider recommendation.

9.4 Prevalence of Pelvic Inflammatory Disease and STI Symptoms

In six of the seven countries, all women were asked, “Has a doctor ever told you that you have had (selected health problems)?” These problems included pelvic inflammatory disease (translated as infections of the tubes or the uterus). Table 9.4.1 shows the responses from

sexually experienced women in Moldova, Romania, the areas surveyed in Russia, Ukraine, Azerbaijan, and Georgia.

These results provide minimum estimates of the true lifetime diagnosis of these health problems in the population of women of childbearing age, since self-reporting of health conditions implies that women had access to health care facilities, had visited these facilities, had been told by a physician about the existence of this health condition, and understood the diagnosis they received. Thus, the self-reported occurrence of health problems among different subgroups should be interpreted with caution because background characteristics may affect both the access to health care system, knowledge of conditions, and reporting. There are several other important limitations of survey reports on health conditions: 1) survey reports are lifetime estimates and some differences in prevalence of health conditions (e.g., prevalence by age group) are likely to be confounded by the length of exposure (e.g., older women have been exposed to the risk of developing a specific health problem for a longer time); 2) they do not reflect current health status; and 3) they cannot be temporally associated with other events. For all these reasons, the survey data on pelvic inflammatory disease (PID) among women may serve only as proxy estimates, in the absence of official statistics based on medical records or hospital discharge data.

On average, about one in four women had been told by a doctor that she had PID (17% to 44%). Women in Ukraine reported the highest lifetime PID incidence. The proportion of respondents reporting these infections increased directly with age. Except in Ukraine, urban women were more likely to report a diagnosis of PID than rural women. PID was almost non-existent among virgins (data not

Table 9.4.1
Percentage of Women Who Were Ever Diagnosed with PID by a Physician by Selected Characteristics
Among Sexually Experienced Women Aged 15–44
Eastern Europe and Eurasia: A Comparative Report

Characteristic	Eastern Europe				Caucasus	
	Moldova 1997	Romania 1999	Russia 1999*	Ukraine 1999	Azerbaijan 2001	Georgia 1999
Total	26	31	17	44	42	25
Residence						
<i>Urban</i>	29	34	*	38	44	27
<i>Rural</i>	22	25	*	46	40	24
Age Group						
15–19	13	11	8	22	18	8
20–24	19	18	13	37	35	19
25–29	25	31	20	43	41	23
30–34	29	35	17	47	44	25
35–39	28	38	18	50	48	31
40–44	30	37	21	49	42	30
Marital Status						
<i>Currently Married</i>	26	32	18	45	42	26
<i>Previously Married</i>	29	38	18	52	41	23
<i>Never Married</i>	14	18	12	26	†	†
Education Level						
<i>Secondary Incomplete</i>	24	28	15	43	38	16
<i>Secondary Complete</i>	23	34	13	38	41	25
<i>Technicum</i>	29	‡	17	48	47	28
<i>Postsecondary</i>	29	31	22	44	46	27
Employment Status						
<i>Currently Employed</i>	26	35	18	44	43	26
<i>Not Currently Employed</i>	25	26	16	43	42	25
Routine Gynecologic Exam						
<i>Ever Had</i>	27	38	18	45	65	32
<i>Never Had</i>	12	12	12	26	11	9
Number of Lifetime Partners						
1	23	28	14	§	42	25
2	31	33	15	§	42	35
3+	35	39	20	§	59	25

* Data for Russia pertain to three primarily urban areas as described in Chapter 2.

† Fewer than 25 cases in this category.

‡ Technicum, specific to former Soviet Union countries, does not exist in Romania.

§ Data on lifetime number of sexual partners were not collected in Ukraine.

shown) and increased with the number of lifetime sexual partners, from a range of 14% to 42% among monogamous women to a range of 20% to 59% among those with three or more sexual partners.

In an attempt to assess the prevalence of symptoms associated with sexually transmitted infections (STIs) among the general population, five of the seven RHS

included a series of questions about recent history of vaginal discharge and the presence or absence of any genital sores or ulcers. Table 9.4.2 shows the reported prevalence of vaginal discharge and genital sores/ulcers among sexually experienced women aged 15–44 during the 12 months prior to interview. This information may be useful to decide if a syndromic approach for the case management of STIs among the female population is

warranted. Syndromic case reports do not require laboratory diagnostic tests and are based on the identification of a combination of symptoms and signs (syndromes) suggestive of selected STIs. Syndromic case management combines the identified syndromes with knowledge about the most common causative organisms and their antibiotic susceptibility.

