United Nations Population Fund

RA Ministry of Health

RA National Service of Statistics

Institute of Perinatology, Obstetrics and Gynecology of RA

A CLINICAL AND EPIDEMIOLOGICAL STUDY OF THE PREVALENCE OF THE CERVICAL PRECANCER/CANCER AND SEXUALLY TRANSMITTED DISEASES

Yerevan 2005

Preface

The present survey was conducted through the close collaboration of the Ministry of Health, was financed by United Nations Population Fund and with assistance provided by the National Statistical Service and the Institute of Perinatology, Obstetrics and Gynecology.

The successful implementation of the "Cancer/Precancer and STIs Prevalence Clinical and Epidemiological Survey" became possible due to mutual efforts of the above mentioned organizations. First of all we acknowledge the financial support of UNFPA.

We acknowledge the work of the field staff, whose joint efforts ensured the effective implementation of the survey. As a result of the survey very important practical conclusions have been made and the implementation of them will contribute to the improvement of women reproductive health, STDs and cervical cancer prevention.

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CHAPTER 1

INTRODUCTION

1.1. **Preamble**

Within the framework of cooperation between the Ministry of Health of RA and the United Nations Population Fund (UNFPA) in order to conduct §Cervical Cancer/Pre-Cancer and STIs Prevalence Clinical-Epidemiological Survey, the Steering Committee and Inter-Ministerial Working Group have been formed by the order of The Minister of Health of RA. For the implementation of the above-mentioned survey the following was decided:

1. To conduct the survey in all ten marzes and Yerevan City among 2600 women aged 18-49.
2. In order to keep the representativeness of the above-mentioned survey 200 women in each marz and 600 women in Yerevan City were interviewed.
3. To elaborate and adapt the questionnaire.
4. The screening of sexually transmitted diseases is based on trichomonosis, gardnerela, gonorrhea, and Chlamydia researches. The coverage of the other sexually transmitted diseases was considered as unreasonable due to the following reasons:

a/ the information about syphilis is more than enough, cases and morbidity are very precise. But a simple screening can provide non-precise data (false positive reactions, cured cases, serological stability, prozon phenomenon, etc)

b/ serological tests widely used in Armenia in case of sexual herpes, could not describe the real situation regarding the sexual herpes (tests of simple and sexual herpes are the same, and non type specific).

c/ The is no screening for sexual warts. In case of clinical symptoms, screening via Polymeric Chain Reaction (PCR) is possible. General screening is not practiced in developed countries either. HPV is revealed back in pre-cancer and cancer cases.

5. The following algorithm was approved:

To conduct a mirror screening for cervical pre-cancer diseases and cancer research, process with vinegar acid, take a pap-smear with spatula and cytobrush for cellular research covering all the interviewed women except those who would decline (about 2,400 were examined).

Fix, indicate, color and research by Papanikolau, according to the procedure.

6. Select and train 16 interviewers for conduction of interview and data collection.

7. Select and train 10 obstetricians-gynecologists for mirror screening, cellular research of cervix, research of sexually transmitted diseases, as well as vagina research.
8. Primary analysis (fixing, indication, placement into transportation container, transmission, and delivery) of materials to be researched were conducted by obstetrician-gynecologist.
9. For clinical research accessibility and interviewed women maximum coverage, it was decided to implement the researches by their place of residence at the primary health care centers. The above mentioned health care centers were enriched with necessary medical equipment and devices (mobile gynecological chair, gloves, mirrors, sanitary pads, subject glasses, Folkman spoons, cotton, vinegar acid, markers, fixing devices, etc).
10. In order to increase the reliability of cervix, pre-cancer diseases and cancer clinical research, reveal the side effects of chlamidia and gonorrhea, it was decided to conduct ultra-sound research among interviewed women. Thus, an ultra-sound specialist was involved in obstetricians-gynecologists group. Provision of mobile ultra-sound devices and the work of ultra-sound specialist will be provided free of charge as promotion by the Center of Perinatology, Obstetrics and Gynecology (CPOG).
11. The cellular research of sexually transmitted diseases and cervix were implemented by contract with the medical institution winning the tender.

1.2 Epidemiology of cervical cancer in Armenia

Cancer is the third leading reason among women morbidity in Armenia, moreover, in the structure of malignant neoplasm of women's reproductive system, cervical cancer is in the second place after breast cancer.

Though in the last decade cervical cancer cases per 100,000 persons comprised 11 – 14 in Armenia (Russian Federation – 15.94, Latvia – 25.09, France – 11.1, Finland – 5.2, source: WHO/Europe, HFA Database, January, 2005), the number of advanced disease cases is high which was doubled during the last years (table 1). If to mention that nowadays advanced cases are considered the ones at IB and II stages, which comprise a small number in all newly revealed cases, there is so doubt about the emergency of the above mentioned problem in Armenia.

Besides, there is tendency of rejuvenation of malignant neoplasm, particularly cervical cancer. Unlike other countries where cervical cancer is more likely to be discovered at the age of 50 and over, each forth case (27%) in Armenia is registered in the age group of 25 – 35.

Table 1. Situation of cervical cancer morbidity and mortality in Armenia, 1985 - 2004

Years	Morbidity, absolute numbers	Indicator per 100,000 person	Mortality, absolute numbers	Advanced cases, absolute numbers	Advanced cases, %
1985	169	9.5	113	27	15.9
1990	262	14.3	128	36	13.7
1995	192	12.6	130	45	19.1
1998	218	11.2	140	88	40.4
1999	214	10.9	136	93	43.4
2000	238	12.8	128	104	43.7
2001	215	10.9	150	131	60.9
2002	201	10.6	126	108	53.7
2003	241	13,1	144	113	46.9
2004	230	13.8	152	109	47.4

Source: Ministry of Health of the Republic of Armenia

1.3. Country situation

The Republic of Armenia is landlocked country located between Caucasus and Middle Asia. Total territory comprises 29,800 square kilometers (11,175 square miles), with the total population of 3,200,000, the majority (97%) of which is Armenian.

Armenia was the first country in the world to adopt Christianity as state religion in 301.

The geographical location of Armenia has restricted the country from access to sea, which hardens the communication and economic development.

After the collapse of the Soviet Union, Armenia was the first republic to declare its independence by Constitution and become a democratic, state of law country in 1991.

The collapse of the Soviet Union caused the destruction of the centralized planned soviet system, industrial and trade relations, as well as brought to energetic and natural resource deficit and transition to free market economy. Besides the difficulties of the transition period, 1988 disastrous earthquake consequences brought up to 40 % decline in production capacity of Armenia, and the conflict between Azerbaijan and Mountainous Karabagh caused a big inflow of around 500,000 refuges to Armenia, meanwhile 700,000 people remained homeless.

All the above mentioned facts brought to the collapse of the economy, unemployment, sharp decline in the living standards and poverty, as well as population migration.

There are special groups of people (refuges, people suffered from the earthquake, unemployed, single pensioners, women and children) who need special approach in health care service organization.

1.4. The health care system and epidemiological situation in Armenia

Not very long ago the health care system of Armenia, as a part of the Soviet Union heath care system, could have been qualified as a system with planned and centralized management, with huge number of medical institutions and health care personnel.

The health care services rendered to the population were free of charge in state medical institutions, financed solely from state budget. The preparation of big number of medical doctors and provision of big number of hospital beds were highly emphasized. The system was designed for provision of comprehensive health care services to the population, wide opportunities of health care accessibility, especially emphasizing prevention of diseases.

The health care services were provided by primary health care network (2,000-4,000 people in each center). Professional health care services were rendered in the secondary and further levels (hospital/in-patient level).

For the majority of population the Soviet health care system was the most successful in terms of adequate accessibility of health care services including population of rural and remote areas.

Although the Soviet health care system was solving the majority of available problems, the system itself and health situation of the population in general was worsening mostly due to the political and economical unstable situation, which was common for Armenia after the collapse of the Soviet Union. As a result, the country inherited such a health care system with may unsolved problems.

Considerable reforms were conducted in the last years to moderate the system and decrease the expenditures. The lack of state financing, health care inaccessibility caused the increase of morbidity and mortality in the country.

1.5. Certain characteristics of demographic and health situation

In the last decade socio-economic decline has had negative influence on the whole population of Armenia, particularly on health condition of women and children. Considerable increase in social dependency diseases (cancer/pre-cancer, tuberculosis, STIs, anemia) was registered. Reproductive health indicators were worsened, fertility rate decline twice, natural growth indicator declined ten times, for example if in 1990 it there were 77,000 – 78,000 births, in 1998 the number of births was 39,000, in 2003 – 36,818, in 2004 – 37,654. Natural growth in 1990 comprised 16.3, in 2004 – 1.2 per 1,000 persons. Total mortality rate was increased and comprised 8.8 per 1,000 persons in comparison with 6.6.

Maternal mortality index still continues to remain high in comparison with the level suggested by WHO, in three-year period comprising approximately 30 per 100,000 live births. The main reasons of the above mention phenomena are bleedings, hypertensions, extra-genital diseases, trombo-embolic complications, etc. During the recent years, increasing tendency was registered in frequency of STIs, malignant neoplasm, particularly breast and cervical cancers and infecundity; the latest comprised around 32% which made it a national problem. The data on some STIs prevalence In Armenia, especially on Chlamydia trachomatis are missing.

1.6. Summary of results and analysis

Cervical cancer/pre-cancer and STIs prevalence clinical-epidemiological survey is nationally representative. The field forks of the above mentioned survey were conducted in May-November 2004 among 2,600 women aged 18-49.

The survey was conducted by the National Statistical Service and the Ministry of Health of RA. The survey coordination was implemented by “Improvement of Reproductive Health” management office by United Nations Population Fund (UNFPA) financing.

Provision of mobile ultra-sound equipment and ultra-sound specialist were implemented by the Center of Perinatology, Obstetrics and Gynecology as an input to the survey.

Chapter 2.

The goals and problems of current survey, sample design and implementation

Survey goals are:

- Collect data on women's reproductive health, fertility and sexual preferences, contraceptive means, sexually transmitted infections, including the knowledge on HIV/AIDS, on the national and regional levels,
- Collect data on fecundity, fertility, general and reproductive diseases,
- Collect data on STIs prevalence and cervix diagnosis via interviews and special research,

2.1. Household selection methodology

The sample was designed in a very detailed structure to provide and allow collecting the information on fertility fecundity, infant and child mortality, somatic and reproductive health, as well as obtaining information on STIs, contraceptive means (methods), health condition and social security level, conditions negatively influencing on the reproductive health, previous diseases, surgical operations, and harmful habits.

Based on the received data, it was possible to estimate the knowledge, health condition and social security levels if the interviewed women, as well as cervix condition and STIs prevalence.

Collection of the above mentioned data in Yerevan City and marzes (urban, rural) was a basis sample design.

The sample size comprised 2,600 interview women aged 18-49.

Two-stage sample method was used. On the first stage the primary sampling units (PSUs/clusters) were selected. Each primary sampling unit was selected proportionally to population size by "systematic" sampling method from place of residence list. National Statistical Service of RA created and provided households database and addresses of 2001 which was used as a place of residence list. Many listed places of residences were big enough, and it was not possible to involve them directly. That's why in order to select preferable households, the special segmentation method was used. Selected big Places of residence were divided into segments, out of which two segments were included in the sample. The aggregate listing of households was conducted in the selected segments and those places of residence which were not segmented. Lists of listed households served as a sample frame for second stage sampling for household selection. In each place of residence, the households were selected systematically, in order to get certain number

of eligible women with completed interviews. All the women aged 18-49 who were present at the selected household in the pre-survey night were considered as eligible respondents for the survey.

2.2. Questionnaire

For conduction of "Cervical cancer/pre-cancer and STI's prevalence clinical-epidemiological survey" in Armenia, two types of questionnaire were used:

- "Household questionnaire" (annex 1),
- "Individual questionnaire on cervical pap-smear" (annex 2).

The questionnaire was based on the master tools of the survey and it was elaborated by SPSS Software package. The master questionnaire was adopted in CPOG. The questionnaire was comprised in Armenian.

In April 2004 the pilot survey was conducted in order to test the household and individual questionnaire.

The household questionnaire was designed to obtain the information from reproductive age (18-49) women on marital status, educational level of interviewed women and their husbands/partners, sexual behavior, reproductive health, etc.

Household questionnaire consists of the following main sections:

1. Individual data on interviewed person and reproductive aged women residing in the household,
2. General information about respondent and her sexual behavior,
3. Data on family planning and contraceptive methods used by the respondent
4. Knowledge on sexually transmitted infections prevalence (including AIDS),
5. Safe motherhood,
6. Unfecund marriage
7. Data on conditions negatively influencing on the reproductive health, previous diseases, surgical operations, and harmful habits.

In the individual questionnaire the data on pap-smear results taken from cervix are collected:

1. Sexually transmitted infections (trichonomias, gardnerela, gonorrhea, Candida, etc),
2. Chlamydia infection
3. Cervical diagnosis (cancer/pre-cancer)

Field staff

Main field work started in May 2004 and finished in November 2004. All the control visits and interviews were finished in December 2004.

The questionnaires from each primary sampling units (clusters) were immediately returned to NSS and CPOG Yerevan offices for data processing. All the filled and returned questionnaires were checked and edited by special professionals. Using the SPSS special statistical software package, keyers team has inputted questionnaire data to the computers. Data checking, editing, input and processing activities started in parallel with field works in September 2004 and finished in May 2005.

Response rates

Responds rates were between 97.0 and 99.0 (0.97 - 1).

CHAPTER 3.

RESPONDENT CHARACTERISTICS

3.1. Main characteristics of the respondents

Armenia is an ethnically monorace country, all the respondents in the study were armenians.
60% of population of Armenia live in towns, and 1/3 of the population lives in Yerevan. So 768 women-respondents ingaged in the study live in Yerevan, which makes 30% of the sampling.
2600 women aged from 18 to 49 years living with sexual life have been interviewed and examined.
Based on the informationed received their knowledge, health condition and social situation was evaluated, as well as the condition of their cervix and the prevalence of the STDs.

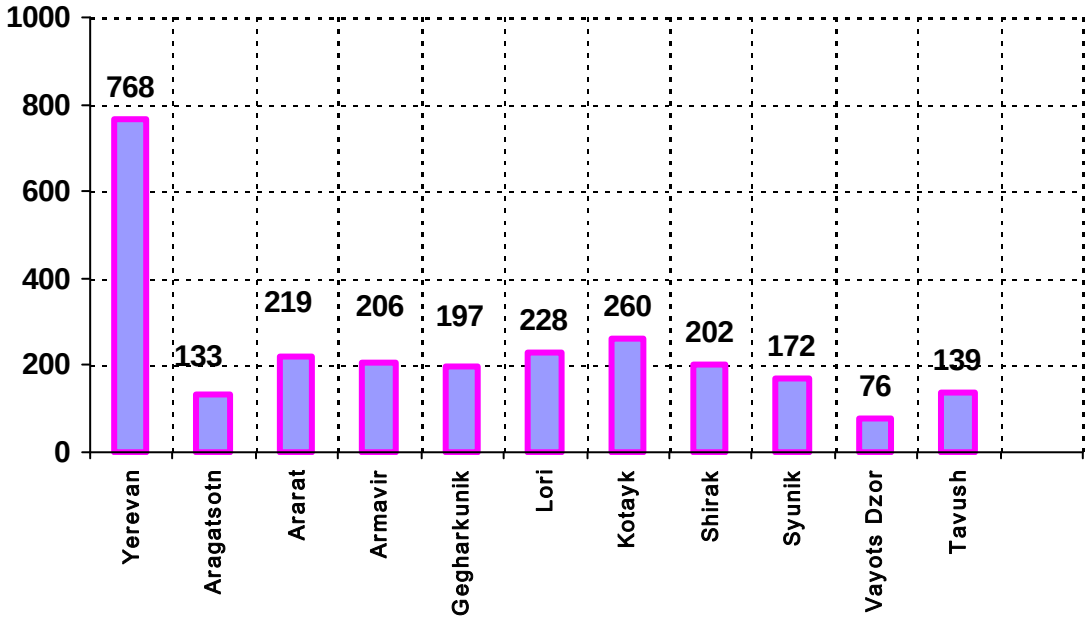
3.1.1. Distribution of women interviewed/examined by marzes

In order to provide the representativeness the investigation was performed based on the sampling made by the RA National Statistical Service, with the addresses presented by them.
The number of the investigated was decided based on the population of the given marz. Thus, the distribution of the respondents in all 10 marzes and Yerevan has the following scheme:

Table 2.

Distribution of the respondents by marzes and Yerevan city

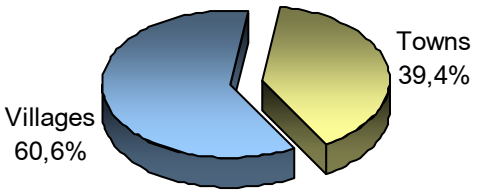
	Marz	**Marz code**	**Number of women examined**	
1	Yerevan	901	768	29.6
2	Aragatsotn	902	133	5.1
3	Ararat	903	219	8.4
4	Armavir	904	206	7.9
5	Gegharkunik	905	197	7.6
6	Lori	906	228	8.8
7	Kotayk	907	260	10.0
8	Shirak	908	202	7.8
9	Syunik	909	172	6.6
10	Vayots Dzor	910	76	2.9
11	Tavush	911	139	5.3
	Total		***2600***	***100***



Pic. 1. Distribution of the respondents by marzes and Yerevan city

3.1.2. Number of the respondents by place of living and age groups

1025 (39,4%) of the women interviewed were urban, 1575 (60,6%) – rural.



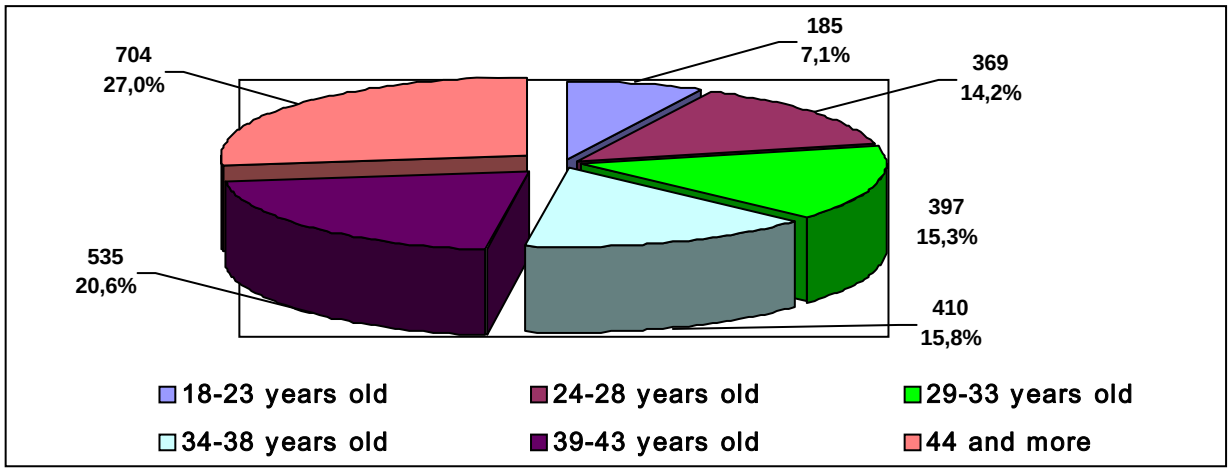
Pic. **2. Number of respondents by place of living**

3.1.3 Distribution of the respondents by age

According to age the respondents were divided to 6 groups:

- 18-23 years old
- 24-28 years old
- 29-33 years old
- 34-38 years old
- 39-43 years old
- 44 and more

The distribution of women examined by age groups is shown in Picture 3. As it can be seen from the information presented, every second respondent 1361 (53%) was in an active reproductive age (18-38 years old).



Pic. 3 . Distribution of the respondents by age groups

The analysis of the presented data show (Table 3) that the number of the respondents in rural and urban areas is alike.