Several important limitations, however, reduce the usefulness of the syndromic approach for assessing STI incidence and prevalence or for monitoring the impact of STI prevention programs. First, STIs do not cause a high proportion of vaginal discharge cases and genital ulcers are often an indication of recurrent herpes virus infection, which may have been acquired years before. Second, a high proportion of STIs are asymptomatic in women. Third, syndromic case definitions are not pathogen-specific (WHO and UNAIDS, 1999). Fourth, treatment based on syndromic case definitions leads inevitably to over-treatment, promotion of antimicrobial resistance, and the social costs related to mislabeling individuals as infected with an STI. These drawbacks should be carefully balanced against the costs associated with STI complications, continued transmission and potential increased transmission of HIV infection, and medical costs such as laboratory testing and clinician diagnosis (van Dam CJ et al., 1998).

As shown in Table 9.4.2, the percentage of women reporting abnormal vaginal discharge in the past year varied across the five countries surveyed, from a low of 19% in Ukraine to a high of 32% in Azerbaijan. There was no statistically significant difference between urban and rural dwellers. Age had disparate effects on reported abnormal vaginal discharge across countries. Reports were highest among 15–24 year olds in Romania, 15–34 year olds

in Ukraine, 20–29 year olds in the areas surveyed in Russia, and 20–34 year olds in Georgia and Azerbaijan. Vaginal discharge reports increased with the number of sexual partners.

Azerbaijan, Romania, and Georgia (2%, 3%, and 5%, respectively) had very low reports of genital sores/ulcers, while Ukraine had the highest (13%). Reports of genital sores were roughly equal among urban and rural dwellers.

9.5 Cigarette Smoking

Tobacco is a potent human carcinogen that has been shown to be related to many cancers, including those of the respiratory and digestive tracts, bladder, cervix and kidney. Worldwide, cigarette smoking accounts for 87% of lung cancer deaths and 30% of all cancer deaths. Smoking is also a risk factor for atherosclerosis, which is a major risk factor for heart attacks, strokes, and blood clots of the legs and lungs. Smoking also contributes to asthma, emphysema, pneumonia, and osteoporosis. Maternal smoking has been linked to low birthweight babies, pre-term deliveries, miscarriages, sudden infant death syndrome, and respiratory problems of infants (DiFranza JR and Lew RA, 1996).

Among the countries of Eastern Europe and the former Soviet Union, Poland, Romania and Czech Republic report the highest smoking prevalence among women, while Hungary reports the highest prevalence among adult men (Piha T et al., 1993). Tobacco use in Eastern Europe has increased since 1990, concurrent with the transition toward market economies and the arrival of the international tobacco industry whose promotional campaigns for their products have thrived in the absence of legislative regulations. Facing increasing restrictions in the U.S. and Western Europe, transnational tobacco companies have

Table 9.4.2
Percentage of Women Who Had an Abnormal Vaginal Discharge or Genital Sores or Ulcers in the Past Year
by Selected Characteristics
Among Sexually Experienced Women Aged 15–44
Eastern Europe and Eurasia: A Comparative Report

Characteristic	Eastern Europe						Caucasus					
	Romania, 1999		Russia, 1999*		Ukraine, 1999		Armenia, 2000		Azerbaijan 2001		Georgia 1999	
	Vaginal Discharge	Genital Sores	Vaginal Discharge	Genital Sores	Vaginal Discharge	Genital Sores	Vaginal Discharge	Genital Sores	Vaginal Discharge	Genital Sores	Vaginal Discharge	Genital Sores
Total	23	3	22	11	19	13	23	9	32	2	24	5
Residence												
Urban	23	4	*	*	19	13	19	8	32	2	25	5
Rural	22	3	*	*	19	14	27	10	32	1	23	5
Age Group												
15–19	28	2	25	12	22	8	24	4	28	0	14	3
20–24	28	4	29	16	23	14	34	13	36	1	27	6
25–29	24	4	28	13	22	15	32	15	36	3	26	4
30–34	24	5	21	10	21	15	28	12	37	2	26	5
35–39	21	3	17	8	15	12	19	8	31	2	24	5
40–44	15	2	15	7	12	12	15	5	23	1	20	4
Marital Status												
Currently Married	22	3	22	11	20	14	23	9	32	2	25	5
Previously Married	21	4	20	8	13	10	18	5	33	†	18	2
Never Married	27	2	23	10	18	9	‡	‡	‡	‡	‡	‡
Education Level												
Secondary Incomplete	23	3	21	10	17	15	U	U	32	1	15	5
Secondary Complete	21	3	20	10	16	12	U	U	32	2	25	4
Technicum	§	§	22	11	20	14	22	10	32	2	25	6
Postsecondary	24	4	24	10	19	12	17	6	34	2	26	5
Employment Status												
Currently Employed	23	4	22	10	18	12	U	U	31	2	25	4
Not Currently Employed	23	3	22	13	21	15	U	U	33	2	24	5
Routine Gynecologic Exam												
Ever Had	25	4	22	11	19	13	U	U	38	2	28	6
Never Had	18	2	17	8	17	8	U	U	24	1	14	2
Number of Lifetime Partners												
1	21	3	19	10			U	U	32	2	24	5
2	26	5	18	11			U	U	38	1	26	1
3+	27	3	26	12			U	U	43	3	31	6

* Data for Russia pertain to three primarily urban areas as described in Chapter 2.

† Less than 0.5%.

‡ Fewer than 25 cases in this category.

§ Technicum, specific to former Soviet Union countries, does not exist in Romania.

|| Data on lifetime number of sexual partners were not collected in Ukraine.

U = Unavailable.

been expanding rapidly through local manufacturing and aggressive advertising in Eastern Europe and the former Soviet Union. Currently, tobacco control policies in former communist countries are neither comprehensive nor strongly enforced. Restrictions on tobacco advertising and

promotion have been recently imposed in some countries, but no systematic efforts have been made toward ensuring prohibition of smoking in public places, preserving smoke-free environments, restricting cigarette sales to children and teenagers, developing health promotion campaigns, or promoting smoking

cessation services (NATIONS, 2001). Because tobacco is such a profitable commodity and produces government taxes, economic interests often prevail against health interests. Gains from tobacco sales, however, are likely to be offset by the enormous cost of treating the health consequences of tobacco use in the future.

The RHS included questions for determining cigarette-smoking status: “Have you smoked at least 100 cigarettes in your entire life?” and “Do you currently smoke?” or only “Do you currently smoke?” Smoking prevalence among women of reproductive age varied from about

1% in Azerbaijan to 30% in Romania and the Czech Republic (Table 9.5). In all of the surveyed countries, women residing in urban areas were substantially more likely than rural women to be current smokers, and previously married women were most likely to smoke. Age affected smoking prevalence differently across countries. Smoking decreased with age in the Russian areas surveyed, increased with age in Czech Republic, and peaked among 20–29 year olds in Moldova, 25–34 year olds in Romania, women under 30 in Ukraine, and women over 20 in Georgia. Smoking varied by country with the educational attainment of women. Respondents who were currently

Table 9.5
Percentage of Women Who Smoke Daily or Almost Daily by Selected Characteristics
Among Women Aged 15–44
Eastern Europe and Eurasia: A Comparative Report

Characteristic	Eastern Europe					Caucasus		
	Czech Rep. 1993	Moldova 1997	Romania 1999	Russia 1999*	Ukraine 1999	Armenia 2000	Azerbaijan 2001	Georgia 1999
Total	30	6	30	28	19	3	1	6
Residence								
Urban	32	9	35	*	23	5	1	10
Rural	27	1	21	*	7	1	0	1
Age Group								
15–19	19	4	20	33	19	1	†	2
20–24	27	8	31	33	25	2	1	8
25–29	29	9	34	33	22	3	1	7
30–34	36	5	35	27	18	4	1	7
35–39	37	4	32	23	16	2	1	7
40–44	36	3	27	20	14	6	1	6
Marital Status								
Currently Married	32	5	31	25	16	3	1	5
Previously Married	48	13	47	35	29	11	3	20
Never Married	21	6	24	28	21	2	†	6
Education Level								
Secondary Incomplete	35	5	28	35	23	U	†	1
Secondary Complete	25	5	32	33	19	U	†	4
Technicum	‡	5	‡	27	17	3	1	5
Postsecondary	18	8	33	21	19	7	2	12
Employment Status								
Currently Employed	32	5	35	24	17	U	1	9
Not Currently Employed	26	7	26	36	22	U	1	5

* Data for Russia pertain to three primarily urban areas as described in Chapter 2.

† Less than 0.5%.