Table 3

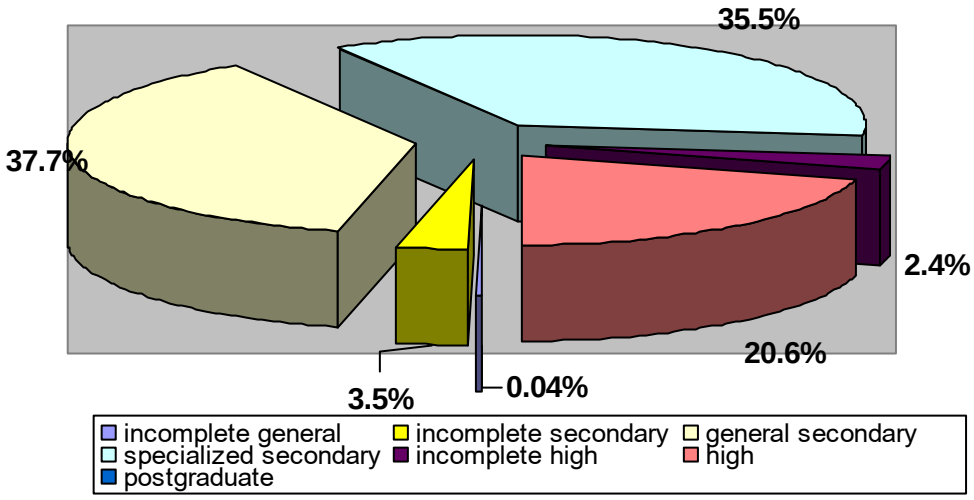
Number of respondents by place of living and age groups

Marz	Age groups						
	18-23	**24-28**	**29-33**	**34-38**	**39-43**	**44 and more**	**Total**
Yerevan	56 /8%/	118/16%/	131/17%/	123/16%/	140/19%/	200/26%/	768
Aragatsotn	13/10%/	16/12%/	13/10%/	28/21%/	23/18%/	40/30%/	133
Ararat	14/7%/	36/17%/	35/16%/	28/13%/	50/23%/	56/26%/	219
Armavir	18/9%/	31/15%/	32/16%/	31/15%/	39/19%/	55/27%/	206
Gegharkunik	16/9%/	23/12%/	25/13%/	32/17%/	42/22%/	59/30%/	197
Lori	17/8%/	28/13%/	33/15%/	38/17%/	37/17%/	75/33%/	228
Kotayk	14/6%/	38/15%/	40/16%/	36/14%/	64/25%/	68/27%/	260
Shirak	13/7%/	26/13%/	26/13%/	37/19%/	52/26%/	48/24%/	202
Syunik	16/10%/	28/17%/	24/14%/	31/16%/	28/17%/	45/27%/	172
Vayots Dzor	2/3%/	4/6%/	16/21%/	13/18%/	21/28%/	20/27%/	76
Tavush	6/5%/	21/16%/	22/16%/	13/10%/	39/28%/	38/28%/	139
Total	***185***	***369***	***397***	***410***	***535***	***704***	***2600***

3.1.4. Distribution of the respondents by educational background

The survey once again proved the fact that there is no illiteracy among the population (either men or women) in Armenia.

Only 6 women and 8 men had incomplete primary , primary and incomplete general education.
As it can be seen from the Table 4 the vast majority of men and women (74% & 69% correspondingly) have general secondary and specialized secondary education, and every 5-th respondent had high or incomplete high education.



Pic. 4. Educational background of the respondent women

Table 4

Educational background of the recent husband / partner of the respondent

Educational background of the recent husband / partner of the respondent		**abs. number**	**%**
1	illiterate	1	0
2	incomplete primary (1 – 3 grades)	1	0
3	primary (4 grades)	3	1
4	incomplete general (5 – 7grades)	3	1
5	full general (8 grades)	133	5.1
6	incomplete secondary (9 grades)	8	0.3
7	general secondary (10/11 grades)	1004	38.7
8	specialized secondary	775	29.8
9	incomplete higher school	61	2.3
10	higher school	584	21.7
11	postgraduate	2	.1
	Total	***2575***	***100***

3.1.5. Employment and income of the respondents

During the recent 12 months the vast majority of the respondents (68.8%) didn't have any regular or conditional job.

Table 5

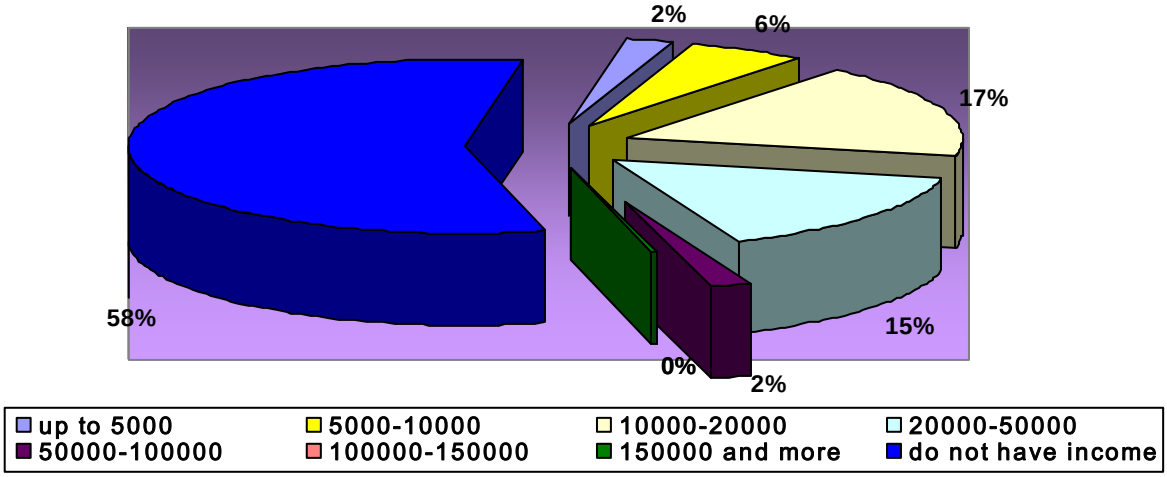
Number of people having regular or conditional job during the recent 12 months

	Job done	µ³ó. ÃÇíÁ	%
1	Performed work on regular or conditional basis	801	30.8
2	Disn't perform any work	1788	68.8
	Total	***2589***	***99.6***

The majority of the respondents (approximately 70%) didn't have any job in 12 months period preceding the interview.

Every second woman (58%) didn't have any income in 12 months period preceding the interview (Table 5).

8.2% of the respondents had up to 10000 drams income, 17.5%- 10000-20000 drams, 15.5%- 20000- 50000 drams, and only 2.0% had income up to 150 000 drams (Picture. 5).



Pic. 5. The average income of the respondents (in drams)

Special attention should be paid to the income sources of the women interviewed, their average earnings, as well as the dependence of the earnings from the education (absolute number and percentage), which are presented in the following Table.

Table 6

Occupation and Education

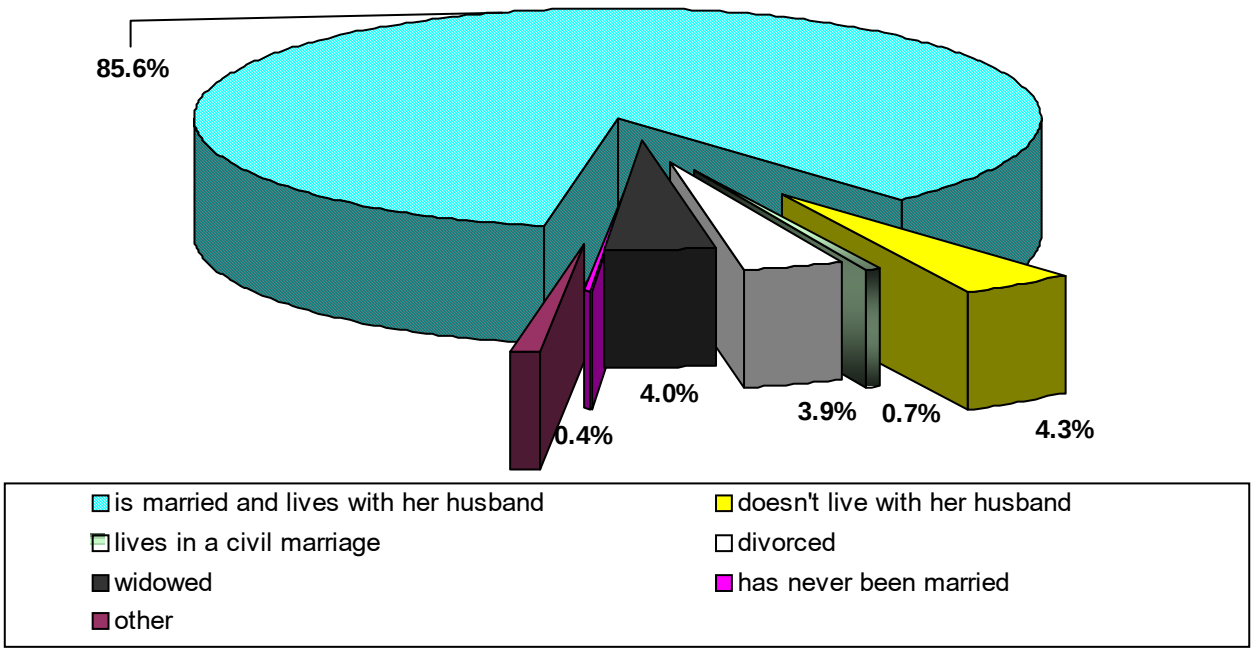
Main source of income	Higher		Incomplete higher		Secondary		Incomplete secondary	
	abs. num.	%	abs. num.	%	abs. num.	%	abs. num.	%
Civil servant	80	69.6	19	19.2	4	2.4	3	0.8
Agriculture	8	6.9	40	40.3	85	50.8	270	64.2
Trade	3	2.6	32	32.3	62	37.2	84	20
Gets aid	4	3.5	3	3.1	7	4.2	23	5.5
State sources	20	17.4	5	5.1	9	5.4	40	9.5
Total	115	100	99	100	**167**	100	420	100
801 women in total								

As it can be seen from the table, there is a certain dependence between occupation and educational background.

The occupation of 69.6% respondents with higher education id the state service, as compared with 0.8% of respondents with incomplete secondary education. There is a diverse regularity in people of agricultural and trade sphere: 6.9 & 2.6% against 64.2% 20. The majority of people having chance income is among ones with higher educational background (17.4%), which is 3 times higher for the people having incomplete higher and secondary education.

3.1.6. Family status of the respondents

At the moment of interview the vast majority of the respondents was married -2225 (85.6%), 113 (4,3%) of them were married but did not lived with their husbands, 104 women (4%) were widowed, 102 (3.9%) – divorced, 10 (0,4%) – had never been married, 27 (1%) – mentioned other status ¥Pic 6¤.



Pic. 6. ***Family status of the respondents***

Table 7

Family status of the respondents in different age groups

Family status of the respondents	Age groups											
	18-23		**24-28**		**29-33**		**34-38**		**39-43**		**44 ¨ ³í»É**	
	abs. num.	**%**	**abs. num.**	**%**	**abs. num.**	**%**	**abs. num.**	**%**	**abs. num.**	**%**	**abs. num.**	**%**
At present the woman is married and lives with her husband	171	**93**	338		352	**89**	342	**84**	450	**85**	572	**82**
At present she is married but they are separated	7	**4**	7		15	**4**	21	**6**	28	**6**	35	**5**
Lives with a man in a civil marriage (without marriage registration)	2	**1**	5		3	**1**	4	**1**	3		1	
Divorced	3	**1.4**	12		20	**5**	18	**5**	21	**4**	28	**4**
Widowed			2		5	**2**	18	**5**	24	**5**	55	**8**
Has never been married but has a child (children)			1		1		2				6	
Other	2	**1**	4		1		5	**1**	8	**2**	7	**1**
Total	185		369		397		410		534		704	

The investigation of the family status of the respondents by age groups shows (Table7) that there is no separate link between age and family status, exclusive of the age groups 18-23 and 44 and more. The highest frequency of the answer "At present the woman is married and lives with her husband" (93%) is registered in the age group 18-23, the number of widowed women is 2 times higher in the age group 44 and more, making 8%.

The study of the number of the women interviewed is of a separate interest. According to our national description the majority of the respondents had one partner during their lifetime (97.5%¤, 2.2% of them had 2 partners, and only 3 women had 3 and more partners (Table8).

Table 8

Distribution of the respondents by the number of their partners

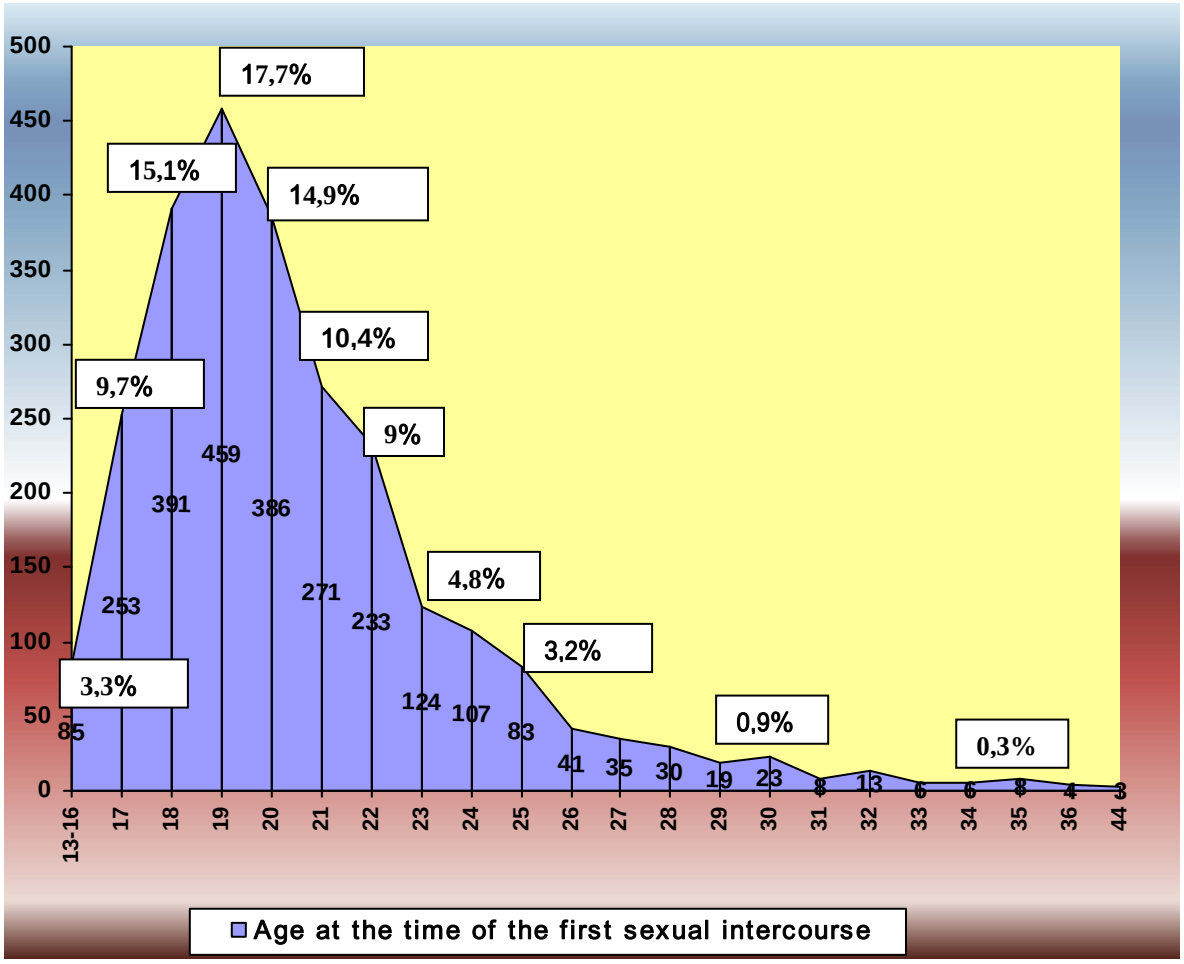
	Abs. number	**%**
one husband (partner)	2535	97.5
two partners	56	2.2
three and more partners	3	0.01
Total	2594	99.8

3.1.7. Sexual behaviour of the respondents

3.1.7.1. Age at the time of the first sexual intercourse and marriage/cohabitation

2597 of the women interviewed (99,9%) told the age when they had sexual intercourse at the first time, 3 women did not give answer.

The majority of the respondents were 17-25 years old at the time of the first sexual intercourse (88.7%¤ (Pic 7¤. Only 20 women started their sexual life at the age before 17 (0.8%¤, and 80 (3.1%¤ - in the age group 30 and more. According to our national description in 99% cases the time of the first sexual intercourse coincided with the marriage.



Pic. 7. Age at the time of the first sexual intercourse

3.1.7.2. **Duration of sexual life**

The Table 9 presents the duration of marital (sexual) life of the respondents.

238 (9.2%) respondents had a sexual life up to 1 year, 967 (37.2%) - 1-5 years, more than the half of them - 1395 (53.7%) 10 years and more.

Table 9

Duration of the sexual life

Duration of the sexual life	abs. number	%
up to 1 year	238	9.2
1-5 years	967	37.2
5-10 years	705	27.2
10 years and more	690	26.6

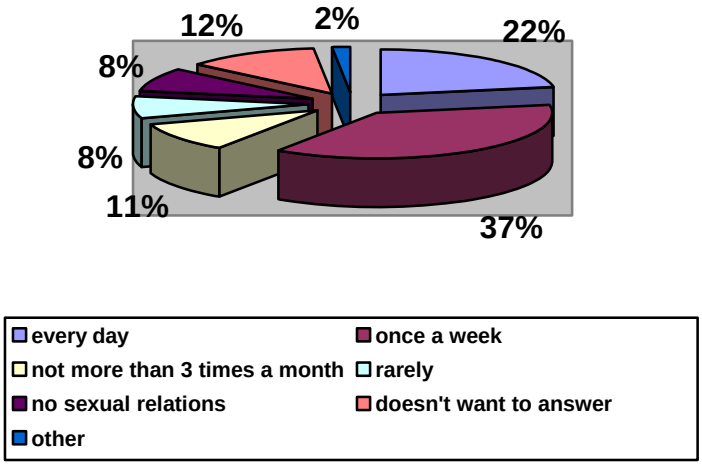
3.1.7.3. Study of the frequency and periodicity of sexual life of the respondents within the last 2 years

The data about the frequency of sexual life of the respondents is presented in the Table 10.

Table 10

The frequency of sexual relations among the women interviewed

		abs. number	%
1	Almost every day or every other day	574	22.1
2	At least once a week	967	37.2
3	Not more than 3 times a month	280	10.8
4	Rarely (occasionally and not in every month)	202	7.8
5	There were no sexual relations involved	215	8.3
6	Doesn't want to answer	314	12.1
7	Other	45	1.7
	Total	2597	100



Pic. 8. The frequency of sexual relations among the women interviewed

The prevalence of sexual relations 37% is among the women having sex at least once a week, every 5th respondent (22%) had sex almost every day or every other day. 12% of women had sexual relations once a month.

The majority of the respondents 1856 (71.4%) had their recent sexual relations in 1 month prior to the interview, 213 (8.2%) – in 6 months, 211 (8.2%) – in a year, 320 (12.3%) – in 1 year and more. The women having sexual relations at least once in 4 weeks prior to the interview were referred to the group of sexually active respondents, thus, 70% of the respondents were regarded to be sexually active.

CHAPTER 4.

FAMILY PLANNING AND USE OF CONTRACEPTION

4.1. Ever use of contraceptives

All the women were asked if they or their husbands have ever used any method of contraception. The results are presented in the Table 11.

Table 11

Ever use of contraceptives

	What method of contraception has the respondent used	**abs. number**	**%**
1	Never used any	1006	38.7
2	Hormonal pills	101	3.9
3	Injected hormonal preparations (injections)	5	0.2
4	Hypodermic implants	1	0.0
5	Intrauterine contraceptive device	398	15.3
6	Condoms	339	13.0
7	Vaginal diaphragms	2	0.1
8	Women's condoms	20	0.8
9	Vaginal spermicidal agents – suppositories, pills or jellies	16	0.6
10	Tying up of the fallopian tubes (Female sterilization)	12	0.5
11	Tying up of the ejaculatory duct (male sterilization)	3	0.1
12	Abstaining from sex on certain days of the month (rhythmic method)	261	10.0
13	Withdrawal	300	11.5
14	Breastfeeding	44	1.7
15	Vaginal infusions	82	3.2
16	Other	9	0.3
	Total	2599	99.9

Every third interviewed woman or **her partner** (38.7%) had never used any method of contraception. The most common methods were: IUDs (15.3%), condoms (13%), withdrawal (11.5%), abstaining (10%), hormonal methods (3.9%).

As it can be seen from the above mentioned data 32.2% of the respondents used modern methods of contraception, which is higher by 10% that the data provided by the "Armenian demographic and health survey", 2000.

4.2. Use of contraception at the time of interview

The use of contraceptives at the moment of the interview is presented in Table 11.

At the moment of interview 854 (32,8%) respondents used some means to prevent conception, 747 (28,7%) women did not use any means, 999 (38,4%) women did not give a response to the queSTDon.

Table 12

Use of contraception at the time of interview

		abs. number	**%**
1	use	854	32.8
2	do not use	747	26.7
	Total	1601	59.5

5..2.1. Use of condoms at the time of interview

As far as the condoms are important not only for contraception but also to prevent the transmission of STDs, a separate question was asked regarding the use of condoms. Table 13 presents the number of condom users at the time of the interview.

Table 13

Use of condoms at the time of interview

		abs. number	**%**
1	use	331	12.7
2	do not use	1241	47.7
	Total	1572	60.4

192 (7,4%) out of 331 pairs regularly use condoms, 133 (5,1%) of them use rarely, 1241 (47.7%) – do not use condoms.

11.1. Indicators of contraceptives use by other surveys

According to the data provided by the “Armenian demographic and health survey”, 2000, 22.3% of the married women use a method of modern contraception, 39.5% - do not use any method of contraception, 1.1% of them use hormonal pills, 9.43% - use IUD, 6.9% - use condoms. According to the survey carried out in 1998 (M.Khachikyan, R.Abrahamyan) 57% of married women used a method of contraception, 2/3 of which used the method of withdrawal. Another survey ¥”National Program on Reproductive Health”, RA Ministry of Health, 1998¤ also presented that 60% of married women used a method of contraception, half of them used the method of withdrawal.

It is obvious, that there is a improving tendency in the field of using modern methods of contraception.

CHAPTER 5.

STD PREVALENCE

5.1. The level of knowledge about sexually transmitted diseases

Each respondent was asked if any of the mentioned diseases is regarded to STDs.
The knowledge of women regarding the STDs mentioned is presented in Table 14.

Table 14

Knowledge about STDs

		sexually transmitted		not transmitted sexually	
		abs. number	**%**	**abs. number**	**%**
1	**gonorrhea**	862	33.2	1738	66.8
2	**tuberculosis**	110	4.2	2490	95.8
3	**toxoplasmosis**	119	4.6	2481	95.4
4	**chlamydiosis**	376	14.5	2224	85.5
5	**genital warts**	661	25.4	1939	74.6
6	**scab**	519	20.0	2081	80.0
7	**syphilis**	2463	94.7	137	5.3
8	**HIV/AIDS**	2424	93.2	176	6.8
9	**mycoplasma**	129	5.0	2471	95.0
10	**herpes**	289	11.1	2311	88.9
11	**trichomoniasis**	771	29.7	1829	70.3
12	**influenza**	135	5.2	2465	94.8
13	**salmonellosis, dysentery**	101	3.9	2499	96.1
14	**hepatitis**	171	6.6	2429	93.4
15	**pubis pediculosis**	548	21.1	2052	78.9

The interviewed women are well informed about HIV/AIDS and syphillis, these diseases were marked as STDs in correspondingly 93.2 & 94.7%. 66.8% of the respondents had insufficient knowledge about gonorrhea, chlamydia (85.5%), genital warts (76,4%), scab (80%), herpes (88.9%). 4.2 & 5.2% of women correspondingly consider that tuberculosis and influenza are STDs.

Table 15

Knowledge about transmission of STDs

	Way of STD transmission	yes, possible		impossible		in some cases		doesn't know	
		abs. number	%	abs. number	%	abs. number	%	abs. number	%
1	during blood transfusion	2328	89.5	35	1.3	94	3.6	141	5.4
total answers` 2598									
2	In public bath-houses	1367	52.6	368	14.2	581	22.3	274	10.5
total answers ` 2590									
3	When kissing	928	35.7	738	28.4	550	21.2	375	14.4
total answers ` 2591									
4	Through sexual intercourse	2502	96.2	23	0.9	33	1.3	36	1.4
total answers ` 2594									
5	When shaking hands	264	10.2	1470	56.6	420	16.2	431	16.6
total answers ` 2585									
6	When being injected with an already used syringe	1975	76.0	149	5.7	284	10.9	178	6.8
total answers ` 2586									
7	Through a STDng of a mosquitoes	700	26.9	828	31.8	418	16.1	637	24.5
total answers ` 2581									
8	When using the household objects of a person diseased with chlamydiosis	648	24.9	370	14.2	311	12.0	1250	48.5
total answers `									
9	When getting treatment from a physician or dentist	1439	55.3	298	11.5	543	20.9	314	12.1
total answers ` 2594									
10	Through transmission from mother to fetus	2305	88.7	19	7	142	5.5	130	5.0
total answers ` 2596									

The knowledge of women about STDs was distributed in the following way (Table15). According to the data received during the interviews 89.5% percent of the respondents have sufficient knowledge about transmission of STDs through during blood transfusion, when being injected with an already used syringe (76.0%), through sexual intercourse (94%), through transmission from mother to fetus (88.7).

The respondnents had very scanty knowledge about possible transmission of STDs through a sting of a mosquitoes (26.9%), In public bath-houses (52.6%), when shaking hands (10%) .

The knowledge is very scanty also regarding transmission of chlamydiosis. Every second respondent had no information about the ways of transmission of that disease.

5.2. STDs the respondents previously suffered.

During the recent years a tendency to increase of sexually transmitted diseases is seen in Armenia and in the whole world. Most of those diseases have decisive importance for the causes and pathology rise of the reproductive illnesses. Enough to say that in 96-98% cases of cervical cancer/precancer papillomavirus, chlamydia or herpes virus is revealed. The results of the study (Table 16) showed that every 5-th repondent had a STD in the anamnesis. Approximately 2 % of the respondents didn't deny but didn't also confirm the fact of having a STD.

Table 16

The study of previously suffered STDs

N		**Number of women**	**%**
1	Previously had STDs	512	19.7
2	Previously didn't have STDs	2046	78.7
3	Don't know	39	1.5
		2597	99.9

Attention should be paid to the fact that ¥Table 17) in comparison to respondents living in villages the prevalence of STDs among the respondents living in towns was 2,5 times higher.

Table 17

The study of previously suffered STDs by town/village

N	town / village	Total in group	**yes**		**no**		**doesn't know**	
			N of women	**%**	**N of women**	**%**	**N of women**	**%**
1	town	1870	445	23.8	1401	74.8	24	1.3
2	village	728	67	9.2	645	88.6	15	2.1
		2598	512		2046		39	

The frequency of STD occurrence by place of living is vary diverse, the highest rate of occurrence is in Tavush and Yerevan 36,7 & 34% correspondingly, and 23,7 & 23.8% in Kotayk and Vayots Dzor. The lowest is in Aragatsotn marz - 1.5%, then in Gegharkunik - %, and further in Shirak - 8.9 and Lori - 7% Table 18¤.

Table 18

The study of previously suffered STDs by marzes

N	Marz	Total	**yes**		**no**		**doesn't know**	
			N of women	**%**	**N of women**	**%**	**N of women**	**%**
1	Yerevan	767	261	34	504	65.2	5	0.7
2	Aragatsotn	133	2	1.5	131	98.5	-	-
3	Ararat	219	28	12.8	190	86.8	-	-
4	Armavir	206	32	15.5	165	80.1	9	4.4
5	Gegharkunik	197	5	2.5	191	97.0	1	0.5
6	Lori	228	16	7.0	209	91.7	1	0.4
7	Kotayk	260	62	23.8	190	73.1	8	3.1
8	ÞÇñ³Ï	202	18	8.9	181	89.6	3	1.5
9	Syunik	172	19	11.0	150	87.2	3	1.7
10	Vayots Dzor	76	18	23.7	51	67.1	7	9.2
11	Tavush	139	51	36.7	87	62.6	1	0.7
		2599	512		2049		33	

The study of previously suffered STDs by age groups showed that the highest prevalence of STDs is seen in the age 24-28 (29,3%), then in parallel with age growth there is a decreasing tendency. Thus, 29-33 - (24.8%), 34-38 - (21.5%), 39-43 it becomes 17%. It is interesting to mention that notwithstanding the fact that a relatively low frequency of STD occurrency is seen in the age group 18-23 (17.8%), but it is a rather high percent taking into consideration the short period of time they have sexual relations (Table19).

Table 19

The STDs the respondents previously suffered arranged by age groups

N	Age groups	Total in groups	yes		no		doesn't know	
			N of women	%	N of women	%	N of women	%
1	18-23	185	33	17.8	147	79.5	5	2.7
2	24-28	369	108	29.3	257	69.6	4	1.1
3	29-33	397	97	24.4	293	73.8	6	1.5
4	34-38	410	88	21.5	317	77.3	5	1.2
5	39-43	535	93	17	429	80.2	12.2	2.2
6	44 and more	704	93	13.2	603	85.7	7	1.0
	Total	2600	512		2046		39.2	

As for the type of the sexually transmitted diseases, 77% of the respondents mentioned mycotic infection, 21.3% - trichomoniasis, 4.5% - Hepatitis B, 4.3% - gardnerellez, 3.3% - chlamydiosis, 2.3% - herpes virus, 1.4% - cytomegalovirus, (Table 20).

Table 20

The STDs the respondents previously suffered arranged by STD types

	Type of STD	abs. number	%
1	**Gonorrhea**	3	0.6
2	**Syphilis**	1	0.2
3	**Chlamydiosis**	17	3.3
4	**Hepatitis B**	23	4.5
5	**Herpes**	12	2.3
6	**Trichomoniasis**	110	21.3
7	**Mycotic infection**	402	77.9
8	**Gardnerellez**	22	4.3
9	**Toxoplasmosis**	1	0.2
10	**Cytomegalovirus**	7	1.4

The study of prevalence of STDs the respondents previously suffered arranged by the place of living (town/village) showed Table 21¤ that of occurrence of some sexually transmitted diseases (chlamysia, gardnerella) has the same frequency in towns and villages, some STDs, particularly trichomoniasis, appears 2.3 times frequently in villages, but the rate of mycotic colpitis is by 29% higher among the people living in towns. Only 3 of respondents living in towns had gonorrhea, 12 of them – herpes, 1 – toxoplasmosis and 7 – cytomegaloviruus, and the only case of syphillis was found in a village.

The absence of infections in villages is most probably conditioned with lack of access to examination.

Table 21

The STDs the respondents previously suffered arranged by STD types (town/village)

	Type of STD	town		village	
		abs. number	%	abs. number	%
1	**Gonorrhea**	3	0.7	-	
2	**Syphilis**	-		1	1.5
3	**Chlamydiosis**	15	3.3	2	3.0
4	**Hepatitis B**	23	5.1	-	
5	**Herpes**	12	2.7	-	
6	**Trichomoniasis**	83	18.5	27	40.3
7	**Mycotic infection**	360	80.2	42	62.7
8	**Gardnerellez**	19	4.2	3	4.5
9	**Toxoplasmosis**	1	0.2	-	
10	**Cytomegalovirus**	7	1.6	-	
		520		75	

The study of prevalence of STDs the respondents previously suffered arranged by the age groups showed that the utmost frequency of occurrence of sexually transmitted diseases is in the age group 24-28, which has a tendency to decrease in parallel with age growth (Table 22).

The low prevalence of STDs is explained by the unsymptom process of those illnesses, by the lack of accessibility to researches and insufficient level of laboratory services.

Table 22

The STDs the respondents previously suffered arranged by types and age groups

STD	18-23		24-28		29-33		34-38		39-43		44 and more	
	abs. num	%	abs. num	%	abs. num	%	abs. num	%	abs. num	%	abs. num	%
Gonorrhea	-		2	1.9	1	1.0	-		-		-	
Syphilis	-		1	0.9	-		-		-		-	
Chlamydiosis	2	5.9	5	4.6	4	4.1	4	4.5	2	2.2	-	
Hepatitis B	2	5.9	7	6.5	3	3.1	7	8.0	3	3.2	1	1.1
Herpes	1	2.9	5	4.6	1	1.0	-		3	3.2	2	2.1
Trichomoniasis	6	17.6	16	14.8	16	16.3	21	23.9	24	25.8	27	28.4
Mycotic infection	26	76.5	88	81.5	76	77.6	68	77.3	69	74.2	75	78.9
Gardnerellez	1	2.9	7	6.5	4	4.1	2	2.3	6	6.5	2	2.1
Toxoplasmosis	1	2.9	-		-		-		-		-	
Cytomegalovirus	1	2.9	5	4.6	-		-		1	1.1	-	
Total infections	40		136		105		102		107		107	
Total respondents in marz	34		108		98		88		93		95	

The study of prevalence of STDs the respondents previously suffered arranged by the marzes and Yerevan town showed that the utmost frequency of occurrence of sexually transmitted diseases is in Yerevan, Ararat, Armavir and Lori marzes, where there are possibilities of examinations and they are nor so far from the capital and it allows the people to make use of the services in Yerevan (Table 2).

Table 23

STDs the respondents previously suffered arranged by type and marz

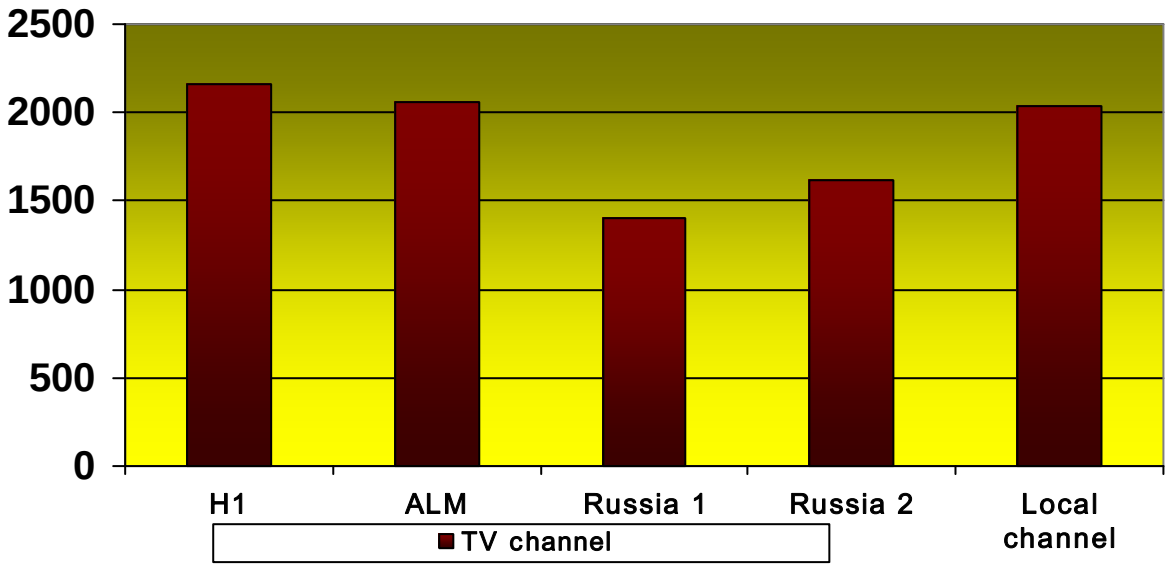
	STD	Yerevan		Aragatsotn		Ararat		Armavir		Gegharkunik		Lori		Kotayk		Shirak		Syunik		Vayots Dzor		Tavush	
		abs. num.	%	abs. num.	%	abs. num.	%	abs. num.	%	abs. num.	%	abs. num.	%	abs. num.	%	abs. num.	%	abs. num.	%	abs. num.	%	abs. num.	%
1	**Gonorrhea**	1	0.4	-		-		-		-		-		2	3.2	-		-		-		-	
2	**Syphilis**	-		-		-		-		-		-		1	1.6	-		-		-		-	
3	**Chlamydiosis**	12	4.6	-		-		3	9.4	-		-		2	3.2	-		-		-		-	
4	**Hepatitis B**	13	5.0	-		1	3.4	6	18.8	-		3	18.8	-		-		-		-		-	
5	**Herpes**	10	3.8	-		-		2	6.3	-		-		-		-		-		-		-	
6	**Trichomoniasis**	52	19.8	-		3	10.3	6	18.8	-		4	25.0	18	28.6	6	33.3	1	5.3	5	27.8	15	29.4
7	**Mycotic infection**	218	83.2	-		24	82.8	20	62.2	-		10	62.5	49	77.8	15	83.3	-		14	77.8	25	49.0
8	**Gardnerellez**	8	3.1	-		-		-		-		-		-			-	-		-		14	27.5
9	**Toxoplasmosis**	1	0.4	-		-		-		-		-		-			-	-		-		-	
10	**Cytomegalovirus**	7	2.7	-		-		-		-		-		-			-	-		-		-	
	Total infections	321		0		28		37		0		17		72		21		1		19		54	
	Total respondents in marz	262		2		29		32		6		16		***63***		***18***		***19***		***18***		***51***	

CHAPTER 6.
ACCESSIBILITY OF MASS MEDIA

6.1. Choosing television as a mass media source

2133 (82,0%) interviewed women have access to mass media and they watch TV programmes, 467 (18.0%) women do not watch TV programmes.

The vast majority of the respondents prefer the Armenian State TV channel H1 (83.2%), 79.4% - ALM, correspondingly 54 & 62% watch Russian channels ORT and RTR. The majority of women living in villages prefer local TV channels 78.5%, and especially ALM (81.4%).



Pic. 9. The TV channelsmost frequently watched by the respondents.

6.2. Choosing radio as a mass media source

The women interviewed usually listen to: 73.7%-1 source, 12% of the respondents listen to at least 2 or more radio channels.

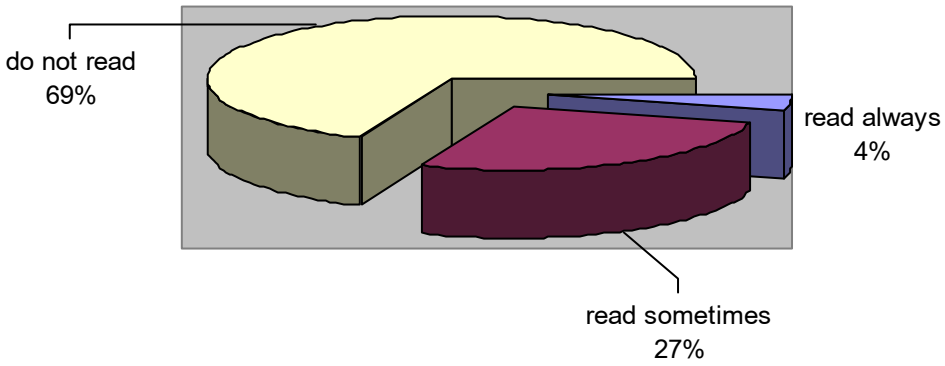
Table 24

Selection of radio channels

		abs. number	
1	at least 1 source	1914	73.7
2	at least 2 source	233	9
3	at least 3 source	63	2.5
4	at least 4 source	17	0.7
5	at least 5 source	4	0.2
		2231	

. 6.3. Getting the health concerning information from published materials

The answers of the respondents regarding reading published materials on health is rather concerning. 68.7% of women do not read any publication about health. Only 4% of them periodically read materials about health, and 27% - read sometimes.