‡ Technicum, specific to former Soviet Union countries, does not exist in the Czech Republic or Romania.

U = Unavailable.

employed were more likely than those not employed to have ever smoked and to be current smokers, except in Moldova and Ukraine.

Trend data from the RHS surveys in Romania, as well as from the 1996 YARHS conducted there, showed a rapid increase in smoking prevalence, particularly among young adults (Figure 9.5.1). In the 1993 Romania RHS, 22% of women were current smokers. In the 1999 Romania RHS, current use of cigarettes increased to 30%. The increase was the highest among women aged 15–24, from 15% in 1993 to 26% in 1999. The percentage of current smokers increased among all young adults, but much faster among 18–19 year-

olds (from 10% in 1993 to 27% in 1999), rural women (from 16% to 25%), and unmarried women (from 16% to 29%).

While smoking prevalence for women had increased, the percentage of young males who had ever smoked and the percentage currently smoking remained basically unchanged between the 1996 YARHS and the 1999 RHS (Figure 9.5.2). Although both the initiation and the current smoking rates in 1999 were much higher for young men than for young women (58% vs. 33% and 45% vs. 26%, respectively), the gender gap for these rates narrowed substantially (from 37 to 29 percentage points for “ever smokers” and from 27 to 19 percentage points for “current smokers”).

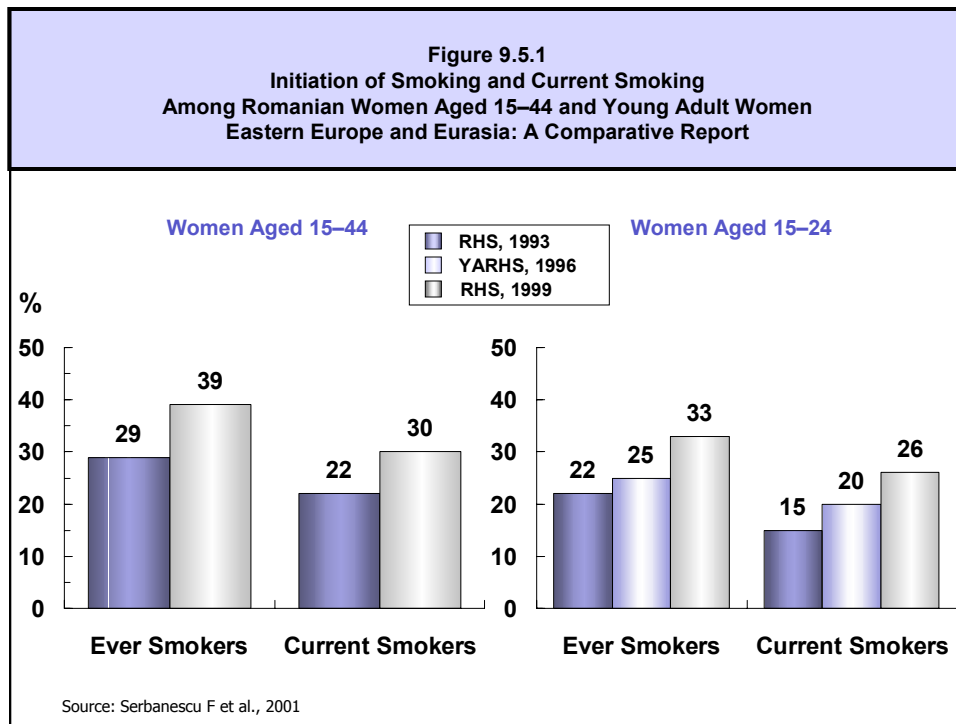
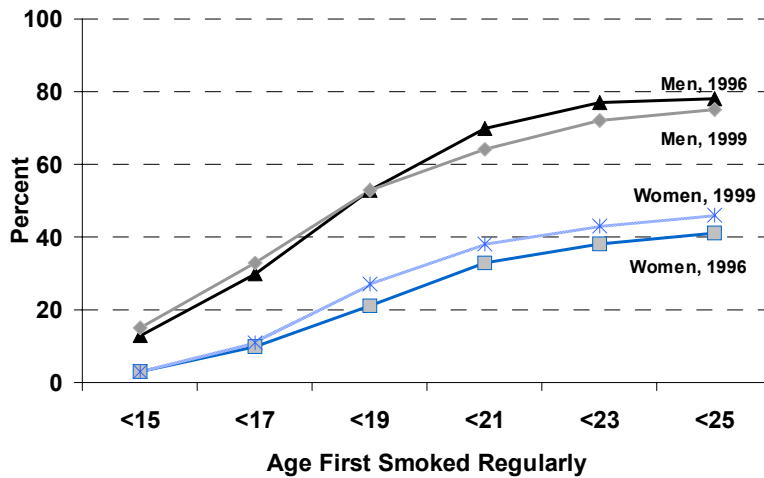