Pic. 10. Getting information about health from published materials

In Table 25 the respondents gave their evaluation to expedience of providing knowledge about sexuality and reproductive health by the mass media.

At the same time the major mass media source was considered the television (53.9%), then the newspapers - 17.2%, but the information was mainly regarding reproductive health, the rate of providing information about other reproduction issues by mass media is very low.

Table 25

Maximum information received from mass media by the respondents

	Mass media	about family planning		about sexuality		about STDs		about AIDS		about reproductive health	
		abs. number	%	abs. number	%	abs. number	%	abs. number	%	abs. number	%
1	**newspapers**	448	17.2	1	0	0	0	1	0	0	0
2	**journals**	206	7.9	179	6.9	0	0	0	0	0	0
3	**books / brochures**	289	11.1	127	4.9	85	3.3	0	0	0	0
4	**television**	1401	53.9	450	17.3	165	6.3	61	2.3	0	0
5	**radio**	17	0.7	83	3.2	39	1.5	20	0.8	4	0.2
6	**video clips**	3	0.1	1	0	6	0.2	2	0.1	4	0.2
7	**none of the mentioned**	229	8.8	2	0.1	0	0	0	0	0	0
	Total	2593	99.7	843	32.4	295	11.3	84	3.2	8	0.3

As for the character of the information, 81% of the respondents found expedient the TV programmes. Every second respondent (50.9%) finds extremely inexpedient the demonstration of video clips. On the whole the attitude of the respondents towards clips, books, brochures and materials regarding their health was very negative (Table 26).

Table 26

	Mass media	is very expedient		is expedient in some cases		is not expedient		Total	
		abs. number	%	abs. number	%	abs. number	%	abs. number	%
1	newspapers	1160	44.6	968	37.2	395	15.2	2523	97.0
2	journals	1245	47.9	921	35.4	338	13.0	2504	96.3
3	books / brochures	1305	50.2	824	31.7	359	13.8	2488	95.7
4	television	2109	81.1	298	11.5	174	6.7	2581	99.3
5	radio	886	34.1	837	32.2	735	28.3	2458	94.5
6	clips	316	12.2	814	31.3	1323	50.9	2453	94.3
7	other sources	65	2.5	208	8.0	391	15.0	664	25.5

CHAPTER 7 .

FERTILITY

7.1. Fertility of respondents

Fecundity of a woman is different by age, it begins to grow starting from the first menstruation and reaches its peak at the age of 20. Then it goes on reducing while coming closer to menopausa. The fecundity is highly dependent on social surroundings, and the couples are deciding the number of their children and the age intervals between them. In case of deliveries with a live fetus the term fertility is used. According to the WHO definition the delivery with a live fetus is the total discharge or isolation of the conception result from mother, when after that isolation, notwithstanding the duration of the delivery, it can breath or show any other sign of living. As a result of this study a number of measurements have been calculated. Age related fertility factors (AFF) reveal the number of deliveries of women defined by the age intervals per 1000 women. In this study the AFF for any special age group was calculated by the following way. The number of deliveries of women of the given age interval from 1 to 36 months prior to the interview was devided to the number of women of the same age interval by the number of years lived. The total fertility rate (TFR) is the presumptive number of children born, which the woman should have had during her lifetime, in case if during reproductive age she should have lived in the fertility age factor conditions currently observed. With the aim of TFR calculation the age peculiar current fertility factors are summed up and that sum is multipled by 5 (as far as 5-year age groups of women were used). Then the amount received is devided to 1000. One of the most important peculiarity of the total fertility rate is that it is not influenced by the age divisions of the population.

During the present study data was collected from the respondents about their whole reproductive hystory. While registering all those hystories each woman was asked how many pregnancies has she had , including those discharged with a live fetus or stillbirth, as well as artificial abortions or miscarriages. Thus, each pregnancy discharge was described in detail, as well as the duration, month of delivery and outcome of each pregnancy was registered. Each pregnancy outcome was classified to a delivery with a live fetus or a stillbirth, miscarriage or an abortion. Data collection was carried out regarding the last completed pregnancy, after which for each pregnancy concrete information was registered regarding the sex of the child, status of living and his age (for alive children) or the age at death, if the children had died. At the end when the data was received it became possible to decide the number of ever born and alive children, the intervals between the

deliveries, the age at the first delivery. Also the frequency of getting pregnant and giving birth in the age group of adolescents was investigated.

7.2. Current levels of fertility

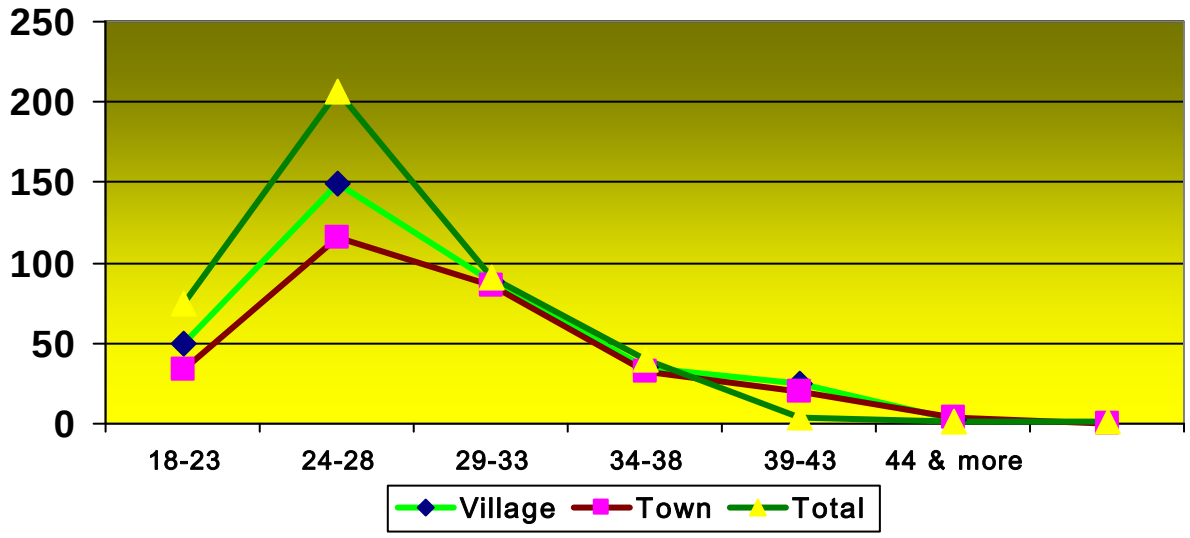
Table 27 and Picture 11 show the peculiar and total fertility factors of the period of time from November 2001 to November 2004 (3 years prior to the interview).

Table 27

Current fertility

The fertility indicators and fertility age specific summed factors and growth fertility indicators three years prior to the interview according to place of living (town/village), Armenia 2005 **__‰‰**			
Age group and index	**Location**		
Age	**Town**	**Village**	**Total**
18-23	118	204	152
24-28	84	96	89
29-33	30	38	33
34-38	18	12	15
39-43	4	1	3
44 and more	0	1	0
Indicators/factors			
Total Fertility factor 18-49	1.5	2	1.6
Total Fertility Indicator 18-44	1.5	2	1.6
General Fertility Indicator	45	68	54
Growth Fertility Indicator	11.9	15.8	13.1

The total fertility factors are expressed per 1 woman.
Total fertility indicators are expressed per 1000 women (the number of deliveries is devided to the number of 18-44 year old women)
Growth Fertility Indicator is expressed per 1000 men



Pic. 11. Age indicators of fertility according to place of living

For the calculation of those indicators a three-year period of time was chosen as an optimal period of time for the memory recollection.

The respondent women started their reproductive life at the age of about 20. The percent of deliveries at that age either among those who live in towns or in villages is 69%. Age specific fertility total indicator is the highest among the age group 20-24, regardless of the place of living, meanwhile the fertility rate of that age group urban women is 2 times lower as compared with rural women (118 against 204 per 1000 women).

Total Fertility Indicator for the period of three years prior to the interview per one woman made 1.6 children, which cannot be provided in a country of simple reproduction. According to the statistical data provided by the RA NSS, the total fertility indicator of the recent years makes 1.2 children per 1 woman.

7.3. Ever born and alive children

The answers of the questions “How did each of your pregnancies discharge” are as follows:
The Table 28 presents the distribution of women interviewed according to the number of children ever born (delivery with a live fetus) during the current marriage. The women interviewed delivered in average less than 2 children during 24 years of their life.

Table 28

Number of children born during the current marriage

N	number of children born	number of women that gave birth	%
1	1 child	369	14.2
2	2 children	1043	40.1
3	3 children	761	29.3
4	4 children	214	8.2
5	5 children	57	2.2
6	6 children	13	0.5
7	7 children	7	0.3
8	8 children	2	0.1
9	9 children	1	0
	Total	***2467***	

As it can be seen from the Table 28, the share of people having one child is relatively low (14.2), 70% of them have 2 or 3 children.

The percent of women having 4 and more children makes 11.3%.

Only 10 women (0.4%) had stillbirths during their current marriage.

During the previous marriages there were 74 (0.4%) deliveries with a live fetus, 64 (2.5%) women had 1 child, 9 (0.3%) of them – 2 children, and 1 woman – 3 children. No deliveries with stillbirth were registered during the previous marriages.

The study of the number of children respondnents have from the view point of age (Table 29) showed a tendency to increase in the number of children. Thus, if in the age group 18-23 the number of women not having a child was 20.5%, but in a higher age group that number decreases and in the age group of 44 and higher it makes 3.6%.

The highest frequency of those having one child (50.8%) is seen in the age group 18-23 years old, the highest frequency of those having 2 children – in the age group 24-28 and 29-33 years old (approximately 53%). As for the respondents having 3 children – the highest is the age group 34-44 years old (35.9-42.8%).

The highest number of those having 4 and more children is the age group 39 years old and higher.

Table 29

Number of children born according to age groups

	18-23		24-28		29-33		34-38		39-43		44 and more	
	abs. number	%	abs. number	%	abs. number	%	abs. number	%	abs. number	%	abs. number	%
Do not have children	38	20,5	20	5,4	13	3,3	12	2,9	16	3,0	25	3,6
1 child	94	50,8	104	28,2	64	16,1	32	7,8	23	4,3	52	7,4
2 children	52	28,1	196	53,1	207	52,1	175	42,7	197	36,8	209	29,7
3 children	1	,5	42	11,4	84	21,2	147	35,9	200	37,4	301	42,8
4 children			6	1,6	21	5,3	32	7,8	75	14,0	82	11,6
5 children			1	,3	4	1,0	7	1,7	17	3,2	25	3,6
6 children					2	,5	3	,7	4	,7	7	1,0
7 children					1	,3	1	,2	3	,6	3	,4
8 children					1	,3	1	,2				
9 children							1	0. 2				
	185		369		397		410		535		704	

The study of the number of children according to the place of living (town/village), Table 30) revealed the following regularity: The number of people not having children is 1.5 times higher among urban population. It can probably be explained by the higher age of marriages. The number of people having 2 children is higher by 13% as compared with rural population and is lower by the same percent in the calculation of people having 3 children. Meanwhile the number of people having 4 children is 2 times lower in towns as compared with those living in villages.

Table30

Number of children born according to place of living (in town/village)

	town		**village**	
	abs. number	**%**	abs. number	**%**
Do not have children	98	5,2	26	3,6
1 child	303	16,2	66	9,1
2 children	811	43,3	225	30,9
3 children	489	26,1	286	39,3
4 children	121	6,5	95	13,0
5 children	37	2,0	17	2,3
6 children	9	,5	7	1,0
7 children	4	,2	4	,5
8 children			1	,1
9 children			1	,1
	1872		728	

The study of the number of children according to the place of living (Yerevan town and villages, Table 31) showed that the number of people having one child is the highest in Yerevan and Armavir (18-19.4%), number of people having two children is the highest in Yerevan, Lori, Shirak and Tavush regions, thus making from 42.4 to 46.5%. The utmost frequency of people having 3-4 children is seen in Vayots Dzor (61.8%), then in Aragatsotn (52.6%), in Armavir (42%), in Gegharkunik (44.7%), in Tavush (39.6%): Number of people having 5 and more children is the highest in Vayots Dzor (6.6%), then in Gegharkunik (6.1%), Aragatsotn (5.2%), Kotayk (4.3%):

The same regularity was observed during ADHS 2000.

Table31

Number of children born by marzes and Yerevan town

		Yerevan		Aragatsotn		Ararat		Armavir		Gegharkunik		Lori		Kotayk		Shirak		Syunik		Vayots Dzor		Tavush	
		abs. number	%	abs. number	%	abs. number	%	abs. number	%	abs. number	%	abs. number	%	abs. number	%	abs. number	%	abs. number	%	abs. number	%	abs. number	%
1	**do not have children**	42	5.5	9	6,8			7	3,4	11	5,6	14	6,1	6	2,3	9	4,5	6	3,5	2	2,6	5	3,6
2	1 child	149	19.4	14	10,5			37	18,0	26	13,2	27	11,8	33	12,7	22	10,9	23	13,4	2	2,6	15	10,8
3	2 children	357	46.5	33	24,8			72	35,0	59	29,9	101	44,3	102	39,2	88	43,6	67	39,0	20	26,3	59	42,4
4	3 children	181	23.6	52	39,1			66	32,0	64	32,5	64	28,1	85	32,7	64	31,7	54	31,4	33	43,4	40	28,8
5	4 children	33	4.3	18	13,5			21	10,2	24	12,2	17	7,5	22	8,5	13	6,4	14	8,1	14	18,4	15	10,8
6	5 children	3	0.4	6	4,5			2	1,0	9	4,6	2	,9	8	3,1	3	1,5	7	4,1	4	5,3	2	1,4
7	6 children	2	0.3	1	,8			1	,5	3	1,5	2	,9	3	1,2	1	,5	1	,6	1	1,3	2	1,4
8	7 children	1	0.1							1	,5	1	,4	1	,4	2	1,0					1	,7
9	8 children	-										1	0.4	1	0.4								
10	9 children	-								1	0.5												
		768		133				206		197		228		260		202		172		76			

7.4. Pregnancy outcomes

7.4.1 Miscarriages

In Table 32 the outcomes of the pregnancies of the antecedent 3 years are represented. Miscarriages (up to 28 weeks) during the current marriage.

Table32

Miscarriages

N	**Number of miscarriages**	**Number of women that had miscarriages**	**%**	**%**
1	1	318	12.2	71.9
2	2	75	2.9	17.0
3	3	27	1.0	60.1
4	4	11	0.4	2.5
5	5	4	0.2	0.9
6	6	3	0.1	0.7
7	10	1	0	0.2
8	15	1	0	0.2
9	16	1	0	0.2
10	28	1	0	0.2
	Total	442	17.0	100
		2158	83.0	
		2600	100	

The number of total miscarriages in the time of current marriage is 442 (17%), the majority of women (15%) had 1 or 2 miscarriages. 1.7% of the respondents had 3 and more miscarriages.

During the previous marriages 1 woman had 2 miscarriages.

7.4.2. Abortions

Table33

Abortions

N	**Number of abortions**	**Number of women that had abortions**	**%**	**%**
1	1	371	14.3	23.6
2	2	360	13.8	22.9
3	3	250	9.6	15.9
4	4	161	6.2	10.2
5	5	107	4.1	6.8
6	6	60	2.3	3.8
7	7	45	1.7	2.9
8	8	41	1.6	2.6
9	9	10	0.4	0.6
10	10	62	2.4	3.9
11	11	7	0.3	0.4
12	12	12	0.5	0.8
13	13	10	0.4	0.6
14	14	8	0.3	0.5
15	15	24	0.9	1.5
16	16	4	0.2	0.3
17	17	2	0.1	0.1
18	18	2	0.1	0.1
19	19	1	0	0.1
20	20	14	0.5	0.9
21	22	2	0.1	0.1
22	23	2	0.1	0.1
23	24	1	0	0.1
24	25	5	0.2	0.3
25	28	1	0	0.1
26	30	6	0.2	0.4
27	36	1	0	0.1
28	39	2	0.1	0.1
29	40	2	0.1	0.1
30	99	1	0	0.1
	Total	1574	60.5	100
		1026	39.5	
		2600	100	

The Table 30 shows the cases of abortions during the lifetime of the respondents. According to the research results more than the half of all the respondents had abortion (60.5%). The prevailing part of the interviewed had 1 abortion (14.3%), 13.8% - 2 abortions, 9.6% - 3 abortions. Together with the increase

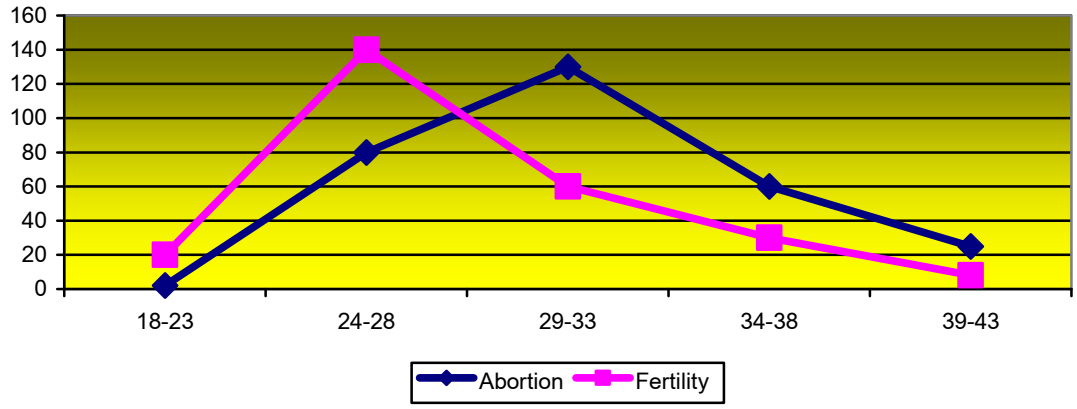
in the number of abortions there is a decrease in the number of women that had abortions. Thus, 6.2% had abortions, but 12.7% of the respondents had 5 and more abortions.

The number of abortions per 1 woman is more than 3. As it was expected, the frequency of abortions is getting higher with age and if in the age group of 18-23 only 12% of respondents had abortions, among the age group of 24-33 - 52% of respondents had abortions, and 70.1% - in the age group 34 and higher. Certain dependence was revealed between the number of alive children and abortions made. Among the women who had no children there were no cases of abortions mentioned. While 21% of women having one child and 75% of women having 2-3 children had abortions.
During the previous marriages 1 woman had 2 miscarriages.

There are no strict diversifications concerning abortions by town and village locations. There is also a curve correlation between educational level and artificial abortions undergone. Women with high and low educational level make fewer abortions. It is possible that the high fertility level of women with low educational level is conditioned with their low appliance to artificial abortions (that means, that when the woman is becoming pregnant she is more apt to giving birth). At the same time it is possible that women with higher education which use more experienced and trusted methods of contraception are less apt to have unexpected pregnancy.

There is a significant diversification regarding artificial abortions had during the life time. The prevalence in Lori and Vayots Dzor (41% & 39% correspondingly) is rather low, than that in other marzes - 74 % in Gegahrkunik, 75 % in Aragatsotn and Armavir.

These data can be seen also in the results of the ADHS 2000, that showed that 65% of ever married women had abortion, 79% of women that ever had abortions had more than one abortion (NPRH & MoH, 1998).



Pic.12. Age coefficients of fertility and abortions

As it can be seen from the Picture 12, the peak of the fertility is in the age group of 23-25 year olds, meanwhile the abortions - in the age group of 26-29 year olds. It means that armenian women go to abortion after having one child.

7.4.3. Other gestational complications

62 (2.4 %) of interviwed women had extrauterine pregnancy, and 57 (2.2 %) of them had 1, 4 (0.2 %) of them - 2, and 1 of them - 3 extrauterine pregnancies.

8 (0.3%) women had pregnancy complications with formation of bubble clusters, 18 (0.7 %) - had immature pregnancy.

Rather interesting information was received regarding the complications during the outcome of the last pregnancy, delivery or abortion.

Every 5th respondent 569 (21.9 %) had complications, 238 (9.2 %) of them had uterine tears, 46 (7.8 %) of them had inflammatory complications.

So, as the data from Table 22 show, 14.2% of the respondents had one delivery with alive fetus during their lifetime, 42% - 2 pregnancies, 1058 (40.7%) - 3 and more.

72 (2.8 %) women had stillbirths during their life.

Table34

Live birth deliveries

N	**Deliveries with a live fetus**	**number of women**	**%**	**%**
1	1	368	14.2	14.9
2	2	1045	40.2	42.3
3	3	765	29.4	31.0
4	4	215	8.3	8.7
5	5	53	2.0	2.1
6	6	15	0.6	0.6
7	7	7	0.3	0.3
8	8	2	0.1	0.1
9	9	1	0	0
	Total	2471	95.0	100
		129	5.0	
		2600	100	

Out of 2470 interviewed women 2247 (86.4 %) have alive children, 173 (6.7%) had one child death, 50 (1.9 %) had 2 and more child deaths.

Table 35

Number of alive and dead children

N	**are alive or dead**	**Number of children**	**%**	**%**
1	all are alive	2247	86.4	91.0
2	1 child has died	173	6.7	7.0
3	more than 1 child has died	50	1.9	2.0
	Total	2470	95.0	100

CHAPTER 8.

INFERTILITY

92 (3.5 %) of the respondents didn't have pregnancies, but 5 (0.2 %) of them took measures to prevent conception, 87(3.4 %) - tried to get pregnant.

68 (2.7 %) women had regular sexual relations for more than 2 years without using any means to prevent pregnancy.

Table 36

N		**number of women**	**%**	**%**
1	rare or never had	7	0.3	6.5
2	up to 6 months	23	0.9	21.5
3	7-12 months	9	0.3	8.4
4	13-24 months	12	0.5	11.2
5	2-5 years	10	0.4	9.3
6	6-10 years	12	0.5	11.2
7	more than 10 years	10	0.4	9.3
8	doesn't remember, doesn't want to respond	20	0.8	18.7
9	used contraception	4	0.2	3.7
	Total	***107***	4.1	100
		2493	95.9	
		2600	100	

Table 37

Sexual activity during the recent years without taking measures to prevent pregnancy

N	Frequency	**number of women**	**%**	**%**
1	every day or every other day	43	1.7	33.9
2	once a week	28	1.1	22.0
3	not more than 3 times a month	6	0.2	4.7
4	rarely	12	0.5	9.4
5	there were no sexual relations involved	11	0.4	8.7
6	doesn’t remember or doesn't want to answer	25	1.0	19.7
7	other	2	0.1	1.6
	Total	***127***	4.9	100
		2473	95.1	
		2600	100	

Regular can be considered the relations that take place at least once a week.

Withdrawal, syringing and natural methods are also considered to be methods of preventing the pregnancy.

<u>Total period of time</u> should be taken into consideration, which covers the period of either current or the previous marriages (cohabitations).

71 women have active sexual life and do not get pregnant for more than a 24 month period, which means that 3.4 % of the respondents suffers primary infertility.

CHAPTER 9.

ACCESSIBILITY OF MEDICAL ASSISTANCE

Special attention should be paid to the investigation of peculiarities of applying to medical institutions of married couples having reproductive health problems. Below one can see the table 38, where we tried to find out if the respondent or her husband (partner) applied to a medical institution or traditional clinic (sorcerer) with the aim of receiving consultation or medical assistance for problems concerned with their reproductive health.

Table 38

Accessibility of reproductive medical aid

N	Person who applied	**Quantity**	**%**	**%**
1	neither of them	891	34.3	34.3
2	only woman applied	1526	58.7	58.8
3	only husband (partner) apllied	6	0.2	0.2
4	woman apllied, but she is not sure if her husband (partner) did	15	0.6	0.6
5	both of them applied	158	6.1	6.1
	total	***2596***	99.8	100
		4	0.2	
		2600	100	

Some questions were asked to find out the levels of accessibility of reproductive services and the barriers that do not allow to apply. First of all the women were asked questions to find out if they had any health problem or need for medical assistance in 12 months period prior to the interview. The number of women who mentioned such a problem is 1526 (58.7 %).

According to every third respondent (34.3 %) neither the respondent, nor the husband (partner) applied for medical assistance with reproductive health problems.

Both the wife and the husband applied in 158 (6.1 %) cases. 42.3% of them mentioned that they hadn't applied for medical aid due to financial problems.

Table 39

Reasons of non-applying

N	Reasons of non-applying	**number of women**	**%**	**%**
1	Decided to wait a little bit more, hoping the illness will pass without treatment	59	2.3	2.3
2	Financial problems	269	10.3	10.3
3	Don't know where to apply for addressing such issues	8	0.3	0.3
4	Husband objects	36	1.4	1.4
5	Relatives object	4	0.2	0.2
6	Are afraid of side effects or complications	31	1.2	1.2
7	Don't have time	80	3.1	3.1
8	Absence of favorable sanitary and hygiene conditions in medical institutions	10	0.4	0.4
9	Other	637	24.5	24.5
		2600	100	

The examination of the data regarding the non-applying of respondents to a medical institution or sorcerer with reproductive health problems for passing an investigation or receiving a treatment showed that 269 (10.3%) of people in need of medical assistance didn't apply because of financial problems, 637 (24.5**%**) - didn't mention any specific reasons, 59 (2.3 %) - decided to wait, hoping the illness will pass without treatment.

As it can be seen from the data of the Table 40 44.8%, abproximately the half of the respondents, have applied to women's consultancy or polyclinics with the aim of getting consultation for the disease, 17.3% - to the regional maternity hospital, 11%- to a specialized center.

Table 40

Division of medical institutions by applying rate

N	Where or whom to apply	**number of women**	**%**
1	Junior surgeon's and obstetrics station (JSOS)	6	0.2
2	Village ambulatory / hospital	52	2.0
3	Women's polyclinics	1165	44.8
4	Regional maternity house/hospital	451	17.3
5	Specialized center	286	11.0
6	Private clinic	30	1.2

7	Private doctor	29	1.1
8	Sorcerer	20	0.8
9	Other	66	2.5
10	Doesn't know, is not sure about the place where her husband (partner) applied	-	
		2600	100

808 (31.1%) respondents said that investigations concerned with reproductive health problems were performed, 1736 (66.8%) of the respondents didn't apply anywhereÉ, 56 (2.2%) – gave other responces.

Table 41

List of investigations performed to the respondents

N	Investigation performed	**yes**		**no**		**doesn't know**	
		quantity	**%**	**quantity**	**%**	**quantity**	**%**
1	Blood pressure measured	1550	59.2	1024	39.4	36	1.4
2	General physical examination	1289	49.6	1225	47.1	86	3.3
3	Gynecological examination	1686	64.8	893	34.3	21	0.5
4	Mirror examination	860	33.1	1555	59.8	185	7.1
5	Smear tests	1359	52.3	1142	43.9	99	3.8
6	Testing for infections	518	19.9	1820	70	262	10.1
7	Testing for the quantity of hormones in blood	322	12.4	1924	74	354	13.6
8	Cytological test of the uterus cervix	398	15.3	1873	72	329	12.7
9	Colposcopy	168	6.5	2031	78.1	401	15.4
10	Sonography	875	33.7	1497	57.6	228	8.8
11	Diagnostic scrape of the uterine cavity endometrium	157	6.0	2098	80.7	345	13.3
12	Hysterosalpingography	85	3.3	2138	82.2	377	14.5
13	Laparoscopy	74	2.8	2176	83.7	350	13.5
14	Other	34	1.3	2378	91.5	188	7.2
		2600	100				

All the questions mentioned in the table have been read to the respondents, and they were asked to point out those investigations that they passed when applying to a medical institution. The data received show that the examination of women experiencing reproductive health problems was carried out in an insufficient level, gynecological examination has been performed in 64.8% cases, mirror examinations - in 33.1% cases, smear tests - in 52.3% cases. Strictly insufficient is the level of investigations for revealing the infections - 19.9%, testing for the quantity of hormones in blood - 12.4%, diagnostic scrape of the uterine cavity endometrium - 15.3%, colposcopy – only in 6.5% cases.

Table 42

List of investigations performed to the husband (partner) of the respondent

N	Investigation carried out	yes		no		doesn't know	
		number of women	%	number of women	%	number of women	%
1	Measurement of blood pressure	158	6.1	1469	56.5	39	1.5
2	General physical observation	112	4.3	1502	57.8	49	1.9
3	Examination and tests for urogenital infections	87	3.3	1531	58.9	47	1.8
4	Sperm investigation	85	3.3	1544	59.4	35	1.3
5	Doppler sonography	19	0.7	1570	60.4	70	3.0
		2600	100				

All the questions mentioned in the table have been read to the respondents, and they were asked to point out those investigations that they passed when applying to a medical institution.

The volume of the husbands (partners) of the respondents is much more concerning. According to data received from 2403 respondents for 92.(4.1)% of them not a single investigation was carried out, and only 181 (7%) women responded that certain medical investigations were carried out with the aim of checking the reproductive health condition of their husband (partner). The data received show that the examination of men experiencing reproductive health problems was carried out in an insufficient level, examination and tests for urogenital infections and sperm investigation has been carried out in 3.3%, and Doppler sonography - in 0,7 %.

Table 43

Type of treatment received by the respondent

N	treatment method	number of women	%
1	Antibiotics / Sulphanilamides	694	26.7
2	Tampons	476	18.3
3	Physiotherapy	63	2.4
4	Antibacterial suppositories	183	7.0
5	Non-traditional, sorcerer's means	124	4.8
6	Vitamins /Biostimulators	364	14.0
7	Surgical intervention	234	9.0

Most often antibiotics therapy has been performed - 26.7 %, tampons - 18.3 %, vitamins, biostimulators - 14 %, Surgical intervention - 9 %.

According to the data received 2311 women (88.9%) mentioned that the husband (partner) hadn't received any treatment, 57 (2.2%) women responded that their husband (partner) had received treatment but she doesn't know the details.

CHAPTER 10.

MORBID CONDITIONS, BAD HABITS, DISEASES, SURGICAL OPERATIONS THAT HAVE NEGATIVE INFLUENCE ON THE WOMEN'S REPRODUCTIVE HEALTH

Table 44

Peculiarities of the menstrual function

N	Menstrual periodicity	**N of women**	**%**	**%**
1	regular, once in every 21-35 days	1773	65.2	68.2
2	irregular	554	21.3%	
3	sometimes there happen intermenstrual bleedings	38	1.5	1.5
4	regular, but there happen intermenstrual bleedings	29	1.1	1..1
5	lack of menstruation for more than 6 months	152	5.8	5.8
6	other	165	6.3	6.3

1773 (68.2%) women have regular and normal menstrual periodicity, 592 (22.8%) of them have irregular menstruation with intermenstrual bleedings. 152 (5.88%) of them have secondary amennorhea.

The fact that 139 (5.3%) respondents had bleeding during sexual intercourse is of interest.

Data collection concerning ulcerations, bubbles, wart-like or other neoplasms on the external genital organs and in their neighborhood showed that more than the half of the respondents - 1394 (53.6%) of them had inflammatory diseases of genitals.

191 women (7.3%) had ulcerations, bubbles, wart-like or other neoplasms on the external genitals or in their neighborhood.

Table 45

Clinical symptoms of gynecological diseases

N	Symptoms	**yes**		**no**		**doesn't know**	
		N of women	**%**	**N of women**	**%**	**N of women**	**%**
1	pain in the lower part of abdomen or in waist	1777	68.3	806	31.0	10	0.4
2	abundant secretion from vagina	1095	42.1	1477	56.8	21	0.8
3	irritation and itching in vagina or external genital organs	581	22.3	1981	76.2	29	1.1
4	pain, burning during urination	462	17.8	2112	81.2	19	0.7
5	frequent urination with difficulties	321	12.3	2250	86.5	22	0.8
6	pain during sexual intercourse	604	23.2	1956	75.2	27	1.0

The analysis of the data received shows the high prevalence of gynecological diseases. It is sufficient to say that 2600 respondents presented approximately 4840 symptoms, that is every woman had in average 2 different symptoms.

More than the half of the respondents (68.3%) had pains in the lowers part of the abdomen or waist, every 2-nd woman had abundant secretion from vagina, every 5-th woman - irritation and itching in vagina or external genital organs, as well as pain, burning during urination (17.8%); 12.3% of respondents had frequent urination with difficulties, and 23.2% of them had pain during sexual intercourse.

Notwithstanding the high prevalence of morbidity, only 737 (28.3%) of the respondents and their husbands had received treatment, 1848 (71.1%) hadn't received treatment.
Only 339 women **(**49%) of 705 (27.1%) that received treatment of cervical erosion, had received contemporary treatment.

Table 46

Treatment received

N		**Number of women**	**%**	**%**
1	tampons	326	12.5	46.3
2	suppositories	37	1.4	5.3
3	cauterization	314	12.1	44.6
4	cryosurgery	21	0.8	3.0
5	extraction	4	0.2	0.6
6	other	2	0.1	0.3
		704		

312 (12.0%) women had surgical operations on genital organs.

CHAPTER 11.

BAD HABITS

On the whole only 79 (3.1%) of interviwed women smoke, meanwhile only 3 of them smoke more than 20 cigarettes.

Number of smokers among their husbands (partners) was 1682 (65%), meanwhile only 19.2% of them smoke more than 20 cigarettes.

Table 47

Smoking, women

N		**Number of women**	**%**	**%**
1	up to 10 cigarettes	40	1.5	50.6
2	10-20 cigarettes	36	1.4	45.6
3	more than 20 cigarettes	3	0.1	3.8
		79		

Table 48

Smoking, men

N		**Number of men**	**%**	**%**
1	up to 10 cigarettes	319	12.3	18.9
2	10-20 cigarettes	864	33.2	51.2
3	more than 20 cigarettes	499	19.2	29.5
		1682		

PART 2

PRESENTATION OF THE RESULTS OF THE CLINICAL AND EMYDEMIOLOGICAL SURVEY

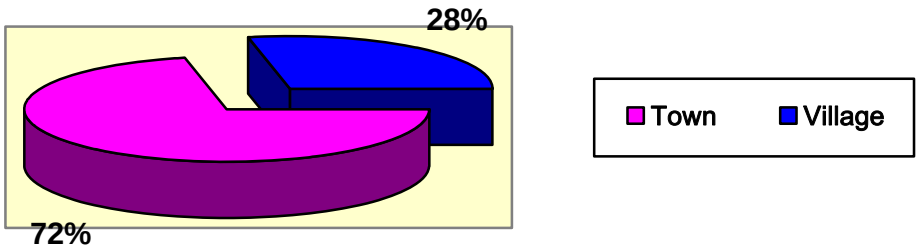
CHAPTER 1.

ULTRASOUND EXAMINATIONS OF THE GYNECOLOGICAL AND PELVIS MINOR ORGANS

Gynecological and pelvis minor organs were exmanied with ultrasound, as well as STD tests were conduvted to 2494 women (gonococcus, thrichomonas, chlamydia, gardnerella, mycotic infection, bacterial coccus).

The people examined were distributed by place of living (town/village) in the following way:

- 1761 (98,7%) out of 1785 urban women were examined ,
- 698 (98,4%) out of 709 rural women were examined .



Pic. 1. Distribution of the examined women by place of living

Before starting the investigation each woman was told about her right not to participate in the investigation and smear test, and has signed an agreement form which allowed the doctors to examine her. 24 (1.3%) urban and 11(1.6%) rural respondents refused to pass the investigation.

1.1. Investigation of external genital organs and vagina

Only one case of genital warts and bubble clusters was revealed during the examination of the external geniats and vagina.

During the examniation of the vagina it was revealed that 6 (0.6%) urban and 3 (0.5%) rural examined women had warts and ulcers (Table1).

Table 1.

Prevalence of warts, ulcers of the vagina by place of living (town/village)

Town/village	number of women having vaginal warts, ulcers					
	not revealed	%	revealed	%	Total in group	%
Town	1779	99.7	6	0.3	1785	100
Village	706	99.5	3	0.5	709	100
Total	2485					

The following was seen from the examination of vagina of the respondents: vaginal warts and ulcers had 4 women in Yerevan, 3 - in Armavir, 1 case in Gegharkunik and Shirak marz (Table 2).

6 (0.6%) urban and 3 (0.5%) rural women had warts and ulcers in the vaginal walls.

Table 2

The prevalence of vaginal warts and ulcers by marz

	Marz	**N of women examined**	**%**	**ulcers, warts on the external genitals**		**warts and ulcers in vagina**	
1	Yerevan	768	29.6	1	0,1	4	0.6
2	Aragatsotn	133	5.1	-	-	-	
3	Ararat	219	8.4	-	-		
4	Armavir	206	7.9	-	-	3	0,5
5	Gegharkunik	197	7.6	-	-	1	0,5
6	Lori	228	8.8	-	-	-	-
7	Kotayk	260	10.0	-	-	-	-
8	Shirak	202	7.8	-	-	1	0,5
9	Syunik	172	6.6	-	-	-	-
10	Vayots Dzor	76	2.9	-	-	-	-
11	Tavush	139	5.3	-	-	-	-
	Total	***2600***	***100***				

1.2. Results of the Ultrasound Examination of the internal genital organs

The ultrasound examination was carried out by a portable US scanner “ALOKA”, that works in the real time regimen.

The results of the survey showed that every 4-5th woman had some kind of uterine pathology (Table 3), most frequent is mioma - in 17.8% cases, 23 (0.9%) women had hypoplastic uterus, 2 women had pathology of absence of the uterus, 38 (1.5%) had hysterectomy.

Every 5th examined, 520 (20.8%) women, had adnexa uteri pathologies, most often, in 13.2%, there was a right ovary enlargement, 4.1% - left ovary enlargement. 34 (1.8%) women had hypoplastic ovaries. Large number of women (2%) made ovaryectomy.

Table 3

Results of the US examination of the uterus

		N of women examined	**%**
1	normal	1775	72
2	enlarged	445	17.8
3	hypoplastic	23	0.9
4	no development pathology	2	0.1
5	ablated	38	1.5
		2283	

Table 4

Results of the US examination of the adnexa uteri

	Ovaries	right		left	
2	enlarged	330	13.2	102	4.1
3	hypoplastic	23	0.9	11	0.4
4	no development pathology	1	0	3	0.1
5	ablated	31	1.2	19	0.8
	Total	385		135	

According to the data received, the rural population had hysteromyoma by 15% more frequently (Table 5, 6), the rest of the pathologies had the same frequency of occurrence. As for the adnexa, the prevalence of the pathologies in rural areas is 2 times higher than in urban areas. (Table 7,8)

Table 5

Results of the US examination of the uterus (town)

		N of women examined	%
1	normal	1241	69.5
2	enlarged	304	17
3	hypoplastic	15	0.8
4	no development pathology	1	0.1
5	ablated	22	1.2

Table 6

Results of the US examination of the uterus (village)

		N of women examined	%
1	normal	534	75.3
2	enlarged	141	19.9
3	hypoplastic	8	1.1
4	no development pathology	1	0.1
5	ablated	16	2.3

Table 7

Results of the US examination of the adnexa uteri (town)

	ovaries	right		left	
2	enlarged	192	10.8	71	4.0
3	hypoplastic	16	0.9	4	0.2
4	no development pathology	1	0.1	2	0.1
5	ablated	23	1.3	9	0.5
	Total	232			

Table 8

Results of the US examination of the adnexa uteri (village)

	ovaries	right		left	
2	enlarged	138	19.5	31	4.4
3	hypoplastic	7	0.1	7	0.1
4	no development pathology	-		1	0.1
5	ablated	8	0.1	10	1.4
	Total				

Table 9

The results of the US examination of the uterine pathologies by marzes

	Marz	N of women examined	%	uterus		ovary	
1	Yerevan	768	29.6	55	7.8	8	0.1
2	Aragatsotn	133	5.1	39	29.5	7	5.3
3	Ararat	219	8.4	42	20.9	17	7.0
4	Armavir	206	7.9	35	17.0	15	7.3
5	Gegharkunik	197	7.6	55	27.9	1	0.5
6	Lori	228	8.8	85	37.3	10	4.4
7	Kotayk	260	10.0	56	21.6	4	1.5
8	Shirak	202	7.8	4	2.0	4	2.0
9	Syunik	172	6.6	30	19.7	24	15.8
10	Vayots Dzor	76	2.9	16	21.0	2	2.6
11	Tavush	139	5.3	28	20.3	13	9.4
	Total	***2600***	***100***	***445***		***105***	

The highest prevalence of hysteromyoma was observed in Lori (37.3%), Aragatsotn (29.5%), Gegharkunik (27.9%), Yerevan (7.8%), and Shirak (2%). The highest percent of adnexa pathologies was in Syunik (15.8%), Tavush (13.9%). The lowest frequency of occurrence was in Gegharkunik (0.5%), Kotayk (1.5%) and Shirak (2%).