Figure 9.5.2
Percent Initiating Smoking Before Given Ages Among Romanian Young Adults
Aged 15–24 Years
YARHS and RHS Surveys in Romania
Eastern Europe and Eurasia: A Comparative Report



Source: Serbanescu F et al., 2001

9.6 Alcohol Use

Alcohol use among young adults has been shown to be related to risky sexual behaviors, violence, and academic problems (Hanson DJ and Engs RC, 1992). Episodic heavy drinking has been shown to be strongly correlated with serious injuries, particularly from motor vehicle accidents. Alcohol abuse among women of reproductive age has additional significance because of its potential harm to the fetus or children. It is known that the more alcohol a pregnant woman drinks, the greater the chances of birth defects (fetal alcohol syndrome). Even “social drinking” may cause minor developmental problems in an otherwise normal baby (Coles CD, 1993).

Eastern European nations have a long tradition of producing and drinking alcoholic beverages. Although alcohol consumption is perceived to be high, there are no reliable statistics on consumption after 1990, since the former tracking system, which was based on data on state-controlled sales, has yet to be

replaced with other assessment tools. Thus, four of the seven RHS surveys included a short module on alcohol consumption.

Alcohol use was measured by a variety of questions asking each respondent how frequently they drank, how many drinks they had at any given occasion during the past three months, and in some surveys, how often did they drink that amount. Respondents who had at least one drink every day or almost every day were defined as “current frequent drinkers” and those who consumed 4 or more drinks on at least one occasion (5 or more drinks for male respondents) at any given time during the three months preceding the survey were defined as “episodic heavy drinkers.”

As shown in Table 9.6, the percentage of women reporting that they consumed alcohol daily or almost daily (current frequent drinkers) ranged from only 1% and 3% in the Czech Republic and Georgia, respectively, to 28% in Romania. However, the situation reversed when women were asked if they had

had consumed 4 or more drinks on one occasion during the three months preceding the interview. Current episodic heavy drinkers made up just 2% of Romanian respondents but 16% of those in Georgia.

Urban/rural residence did not play a uniform role in the prevalence of frequent or episodic drinking in reproductive age women among the countries surveyed. Current frequent drinking was more common among rural women in Moldova (14% vs. 19% of urban women) but there was little or no difference in the other three countries. Episodic heavy drinking was more prevalent among urban women in

Georgia (18% vs. 13% of rural women). Women who had never been married were more likely to be current episodic heavy drinkers in Georgia but were less likely to be frequent drinkers in all of the other three countries. Current employment was associated with higher rates of frequent alcohol use in Moldova. Although very few women reported episodic drinking, women in Georgia were almost twice as likely as Moldovan women and more than seven times as likely as Romanian women to say that they recently drank 4 or more drinks on an occasion. Frequent drinking increased with age in all surveyed countries.

Table 9.6
Percentage of Women Reporting Frequent or Episodic Drinking in the Last Three Months
by Selected Characteristics, Among Women Aged 15-44
Eastern Europe and Eurasia: A Comparative Report

Characteristic	Eastern Europe						Caucasus	
	Czech Rep., 1993*		Moldova, 1997		Romania, 1999		Georgia, 1999	
	% Current Frequent Drinkers	% Current Episodic Drinkers	% Current Frequent Drinkers	% Current Episodic Drinkers	% Current Frequent Drinkers	% Current Episodic Drinkers	% Current Frequent Drinkers	% Current Episodic Drinkers
Total	1	*	16	8	28	2	3	16
Residence								
Urban	1	*	14	9	27	2	3	18
Rural	1	*	19	7	28	3	2	13
Age Group								
15-19	†	*	5	3	17	3	2	15
20-24	†	*	14	6	24	2	2	19
25-29	1	*	18	8	27	2	3	17
30-34	2	*	20	10	33	1	4	17
35-39	3	*	22	10	35	2	3	14
40-44	2	*	22	13	33	2	3	12
Marital Status								
Currently Married	2	*	19	8	31	2	3	13
Previously Married	2	*	21	15	30	2	5	16
Never Married	†	*	7	5	21	3	2	20
Education Level								
Secondary Incomplete	1	*	17	9	26	2	2	7
Secondary Complete	1	*	18	9	30	2	2	18
Technicum	‡	*	16	6	‡	‡	3	16
Postsecondary	3	*	11	6	30	2	3	18
Employment Status								
Currently Employed	2	*	19	9	30	2	3	18
Not Currently Employed	1	*	11	7	25	3	3	15

* Data on number of drinks consumed per occasion were not collected in the Czech Republic.