CHAPTER 2.

RESULTS OF LABORATORY EXAMINATIONS

2.1 The volume of laboratory examinations

The following examination were performed:

1. a vaginal smear was taken for the microscopical analysis,
2. a vaginal smear was taken for chlamydia identification,
3. a smear was taken for a Pap-smear test

Table 10.

Distribution of women examined by type of examination (town / village)

Town/village	number of women examined					
	microscopical	%	chlamydia smear	%	PAP-smear	%
Town	1763	98,8	1761	98,7	1757	98,4
Village	692	97.6	692	97.6	691	97.5
Total	2455		2453		2448	

***(1785 are urban population, 709 are rural, in total - 2485 women)**

2.2. STD revealing among respondents

The chlamydia trachomatis examination was carried out by Direct Immunofluorescence Method (DFA) by examining the biomaterial taken from the cervix. The examination of trichomoniasis, gonorrhea, gardnerella, candidosis - by the Gram method, with the bacterioscopic analysis of the smear. In doubtful cases it was decided to do a bacteriological analysis for the revealing of gonorrhea.

The majority of the women examined, 1785 urban and 709 rural population (2494 in total), had dysbiosis, vaginitis or some other STD.

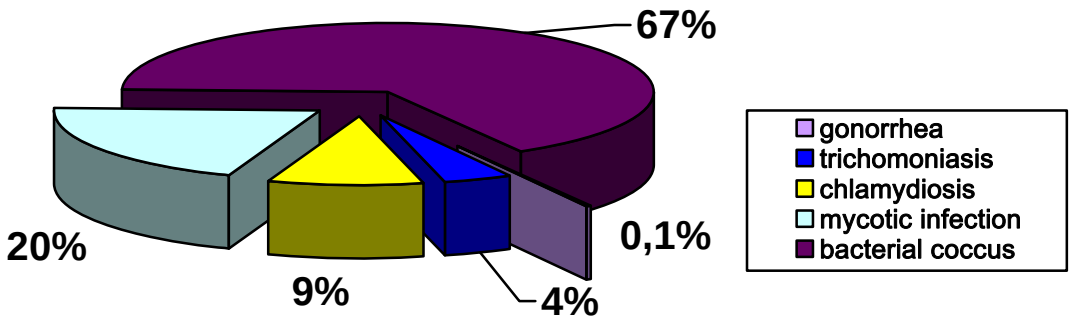
The distribution of the STDs revealed is presented in the Table 11.

Table 11

The prevalence of STDs among the women examined

Town/ village	STDs												
	gonorrhea J1		trichomoniasis J2		chlamydiosis J3		gardnerellez J4		mycotic infection J5		bacterial coccus J6		Total
		%		%		%		%		%		%	
Town	9	0.5	78	4.4	193	10.8	474	26.6	403	22.6	1156	64.8	2313
Village	2	0.3	36	5.1	65	9.2	224	31.6	142	20	649	91.5	1138
Total	11	0.4	114	4.6	258	10.3	698	27.9	545	21.8	1805	72.3	3431

Bacterial coccus were revealed in the majority of cases - 1805 (72,4%), gardnerella - in 698 (28%) cases, mycotic infection - in 545 (21,9%) cases, chlamydia trachomatis - in 258 (10,3%) cases, trichomoniasis - in 114 (4,6%) cases, gonorrhea - in 11 (0,4%) cases.



Pic. 2. STD Prevalence

The total number of STDse among the women examined made 3431, that is, the share per woman is 1.4 STD, the average coefficient per woman in towns is not much differing from the total coefficient. (1.3). The STD coefficient in rural areas is 1.6, which is high either per urban or general population. It can be explained by the lack of access to medical services for the rural population, lower educational level of the rural population and inability to carry for their own health.

Table 12

The prevalence of the STDs revealed by marzes

	Marz	gonorrhea		trichomoniasis		chlamydiosis		gardnerella		mycotic infection		bacterial coccus	
1	Yerevan	1	0.1	32	4.6	82	11.7	165	23.5	208	29.6	236	33.6
2	Aragatsotn	-		7	5.3	18	13.6	35	26.5	28	21.2	119	90.2
3	Ararat	6	3.0	13	6.5	23	11.4	66	32.8	49	24.4	192	95.5
4	Armavir	2	1.0	15	7.3	27	13.1	54	26.2	45	21.8	202	98.1
5	Gegharkunik	-		4	2.0	18	9.1	68	34.5	30	15.2	195	99.0
6	Lori	-		10	4.4	33	14.5	74	32.5	50	21.9	221	96.9
7	Kotayk	2	0.6	14	5.4	24	9.3	84	32.4	56	21.6	228	88.0
8	Shirak	-		8	4.0	4	2.0	80	39.6	43	21.3	201	99.5
9	Syunik	-		-		-		-		-		-	
10	Vayots Dzor	-		3	3.9	15	19.7	22	28.9	12	15.8	-	
11	Tavush	-		8	5.8	14	10.1	50	36.2	24	17.4	135	97.8
	Total	***11***	***0.4***	***114***	***4.6***	***258***	***10.3***	***698***	***27.9***	***545***	***21.8***	***1729***	***72.3***

As it is seen in the Table 6, the highest frequency of occurrence of bacterial coccus is in Shirak marz (99.5%), Gegharkunik (99%), Armavir (98.1%), Lori (96.9%), while in Yerevan it makes 33.6%, and 72.7% is the total percent of the examined. Dysbiosis and vaginosis are most commonly occurring types of vaginal microphlora pathologies. Gardnerella and candidosis are in the second place in the list of the STDs. Gardnerella was revealed in 27.9% cases, the highest frequency was in Shirak (39.6%), Tavush (36.2%), Gegharkunik (34.5%), while in Yerevan it was 23.5%. As for the candidosis, the rate of occurence of it is 21.8%, the highest frequency of occurrence is in Yerevan (29.6%), Ararat (24.4%), the lowest - in Vayots Dzor (15,8%), Tavush (17.4%). Though gonorrhea is in the list of tests the pregnants are obliged to pass, the results of the survey show that it has been revealed in only 11 cases, while every 10th examined had chlamydia trachomatis, which has a destructive influence of the reproductive system. The highest rate of chlamydia was in Vayots Dzor (19.7%), Lori (14.5%), Armavir (13.1%), Aragatsotn (13.6%). The rate of chlamydiosis in Shirak is very low (2%).

The highest frequency of trichomoniasis was observed in Armavir (7.3%), Ararat (6.5%), Tavush (5.8%), and Yerevan (4.6%), the lowest frequency of occurrence was in Gegharkunik (2%), Vayots Dzor (3.9%), total share among the examined - 4.6%.

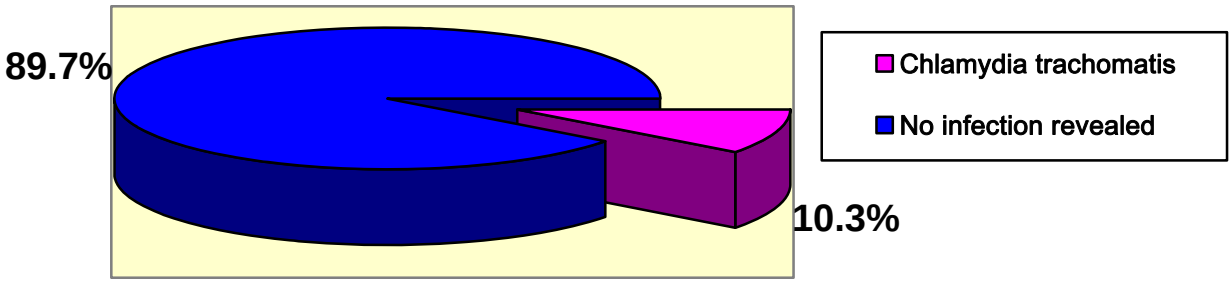
The prevalence of gonorrhea is very low, only 11 cases, which was distributed in the following way: Ararat - 6, Armavir -2, Kotayk - 2 and Yerevan - 1.

CHAPTER 3.

CLINICAL AND EPYDEMIOLOGICAL SURVEY OF CHLAMYDIOSIS PREVALENCE

The results of the survey regarding the chlamydia infection are as follws:

- 258 out of 2494 examined women (10.3%) had chlamydia infection



Pic. 3. Prevalence of chlamydia infection among the women examined

As it can be seen from the analysis of the survey, no difference was revealed among the chlamydia occurrence by place of living (town/village) (Table 13).

Table 13

Prevalence of chlamydia by place of living (town/village)

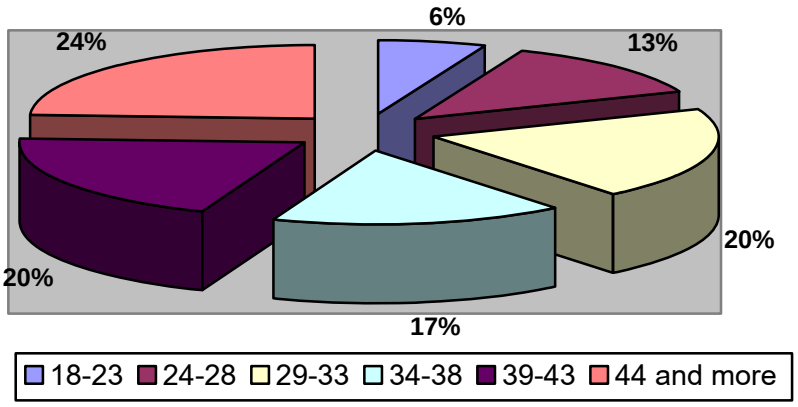
Town/village	Number of women examined for the revealing of chlamydia					
	not revealed	%	revealed	%	total in group	%
Town	1592	89.2	193	10.8	1785	71.6
Village	644	90.8	65	9.2	709	28.4
Total	2236	89.7	258	10.3	2494	

The results of the examinations by age groups (Table 14) showed that the highest frequency of occurrence of chlamydia was observed in the age group 29-33 (13.8%), the lowest - in the age group 18-23 (8.8%).

Table 14

Prevalence of chlamydia infection by age

Age group	Number of women examined for the revealing of chlamydia			
	not revealed	%	revealed	%
18-23	165	91,2	16	8,8
24-28	318	90.6	33	9.4
29-33	325	86.2	52	13.8
34-38	354	89.2	43	10.8
39-43	466	90	52	10
44 and more	608	90.7	62	9.3
Total	2236	89.7	258	10.3



Pic. 4. Prevalence of chlamydia infection by age groups

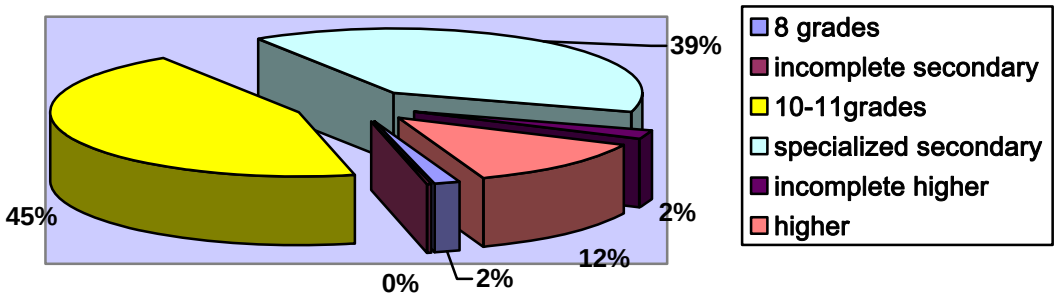
It can bee seen from the picture that the infectiousness rates are increasing along with the age growth, thus the infection is rare in the age groups 18-23 and 24-28 as compared with all other groups.

The results of the examination by the educational background of the respondents showed that (Table 15) there is an indirect dependency between educational background and chlamydia infectiousness. Along with increase of the educational level, the rate of the infectiousness decreased.

Table 15

Prevalence of chlamydia infection by educational background

Age group	results received from the examination of women for revealing chlamydia infection					
	not revealed	%	revealed	%	examined in group	%
2. incomplete primary	2	100	-	-	2	0.1
3. primary (4 grades)	1	100	-	-	1	0
4. 5-7 grades	3	100	-	-	3	0.1
5. 8 grades	69	94.5	4	1.6	73	3.0
6. incomplete secondary	11	91.7	1	0.4	12	0.5
7. general secondary /10-11 grades/	839	87.9	115	44.6	954	38.3
8. specialized secondary	790	88.8	100	38.8	890	35.7
9. incomplete higher	53	89.8	6	2.3	59	2.4
10. higher	467	93.6	32	12.4	499	20.0
11.postgraduate	1	100	-	-	1	0
Total	2236	89.7	258	10.3	2494	100



Pic. 5. Chlamydia prevalence connceted with the educational background

It can be seen from the picture that the infectiuosness of women reduces along with educational increase:

Out of the total number of infected women

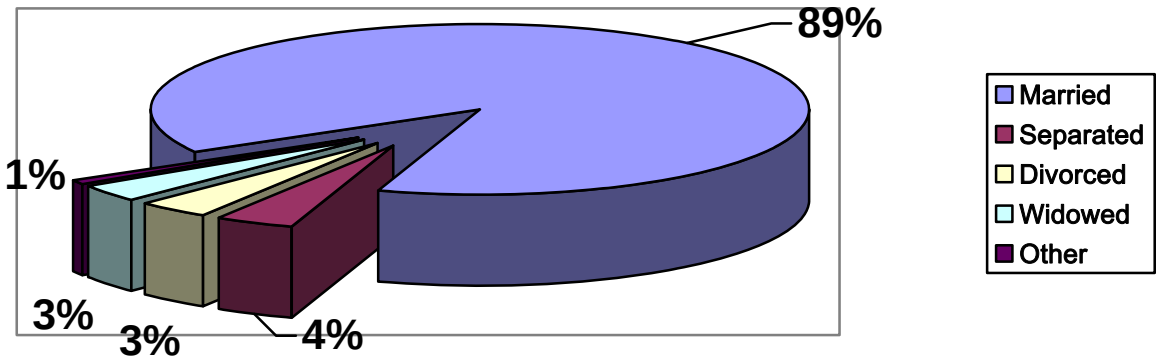
- 45% had general secondary (10-11 grades),
- 39% - specialized secondary,
- 12% - higher,
- 4% - other education.

The results of the examination by family status (Table 16) showed that the majority of infected women (228 (89%) are married and live with their husbands, 10 (4%) of them are married but are separated at present, 9 (3%) women are divorced, 9 (3%) - are widowed.

Table 16

Prevalence of chlamydia infection by marital status

Age group	Data received from the chlamydia test					
	not revealed	%	revealed	%	Examined in group	%
1. Currently married, living with her husband	1906	85,3	228	88,4	2134	85.6
2. Currently married, but separated	100	4,5	10	3,9	110	4.4
3. Cohabits with a man in a civil marriage (without registering marriage)	18	0,8	-	0	18	0.7
4. Divorced	88	3,9	9	3,5	97	3.9
5. Widowed	89	4,0	9	3,5	98	3.9
6. Never married but has a child(ren)	10	0,4	-	0	10	0.4
7. Other	24	1,1	2	0,7	26	1.0
Total	2235	100	258	100	2493	100



Pic. 6. Prevalence of chlamydia depending on marital status

The results of the examination of chlamydia revealing by respondents' marital status showed that (Table 17) the majority of infection carriers (254 (98%)) had been married once.

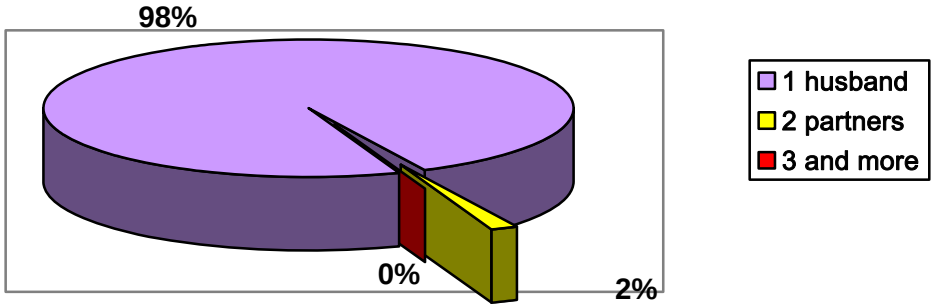
Only 4 (8.5%) women having 2 partners had chlamydia.

No case of chlamydia was revealed among the women that had 3 or more partners.

Table 17

Prevalence of chlamydia infection by family status

Town/village	Number of women examined					
	not revealed	%	revealed	%	Total in group	%
1 husband (partner)	2180	97.8	254	98.4	2434	97,9
2 husbands (partners)	47	2.1	4	1.6	51	2,0
3 and more partners	3	0.1	-	-	3	0,1
Total	2230	89.6	258	10.4	2488	100



Pic. 7. Prevalence of chlamydia infection connected with the number of partners

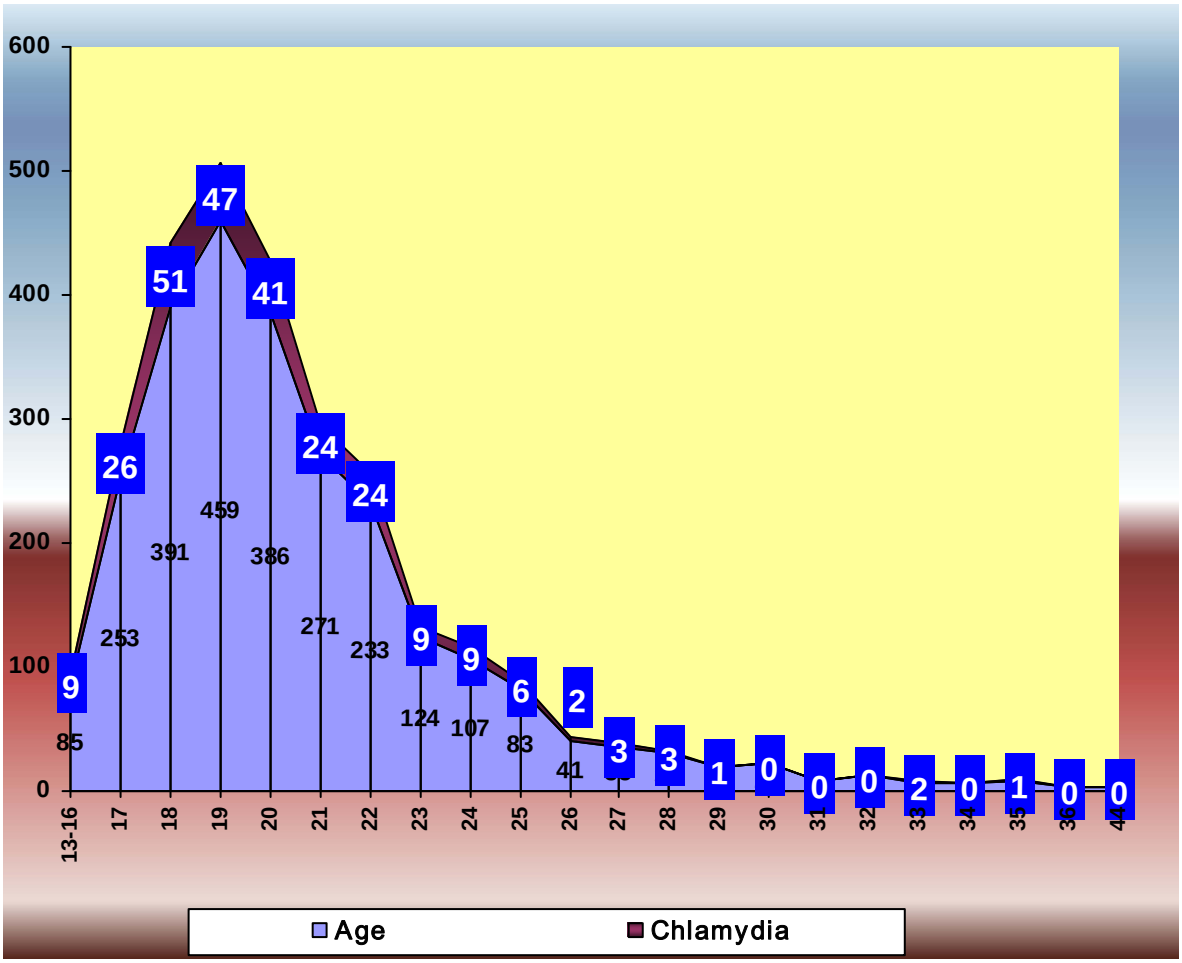
The results of the examination of chlamydia revealing by the age at the time of the first sexual intercourse showed (Table 18) that the rate of revealing of chlamydia infection among women that had first sexual intercourse before the age 16 was very low (up to 3%). An increase tendency was observed between the chlamydia prevalence and the age at the time of the first sexual intercourse , starting from the age 17 years. So if the rate of the chlamydia infectiousness among the ones that had first sexual intercourse at the age 17 was 16.4%, among 18-20 - that number is two times higher (about 32-25%), then there is a gradual decrease tendency and among the age group 25 and higher the revealing rate of chlamydia is 1-2%. It can be explained by the high resistency against the infection of the cylindrical epithelium at that age.

Table 18

The prevalence of the chlamydiosis according to the age at the time of the first sexual intercourse

Age at the time of the first sexual intercourse	revealed	%	Total in group	%
13			1	
14	1	0.63	2	0.1
15	3	1.89	17	0.7
16	5	3.16	61	2.5
17	26	16.4	247	9.7
18	51	32.2	379	15.0
19	47	29.7	442	15.2
20	41	25.9	373	14.8
21	24	15.18	259	10.4
22	24	15.18	220	8.8
23	9	5.69	123	4.9
24	9	5.69	101	4.1
25	6	3.79	74	3.0
26	2	1.26	37	1.5
27	3	1.89	33	1.3
28	3	1.89	29	1.2
29	1	0.63	17	0.7
30	-		22	0.9
31	-		7	0.3
32	-		13	0.5
33	2	1.26	6	0.2
34	-		6	0.2
35	1	0.63	8	0.3
36	-		4	0.2
37			1	
38	-		1	
40	-		4	0.2
42	-		1	
43	-		1	
44	-		3	0.1
Total	258	10.4	2491	100

Mostly the infected women had their first sexual intercourse at the age of 17-23 years old.



Pic. 8. Link between chlamydia prevalence and age at the time of the first sexual intercourse

CHAPTER 4.

RESULTS OF THE CYTOLOGICAL EXAMINATION OF THE CERVIX

4.1. Methodology of cytological examination

The following procedures have been followed during PAP-smear taking and transfering the smears to laboratories:

The following supplies have been used for 1 examination:

- 1 object-plate (one of the sides being matte)
- 1 cervical brush
- 1 Ayre spatula
- 1 bottle with a 95% spirit
- 1 Fixative spray (pathofix)
- Diligently filled-in laboratory card
- Vaginal mirror

The Name of the patient was written on the matte side of the object plate with a N2 pencil (hard graphite).

The vaginal mirror was placed in usual way by making the cervix visible.

The long part of the spatula was placed in the slot of the cervix and two turns were performed so that the surface of the spatula touches the cervic walls. In addition if transformation zone is located deeply in endocervix the cervicobrush is used. The scraping of the cervical material was put in an easily reachable place.

The cervicobrush was placed in the tube of the cervix for not more than 1 inch (2,5sm). Only one total turn of the brush was performed. The cervicobrush was put on the object-plate in a way to be just on the edge of the matte side and take the half of the object plate. Then the brush was rolled on the surface of the object plate trying to smear it with as much biological material as possible. The cervical material of the scraping was rapidly smeared on the other part of the object plate evenly and smoothly. The object plate was immediately fixed with the fixative spray "PATOFIX", which was held at 20-25sm from the object plate and was sprayed with 2 pushings. The exposition time was 20-25 ceconds. After the fixation the object plates were placed into the boxes for being transferred to the laboratory.

Annotations.

At first a cervical scraping was obtained, as far as the cervicobrush frequently caused bleeding. The citological examination is hardened in case of availability of blood sells in the smear.

Only a 95% high level spirit was used.

Preparation of dying procedure

The obtained samples were enumerated and further transferred to the dying tray, after which they were ready for dying.

Dying materials

1. All the dying reagents were filtered daily by squeezing before use.
2. The ready sold reagents of hematoxylin, OG-6, EA-50 and blue dying reagent (Shendon) were used during the dying process.
3. After obtaining the solutions and reagents the dates of their receiving, opening and suing time periods were written.
4. The date of the solution preparation and the name of the person who prepared that were written on all the solutions and reagents.
5. The titres or density of the solution was written on the label of the test tubes, as well as other necessary information was registered (as the expiration date).
6. The spirit and xylole-substitute already used were thrown away of necessity. The xylol-substitute had been used until the water became troubled or the substitute did not simplify the object plates any more. Usually one standard tube of xylole-substitutes is enough for dying more than 1000 object plates.
7. After dying each tray of object plates the water was changed.
8. The bottom of the dying container with xylole was covered with drierite crystals. Once they were becoming pink the xylole was thrown away. The crystals were dried in the oven until they became blue, then they were used several times.

Dying procedure

After being prepared on the FinPrep equipment the object plates were ready to be dyed in the following way:

Stage	Reagent	Time
1	95% spirit	10 sinkings
2	distilled water	20 sinkings
3	hematoxylline	1,5 minutes
4	distilled water	10 sinkings
5	distilled water	10 sinkings
6	blue dying reagent	20 sinkings
7	ordinary water	20 sinkings
8	95% spirit	10 sinkings
9	95% spirit	10 sinkings
10	OG-6	1 minutes
11	95% spirit	10 sinkings
12	95% spirit	10 sinkings
13	EA-50	2 minutes
14	95% spirit	10 sinkings
15	95% spirit	10 sinkings
16	100% spirit	10 sinkings
17	100% spirit	10 sinkings
18	100% spirit	1 minutes
19	hystosolve	20 sinkings
20	hystosolve	20 sinkings
21	hystosolve	15 minutes

Accepting procedure of PAP-smear samples

Getting samples

The samples have been brought to the laboratory during the whole working day. Sample receipt

After the receipt the gynecological samples were opened, the information written on the object plates was compared with that on the appointment card. The number of the object-plate was written on the matte side of the plate by a graphite pencil.

The enumerated object plates were placed into the dying stands in an inturn way.

Sample registration

The data of the patient, the date, number of the sample, name of the patient, his date of birth and the name of the doctor was registered in the laboratory ledger. After examining the sample the diagnosis was also registered in the ledger.

Placing of cover slips

After dying cover plates were placed on the object plates. After the object plates were completely dry, a test for dryness was carried out by taking the object plate out of the material (xylene- substitute). After

that the surface of the object plate was examined, the water was seen in the way of little drops or bubbles. In case of water signs the object plate was sinked into a 100% spirit untill the water completely disappeared, and after that - into a new simplifying reagent. The placing of cover slips by hand was carried out in the ventillated Shendon Hiperclin suction closet.

The necessary items

1. cover slips,
2. cotton pads,
3. absorbent paper towel,
4. smear preparation environment (Permount),
5. tweezers,
6. gauze tampons,
7. empty stands of object plates,

In order to place the cover slips:

1. the object plate was taken out from the simplifying reagent with tweezers,
2. then it has been dryed by leaving only 1-2 drops of simplifying reagent
3. by holding the object plat ein a horizontal condition, in a little ange, 2-3 drops of preparation material was dripped on it
4. the cover slip was placed on the object plate moving away all the bubbles
5. the object plate was turned upside down and that edge was dryed with a paper towel
6. all the edges were dryed with a gauze or cotton tampon with the aim of eliminating the Permaunt excess.
7. the object plate was placed on the tray and the same activities were performed with the following object plate.

The object plates were dryed during the whole night leaving the trays open on the table, then in an inturn way the enumerated object plates were transferred to the examination area and were compared with the numbers written on the appointment cards. That was the method the smears had been prepared for the examination.

2494 women undergone cytological examination, and the results were provided in the following way:

- normal epithelium,
- inconclusive, low-quality smear ,
- reactive changes in epithelium,
- endocervicosis: ordinary, progressive, convalescent
- dysplasia of I , II, III grade,

- canser in situ,
- invasive cancer.

As a result of the cytological examination every second examined had normal epithelium - 1247 (50%) (Table 3).

4.2. Results of cytological examination

Table 19

Frequency of pathological cytology smears

(town / village)

Town / village	STDs										Total examined	
	Reactive changes in the epithelium K3		endocervicosis K4		displasia I , II, III K5		canser in situ K6		invasive cancer K7			
		%		%		%		%		%		%
Town	499	28	11	0,6	227	12,7	1	0,1	2	0,1	1785	100
Village	241	34	1	0,1	56	7,9					709	100
Total	740	29.6	12	0.4	283	11.3	1	0.08	2	0.04	2494	

In 3 cases (0.2%) the smear was not informative. Most often the reactive changes in the epithelium were observed (29.6%), which is conditioned with high prevalence of STDs, 12% - had endocervicosis, 11.3% - displasias of various grades, 3 cases of preinvasive and invasive cancer.

As it can be seen from the pathological smears (Table 19) the pathologies (endocervicosis, dysplasias of various grades, preinvasive and invasive cancer) were revealed among the urban population, excluding the cases with reactive changes in the epithelium.

Table 20

Frequency of pathological cytology smears by marzes

	Marz	N of women examined		Reactive changes in the epithelium		endocervicosis		displasia I, II, III		canser in situ		invasive cancer	
1	Yerevan	768	703	118	16.8	5	0.7	116	16.5	-		-	
2	Aragatsotn	133	132	31	23.5	-		12	9.1	-		-	
3	Ararat	219	201	71	35.3	6	3,0	39	19.4	-		-	
4	Armavir	206	206	77	37.4	-		24	11.7	1	0.5	-	
5	Gegharkunik	197	197	75	38.1	1	0.5	24	12.2	-		-	
6	Lori	228	228	82	36.0	-		23	10.1	-		-	
7	Kotayk	260	259	87	33.6	-		42	16.2	-		2	0.8
8	Shirak	202	202	87	43.1	-		3	1.5	-		-	
9	Syunik	172	152	0		-		-		-		-	
10	Vayots Dzor	76	76	44	57.9	-		-		-		-	
11	Tavush	139	138	68	49.3	-		-		-		-	

	Total	***2600***	***2494***	***740***	29.6	***12***	0.4	***283***	11.3	***1***	0.08	***2***	0.04

The highest rate of reactive changes in the epithelium was observed in Vayots Dzor (57.9%), Tavush (49.3%), Shirak (43.1%), while the total percentage among the examined was 29.6%, 23.5% - in Aragatsotn, 16.8%- in Yerevan.

Only 22 cases of endocervicosis were revealed, meanwhile the 90% of them were in Yerevan and Ararat, 5 and 6 cases correspondingly, and 1 case in Gegharkunik.

The highest rate of precancer situations, displasias /I, II, III/ was observed in Ararat (19.4%), Kotayk and Yerevan (16%)¤. The lowesr rate was registered in Shirak marz (1.5%), the frequency in the number of all the women examined made 11.3%. 3 cases of invasive and preinvasive cancer were revealed: 1 - in Armavir, 2 - in Kotayk marz.

Table 21

Frequency of pathological cytology smears by age groups

	Age group	N of women examined in the group		Reactive changes in the epithelium		endocervicosis		displasia I, II, III		canser in situ		invasive cancer	
1	18-23	181	185	55	30.4	1	0.6	21	11.6	-		-	
2	24-28	351	369	110	31.3	3	0.9	43	12.3	1	0.3		
3	29-33	377	397	109	28.3	4	1.1	40	10.6	-		-	
4	34-38	397	410	114	28.7	-		42	10.6	-		-	
5	39-43	518	535	154	29.7	3	0.6	61	11.8	-		-	
6	44 and more	670	704	198	29.6	1	0.1	76	11.3	-		2	0.3
	Total	***2494***	***2600***	***740***		***12***		***283***		***1***		***2***	

The highest occurrence rate of the reactive changes in the epithelium was observed in the age group 18-23 & 24-28 (30-31%).

The frequency of displasia is nearly the same in all age groups.

Only 1 case of invasive cancer was revealed in the age group 24-28 and 2 cases of preinvasive cancer in the age group 44 and more.

Table 22

Distribution of investigated women by type of investigation (by marzes)

	Marz	N of women examined	%	Retest I1		Colposcopy I2		Byopsy I3		Treatment in a specialized center I4	
1	Yerevan	768	29.6	1	0.1	-		-		1	0.1
2	Aragatsotn	133	5.1	-		-		-		-	
3	Ararat	219	8.4	43	21.4	-		-		1	0.5
4	Armavir	206	7.9	-		-		-		-	
5	Gegharkunik	197	7.6	1	0.5	-		-		-	
6	Lori	228	8.8	-		-		-		-	
7	Kotayk	260	10.0	50	19.3	4	1.5	3	1.2	32	12.4
8	Shirak	202	7.8	-		-		-		-	
9	Syunik	172	6.6	-		-		-		-	
10	Vayots Dzor	76	2.9	-		-		-		-	
11	Tavush	139	5.3	-		-		-		-	
	Total	***2600***	***100***	***95***	***3.8***	***4***		***3***		***34***	***1.4***

4.3. Re-tests and specialized treatment

At the end of the clinical, gynecological, ultrasound and laboratory (STDs and cytology) examination 95 women were appointed for a retest, thus: 1 case in Yerevan and Gegharkunik, 43 cases - in Ararat and 50 cases in Kotayk marzes.

4 women from Kotayk marz were proposed colposcopy, which later ended with biopsy.

34 women received specialized treatment, 32 of which were from Kotayk marz, one from Yerevan and one from Ararat.

Table 23

	Marz	Chlamydia		Displasia I, II, III		Canser in situ		Ovary	
1	Yerevan	82	11.7	116	16.5	-		8	0.1
2	Aragatsotn	18	13.6	12	9.1	-		7	5.3
3	Ararat	23	11.4	39	19.4	-		17	7.0
4	Armavir	27	13.1	24	11.7	1	0.5	15	7.3
5	Gegharkunik	18	9.1	24	12.2	-		1	0.5

6	Lori	33	14.5	23	10.1	-		10	4.4
7	Kotayk	24	9.3	42	16.2	2	0.8	4	1.5
8	Shirak	4	2.0	3	1.5	-		4	2.0
9	Syunik	-		-		-		24	15.8
10	Vayots Dzor	15	19.7	-		-		2	2.6
11	Tavush	14	10.1	-		-		13	9.4
	Total	***258***	***10.3***	***283***	11.3	***3***		***105***	

CONCLUSIONS

The following conclusions can be made at the end of the results received:

1.Every 4-5th woman in the Republic was revealed to have a uterine pathology, most often - hysteromyoma (17.8%), adenomyosis and hypoplastic uterus, absence of uterus as a result of hysterectomy (1.5%).

2. Every 5th examined woman (520 (20.8%)), had adnexa pathologies, most often - enlargement of ovaries (various cysts, cystomas or inflammatory formations), right - 13.2%, left - 4.1%, hypoplastic ovaries (1.8%), ovaryectomy (2%).

3. The hysteromyoma was by 15% frequently revealed among the rural population, the rest of the pathologies were revealed in the same frequency. As for the adnexa, the prevalence of their pathology was 2 times higher among the urban population.

4. The highest prevalence of bacterial coccus was revealed in Shirak marz (99.5%), Gegharkunik (99%), Armavir (98.1%), Lori (96.9%), while in Yerevan the rate was 33.6%. The share of the total respondents was 72.7%.

5. The dysbiosis and vaginosis are the most frequently appearing types of vaginal microflora pathologies. The examinations of every second woman showed that the cause of that are gardnerella or candida.

6. Gardnerella has been revealed in 27.9% cases, the highest frequency was in Shirak (39.6%), Tavush (36.2%) and Gegharkunik (34.5%) marzes, while in Yerevan it was only 23.5%.

7. The prevalence of candida among the women examined was 21.8%, the highest frequency of occurrence was in Yerevan (29.6%), Ararat (24.4%), Tavush (17.4%), Vayots Dzor (15,8%).

8. Trichomoniasis was revealed in 4.6% cases. The highest frequency was registered in Armavir (7.3%), Ararat (6.5%), Tavush (5.8%), Yerevan (4.6%), the lowest – in Gegharkunik (2%), Vayots Dzor (3.9%).

9. The gonorrhea revealing rate was low, only 11 cases were registered: 6 – in Ararat, 2 – in Armavir, 2 – in Kotayk, and 1 case – in Yerevan.

10. Though gonorrhea is in the list of tests the pregnants are obliged to pass, the results of the survey show that it has been revealed in only 11 cases, while every 10th examined had chlamydia trachomatis, which has a destructive influence of the reproductive system and there is an urgent need for investigation.

11. The highest frequency of occurrence was observed in the age group 29-33 (13.8%), the lowest – in the age group 18-23 (8.8%). No substantional differences were observed in the frequency of chlamydia occurrence depending on the place of living (town/village). The highest frequency was in

Vayots Dzor (19.7%), Lori (14.5%), Armavir (13.1%), Aragatsotn (13.6%). The share of chlamydia occurrence in Shirak is very low (2%).

12. Mainly the virus carriers were in the age group 17-23 at the time of their first sexual intercourse.

13. During the cytological examination of the cervix changes in the cytological condition was revealed in nearly every second woman examined (1247 cases (50%)), most often reactive changes in the epithelium (29.6%), endocervicosis (12%), various grades of dysplasia (11.3%), preinvasive and invasive cancer in 3 cases, which is conditioned with high prevalence of STDs.

14. Pathology smears (endocervicosis, precancer condition of cervix, various grades of dysplasia, preinvasive and invasive cancer) were more frequently revealed among the urban population and frequency of occurrence is nearly the same in the age groups.

15. The share of reactive changes in epithelium made 29,6%, the highest frequency was observed in Vayots Dzor (57.9%), Tavush (49.3%), Shirak (43.1%), Yerevan (16.8%). The highest frequency was registered in the age group 18-23 and 24-28 (30-31%).

16. The share of cervical precancer, various grades of dysplasias was 11.3% among the whole number of women examined, the highest frequency was observed in Ararat marz (19.4%), Kotayk and Yerevan (16%), the lowest – in Shirak marz (1.5%).

17. The frequency of dysplasia occurrence was nearly the same in all age groups.

18. Invasive and preinvasive cancers were revealed in 3 cases, one of which was in Armavir, 2 – in Kotayk marz. One case was in the age group 24-28, the other two – in the age group 44 and more.

19. In the frame of the current study, with the aim of checking the results of the cytological examination 34 object slides were selected by the method of random sampling. Those object plates were sent to The Cancer Registry of Norway. In all the 34 cases the dyagnosis given by the armenian laboratory were adopted by the foreign authorized cytologists.