† Less than 0.5%.

‡ Technicum, specific to former Soviet Union countries, does not exist in the Czech Republic or Romania.

Trend data from Romania showed that alcohol consumption is increasing, particularly among young adults. Total consumption of alcohol among young adults in Romania had substantially increased since 1996, but much more so for young women than for young men (Figure 9.6.1). The proportion of young women who consumed alcohol at least once within the past month (current drinkers) nearly tripled (from 16% to 45%) whereas the proportion of male current drinkers, which was already high, has further increased (from 65% to 86%). For both young females and males, the most alarming change occurred in the frequency of drinking. Compared to the 1996 YARHS, in the 1999 Romanian RHS the proportion of women who were classified as frequent drinkers increased ten times (from 2% to 20%) and the proportion of men who were classified as frequent drinkers tripled (from 19% to 65%). The recent increase in alcohol use is remarkable, particularly since the purchasing power of the population has substantially declined. Compared to the price of other commodities, however, the relative price of alcoholic beverages may have actually decreased. In addition, the loosened state control of the alcohol market since 1990, which facilitated smuggling, illicit production and trade, and counterfeiting of famous brands, may have contributed further to making alcohol beverages more accessible to all population groups, including youth.

9.7 Summary of Findings

One DHS and several RHS surveys investigated selected women's health behaviors, including the utilization of preventive services for reproductive cancers and tobacco and alcohol use. Routine gynecologic exams are recommended for all reproductive age women and preventive screening practices (e.g. pap smear test,

counseling for breast self-exams), counseling for family planning, and STD prevention, should be part of these exams. Survey findings summarized in this chapter reinforce the perception that, even when health exams are performed, they are not performed routinely and annual rates of screening are quite low. Furthermore, there is a general lack of awareness of gynecologic screening procedures among reproductive age women in Eastern Europe and the Caucasus region. Sustained educational campaigns for the public and changes in the practice of health care providers (e.g. more emphasis on preventive than curative approaches) are essential steps in reducing death and disability associated with gynecologic cancers and with health risk behaviors.

- ◆ In eight countries with data on utilization of routine gynecological exams, between two-thirds of sexually experienced women (in four countries in Eastern Europe) and one-fourth (in Armenia and Azerbaijan) reported having had a routine exam during the past 12 months. Generally, utilization of routine gynecologic exams was higher among urban women, older women, those with post-secondary education, and currently employed women.
- ◆ In the six countries with data, between 85% (in Armenia) and 22% of sexually experienced women (in Czech Republic) were not aware of BSE and only 10% (in Azerbaijan) to 50% (in Czech Republic) had ever practiced breast self-examination (BSE). The fact that 47% - 87% of women with at least one routine gynecologic visit did not report BSE suggests that many gynecologists in Eastern Europe do not encourage this preventive health care practice (whose role in early detection of breast cancer in this part of the world needs further studies).

◆ In Moldova (43%) and Romania (17%), less than one-half of sexually experienced women reported that they have ever had a Pap test for cervical cancer screening; in Azerbaijan and Georgia, less than 5% of women reported ever having a Pap test. The most important reasons for not having a test were lack of awareness (23%–70%) and lack of recommendation of the test by a health provider (16%–42%).

◆ About 30% of women reported current smoking in the Czech Republic, Romania and Russia, but prevalence was very low in Caucasus region and Moldova where, in each

country, 6% or fewer women currently smoke. Trend data from Romania, documented that smoking among women is increasing. The rate of increase is highest among young women (aged 15–19 years), unmarried women, and rural women.

◆ In the four countries with data on alcohol use, women reporting that they consumed alcohol daily or almost daily ranged from less than 4% in the Czech Republic and Georgia to 16% in Moldova to 28% in Romania. Between 2% and 16% of women reported current bingeing (4 or more drinks on a single occasion).