RA MINISTRY OF HEALTH
RA NATIONAL STATISTICS SERVICE
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The data will be used solely for statistic analysis purposes and are not subject to publication

A CLINICAL AND EPIDEMIOLOGICAL STUDY OF THE PREVALENCE OF THE CERVICAL PRECANCER/CANCER AND SEXUALLY TRANSMITTED DISEASES

Number of questionnaire ☐

Household ID number ☐

Period of the study ☐ *month, 2004*

Residence ☐ ☐
name *code*

Marz (Region) ☐ ☐
name *code*

Number of the interviewer ☐

Number of reviewer ☐

1.1 How many persons actually live in this house/apartment?

_____persons

1.2 How many 18-49 year old females that have experienced sexual relations live in this household?

_____women

- *Those 18-49 year old women who have never been married, have never had a sexual partner or are pregnant now should not be interviewed*

1.3Please provide information about the age and marital status of each of the women to be interviewed:

N/N	Age	Marital Status*
1		
2		
3		
4		
5		
6		

* Marital status:

1. Currently married, living with her husband
2. Currently married, but separated
3. Cohabits with a man in a civil marriage (without registering marriage)
4. Divorced
5. Widowed
6. Never married but has a child(ren)
7. Other _____

- *If within a household there are women who correspond to the criteria of this study, then it will be necessary to get their consent for a meeting, to introduce yourself and to work towards getting their agreement regarding their participation in the interview in accordance with the Instruction.*
- *If the selected women are not at their home or they prefer to answer the questions at some other time, more convenient for them, then you should make a note of their first names (no surnames!) and of the date and time of your second visit:*

  Names _____

  Date of the second visit _____ time _____
- *If after the second visit you still do not succeed in meeting with the selected woman, mark code (4) across the item "Registration of the visits — results" and go for the next address.*
- *If you succeed to meet with the selected woman, introduce yourself, explain the aim of your visit and try to get her consent for being interviewed in accordance with the Instruction.*

Visit registration

Number of the visit	*1*	*2*
*Results**		

**Visit results code*

1. *The interview was conducted at home and was successfully completed*
2. *The interview was conducted in another location _____ and was successfully completed*
3. *There were no women matching the criteria of the study*
4. *Nobody in*
5. *The selected woman not in*
6. *Full refusal*
7. *The selected woman refused to answer the questions*
8. *Nobody lives in the house/apartment (reason)_____*
9. *The respondent is not informed _____*
10. *They wouldn't open the door_____*
11. *Other _____*

Individual Questionnaire for 18 – 49 year old women

BEGINNING OF THE INTERVIEW (DATE AND TIME): _____ _____:_____

1. General Information

100. In what month and year were you and your husband/partner (recent) born?

1. I was born in _____(month), _____ (year)
2. He was born in _____(month), _____ (year)

102. On the whole, for how many years have you lived in Armenia? _____months _____ years

104. What is your educational background?

(only one answer should be checked)

1. illiterate
2. incomplete primary (1 – 3 grades)
3. primary (4 grades)
4. incomplete general (5 – 7grades)
5. full general (8 grades)
6. incomplete secondary (9 grades)
7. general secondary (10/11 grades)
8. specialized secondary
9. incomplete higher school
10. higher school
11. postgraduate

105. What is your recent husband's (partner's) educational background?

(only one answer should be checked)

1. illiterate
2. incomplete primary (1 – 3 grades)
3. primary (4 grades)
4. incomplete general (5 – 7grades)
5. full general (8 grades)
6. incomplete secondary (9 grades)
7. general secondary (10/11 grades)
8. specialized secondary

9. incomplete higher school
10. higher school
11. postgraduate

2. Age at the time of the first sexual intercourse and marriage/cohabitation, sexual behavior

200. Now I am going to ask you a few questions which relate to your private life. What is your current family status? *(mark with the corresponding code)* _____

1. At present the woman is married and lives with her husband
2. At present she is married but they are separated
3. Lives with a man in a civil marriage (without marriage registration)
4. Divorced
5. Widowed
6. Has never been married but has a child (children) n
7. Other _____

201. How many times have you been married or had sexual partners?
(only one answer should be checked)
1. one
2. two
3. three and more *(list)* _____

202. How old were you when you had your first sexual intercourse?

1. _____ years old

2. Don't remember *(if the exact age cannot be recalled, indicate the approximate age)*_____

3. Doesn't want to answer

203. On the whole how many years have you lived in a marriage/cohabitation?
(refer to all the marriages/cohabitations). *(more than one answers are possible)*

1. The last marriage / cohabitation lasted _____ years_____ months
2. The previous one: _____ years_____ months
3. On the whole (all the marriages / cohabitations): _____ years_____ months
4. Doesn't remember/ doesn't want to answer

203. Within the last two years how often did you usually have sexual relations?
(only one answer should be checked)
1. Almost every day or every other day
2. At least once a week
3. Not more than 3 times a month
4. Rarely (occasionally and not in every month)
5. There were no sexual relations involved
6. Doesn't want to answer
7. Other _____

205. When was your most recent sexual intercourse?
1. It was in _____(month) _____ (year)
2. It was _____days _____months _____ years ago
3. Doesn't remember/ doesn't want to answer
4. Other *(explain)* _____

206. Please say when did your last husband/partner die?

_____(month) _____ (year)

3. Family planning and use of contraceptives

300. Have either you or your husband ever used any means for prevention of conception? If yes, please specify the type(s). *(more than one answers are possible)*

0. Never used any ----------→ go on to Question 600
1. Hormonal pills (combination oral contraceptives)
2. Injected hormonal preparations (injections)
3. Hypodermic injections
4. Intrauterine contraceptive device (coil)
5. Condoms
6. Vaginal diaphragms
7. Women's condoms
8. Vaginal spermicidal agents – suppositories, pills or jellies
9. Tying up of the fallopian tubes (Female sterilization)
10. Tying up of the ejaculatory duct (male sterilization)
11. Abstaining from sex on certain days of the month (rhythmic method)
12. Interrupted sexual intercourse
13. Breastfeeding
14. Vaginal infusions
15. Other *(explain)*_____
_____

301. Do you use any means to prevent conception now?

1. Yes.
2. No.

302. Do you use condoms?

1. Yes.
2. No.

If yes, then`

1. regularly
2. rarely

4. Prevalence of the sexually transmitted diseases

400. Have you heard of sexually transmitted diseases (STD)? If yes, then please say which of the following diseases are sexually transmitted:

1. gonorrhea
2. tuberculosis
3. toxoplasmosis
4. chlamydiosis
5. genital warts
6. scab
7. syphilis
8. HIV/AIDS
9. mycoplasma
10. herpes
11. trichomoniasis
12. influenza
13. salmonellosis, dysentery
14. hepatitis
15. pubis pediculosis

401. In what ways that I will enumerate one can be infected with sexually transmitted diseases? *(read each of the lines)*

	Yes,	In some	Impossible	DA/D

	possible	cases		N
A. During blood transfusion	1	3	2	8
B. In public bath-houses	1	3	2	8
C. When kissing	1	3	2	8
D. Through sexual intercourse	1	3	2	8
E. When shaking hands	1	3	2	8
F. When being injected with an already used syringe	1	3	2	8
G. Through a sting of a mosquitoes	1	3	2	8
H. When using the household objects of a person diseased with chlamydiosis	1	3	2	8
I. When getting treatment from a physician or dentist	1	3	2	8
J. Through transmission from mother to fetus	1	3	2	8

Accessibility to mass media

402. Do you regularly watch TV programs? If yes, then at what time usually?
(more than one answers are possible)

1. No, very rarely
2. Yes, in the morning *(Indicate time)* _____
3. Yes, in the daytime *(Indicate time)* _____
4. Yes, in the evening *(Indicate time)* _____
5. Yes, at night *(Indicate time)* _____

403. The programs of which TV channels do you usually watch?
(more than one answers are possible)

1. Armenian National Television 1
2. Armenian National Television 2
3. Other local TV channels *(list)* _____
4. Video channels
5. Russian TV channel (RTR)
6. Russian Public Television (ORT)
7. ALM
8. Armenia
9. AR
10. Other (explain) _____

404. Do you regularly listen to the radio programs? If yes, at what time usually?
(more than one answers are possible)

1. No /very rarely ----------→ go on to Question 615
2. Yes, in the morning*(Indicate time)* _____
3. Yes, in the daytime *(Indicate time)* _____
4. Yes, in the evening *(Indicate time)* _____
5. Yes, at night *(Indicate time)* _____

405. Which of the local radio programs do you usually listen to? *(more than one answers are possible)*

1. Don't listen to local broadcasts
2. News
3. Sport updates
4. Press digests
5. Other *(specify)* _____

406. Do you regularly read papers and magazines which publish materials relating to health care issues?

(more than one answers are possible)

1 No
2 Yes, from time to time I read the following periodicals: _____

_____

3 Yes, I regularly read the following: _____

_____

407. From which of the mass media do you get the fullest information on family planning, sexuality, sexually transmitted diseases, AIDS and other issues of reproductive health?

1. Newsletters
2. Magazines
3. Books/brochures
4. Television
5. Radio
6. Video
7. None of these

408. Give your evaluation of the purposefulness of using mass media for keeping the population informed of the sexuality and reproductive health issues.

	Highly purposeful	Purposeful in some cases	Not purposeful
1. Newsletters	1	2	8
2. Magazines	1	2	8
3. Books/brochures	1	2	8
4. Television	1	2	8
5. Radio	1	2	8
6. Video	1	2	8
7. Other_____	1	2	8

5. Safe Motherhood

500. How did each of your pregnancies discharge, both in the present and previous marriages/cohabitations *(read each of the lines)*

	A. During the present (last) marriage/ cohabitation *(state the number of pregnancies)*	During the previous marriage/ cohabitation *(state the number of pregnancies)*
1. Delivery with a live fetus		
2. Delivery with a stillborn fetus		
3. Miscarriage (less than 28 weeks)		
4. Abortion		
5. Extra-uterine pregnancy		
6. Bubble clusters		
7. Immature pregnancy		
TOTAL:		

501. When, how and in what period did your last pregnancy discharge?

In _____(month) of _____(year)

Live fetus delivery	_____weeks	_____monthls
Delivery of stillborn fetus	_____weeks	_____ monthls
Miscarriage	_____weeks	_____monthls
Abortion	_____weeks	_____monthls
Extra-uterine pregnancy	_____weeks	_____monthls
Formation of bubble clusters	_____weeks	_____monthls
Immature pregnancy	_____weeks	_____monthls

502. Did you have any complications during the end your last pregnancy, childbirth or abortion?

1. Yes
2. No

If yes, then did you have uterine tears?

1. Yes
2. No

503. Please try to recall the details of all your childbirths starting from the last pregnancy. When and how was the particular pregnancy discharged and were all these pregnancies desirable?

504	505	506	507	508	509
Number	Delivery date	Delivery timing	Result	Sex of child	Was the pregnancy desirable?
1 (last delivery)	Month _____ Year 19 _____	1 in time 2 earlier _____ 3 later _____ *(specify the month of pregnancy)*	1.Live fetus 2. Stillbirth 3.Both	1. Boy 2. Girl 3. Twins/triplets _____boy _____girl	1.Yes 2.No, wished to postpone that pregnancy 3. No, didn't want to have that chil
2 (last but one)	Month _____ Year 19 _____	1 in time 2 earlier _____ 3 later _____ *(specify the month of pregnancy)*	1.Live fetus 2. Stillbirth 3.Both	1. Boy 2. Girl 3. Twins/triplets _____boy _____girl	1.Yes 2.No, wished to postpone that pregnancy 3. No, didn't want to have that chil
3 (previous)	Month _____ Year 19 _____	1 in time 2 earlier _____ 3 later _____ *(specify the month of pregnancy)*	1.Live fetus 2. Stillbirth 3.Both	1. Boy 2. Girl 3. Twins/triplets _____boy _____girl	1.Yes 2.No, wished to postpone that pregnancy 3. No, didn't want to have that chil
4 (previous)	Month _____ Year 19 _____	1 in time 2 earlier _____ 3 later _____ *(specify the month of pregnancy)*	1.Live fetus 2. Stillbirth 3.Both	1. Boy 2. Girl 3. Twins/triplets _____boy _____girl	1.Yes 2.No, wished to postpone that pregnancy 3. No, didn't want to have that chil
5 (previous)	Month _____ Year 19 _____	1 in time 2 earlier _____ 3 later _____ *(specify the month of pregnancy)*	1.Live fetus 2. Stillbirth 3.Both	1. Boy 2. Girl 3. Twins/triplets _____boy _____girl	1.Yes 2.No, wished to postpone that pregnancy 3. No, didn't want to have that chil
6 (previous)	Month _____ Year 19 _____	1 in time 2 earlier _____ 3 later _____ *(specify the month of pregnancy)*	1.Live fetus 2. Stillbirth 3.Both	1. Boy 2. Girl 3. Twins/triplets _____boy _____girl	1.Yes 2.No, wished to postpone that pregnancy 3. No, didn't want to have that chil

- *If the woman has had more than 5 childbirths, then please make use of an additional page:*

510. So, let's clarify one more time how many deliveries have you had?

1. _____ delivery (s) with live fetus born
2. _____ deliveries with stillborn fetus

511. Are all your live born children alive now?

(only one answer is possible)

1. Yes
2. No, one child of mine has died
3. No, _____ of my children have died

512. At what age did (each) child die, including those that lived only a few hours/days after their birth? What was the cause of the death and what sex was the child/children?

A. Successive number	At what age did the child die?	C. Cause of death	Child's sex
1	_____ days old _____ months old _____years old		1 Male 2 Female
2	_____ days old _____ months old _____years old		1 Male 2 Female
3	_____ days old _____ months old		1 Male 2 Female

	_____years old		
4	_____ days old _____ months old _____years old		1 Male 2 Female

Questions for women who have never been pregnant

600. Let's try to clarify again whether you have ever tried to become pregnant?
(*only one answer should be checked)*
1. No, I haven't tried to become pregnant and have always taken measures to prevent conception ----------→ go on to Question 830
2. No, I haven't tried to become pregnant, but I was not always taking measures to prevent conception
3. No, I haven't tried to become pregnant, but never did anything to prevent conception
4. Yes, I have.

601. On the whole, for how long have you had regular sexual relations without taking precautions against undesirable conception?

- *Those sexual relations should be considered regular which occur at least once a week.*
- *Remind the respondent that the interrupted coitus, vaginal infusions and natural methods are also considered as ways of prevention of conception.*
- *Take into consideration the total period of time, during both present and past marriages /cohabitations*

(*only one answer should be checked)*

0. I have rarely had sexual relations / didn't have at all
1. Up to 6 months
2. 7-12 months
3. 13-24 months
4. from 2- to 5 years
5. from 6 to 10 years
6. more than 10 years
7. Doesn't remember/Doesn't want to answer
8. Has taken measures to prevent conception

602. Try to remember how often did you usually have sexual relations within the recent years with no precautions taken for preventing conception

(state the sexual relations frequency code)

*** *Sexual relations frequency code* s**

1. Almost every day or every other day
2. At least once a week
3. Not more than 3 times a month
4. Rarely (occasionally and not in every month)
5. There were no sexual relations involved
6. Doesn't want to answer
7. Other (specify)_____

Accessibility of medical care

603. Have you or your husband/partner applied to a medical institution or a non-traditional specialist (sorcerer) for getting advice on, being observed or getting treatment for the reproductive health problems?
(*only one answer should be checked)*

1. No, none of us did
2. I did, but my husband/partner didn't
3. He did, but I didn't
4. I did, but I am not sure about whether my husband/partner did, too -------→ go on to Question 809
5. Yes, both of us did

604. If not, what was the reason? *(more than one answers are possible)*

1. We decided to wait a little bit more, hoping the illness will pass without treatment
2. Financial problems

3. Don't know where to apply for addressing such issues
4. My husband objects to my being observed and treated
5. Our relatives object to my being observed and treated
6. We are afraid of side effects or complications
7. Don't have time
8. Absence of favorable sanitary and hygiene conditions in medical institutions
9. Other *(specify)* _____

605. Where did you apply for getting consultancy or medical treatment related to the disease?
(more than one answers are possible)

1. junior surgeon's and obstetrics station (JSOS)
2. Village ambulatory / hospital
3. Women's polyclinics
4. Regional maternity house/hospital
5. Specialized center
6. Private clinic
7. Private doctor
8. Sorcerer
9. Other *(specify)* _____
10. Don't know/ Not sure where my husband/partner applied

606. What kind of examinations were carried out in your case?
1. None
2. The following tests were carried out: *(specify)*_____
_____

607. Have any of these examinations been carried out? *(read all the lines)*

	YES	NO	DN/DR
Measuring blood pressure	1	2	8
1. Blood pressure measured			
2. General physical examination	1	2	8
3. Gynecological examination	1	2	8
4. Mirror examination	1	2	8
5. Smear tests	1	2	8
6. Testing for infections	1	2	8
7. Testing for the quantity of hormones in blood	1	2	8
8. Cytological test of the uterus cervix	1	2	8
9. Colposcopy	1	2	8
10. Sonography	1	2	8
11. Diagnostic scrape of the uterine cavity endometrium	1	2	8
12. Hysterosalpingography	1	2	8
13. Laparoscopy	1	2	8
14. Other	1	2	8

608. What kind of examinations of your husband/partner were carried out?
1. None
2. The following examinations/tests were carried out:
*(specify)*_____
_____

609. Have these tests been carried out? *(read all the lines)*

	YES	NO	DN/DR
1. Taking the blood pressure information	1	2	8
2. General physical observation	1	2	8
3. Examination and tests for urogenital infections	1	2	8
4. Sperm investigation	1	2	8
5. Doppler sonography	1	2	8

609A. Have you received treatment? If yes, then specify please the type of treatment:
(more than one answers are possible)

*** Treatment method codes:**
1. Antibiotics / Sulphanilamides
2. Tampons
3. Physiotherapy
4. Antibacterial suppositories
5. Non-traditional, sorcerer's means

6. Vitamins /Biostimulators
7. Surgical intervention

610. Has your husband/partner received any treatment for urogenital diseases and if yes – do you know what kind of treatment(s) he received?

1. No
2. Yes, but I don't know the further details
3. Yes, I know

611. Try to remember what kind of treatments he received and for how long, starting from the most recent method of treatment.

N	Treatment method *	How long was she treated	Has she stopped the treatment, or continues to be treated
1.		_____ days _____months_____years	1 Stopped 2 Դեռ շարունակում է բուժումը
2.		_____ days _____months_____years	1 Stopped 2 Still is being treated
3.		_____ days _____months_____years	1 Stopped 2 Still is being treated
4.		_____ days _____months_____years	1 Stopped 2 Still is being treated
5.		_____ day _____months_____years	1 Stopped 2 Still is being treated
6.		_____ days _____months_____years	1 Stopped 2 Still is being treated

*** Codes of the treatment methods:**

1. Vitamins / Biostimulators
2. Antibiotics /Sulphanilamides
3. Preparations improving the sperm quality
4. Hormonal treatment
5. Medication fostering sexual potency
6. Non-traditional methods
7. Psychotherapy
8. Physiotherapy
9. Massage of prostatic gland
10. Surgical intervention *(state in the table)*
11. Other method *(state in the table)*

7. Symptomatic situations, diseases, surgical interventions and unhealthy habits that may negatively affect the reproductive health

700. Is your period usually regular? *(more than one answers are possible)*

1. I have my periods regularly on every _____day
2. As a rule, my period is not regular
3. Sometimes I have blood excretion in between two periods
4. My periods are regular but there happen blood excretions in between
5. I don't have periods for already more than 6 months *(specify)*_____
6. Other (specify*)* _____

701. Do you ever have blood excretion in the course of sexual relations?

1. yes
2. no

702. Have you ever had inflammatory diseases of the external and internal genitalia, or other organs and tissues of the abdominal cavity?

1. yes
2. no

If yes, then which one(s)? Please circle them:

Inflammatory diseases	Have you had it?	When was it?

Inflammation of the external genitalia	1 No 2 Yes, one occurrence 3 Yes, _____cases 4 Not sure/Don't remember	1 First occurence _____month_____year. 2 Last case _____month_____year 3. Don't remember
2. Vaginal inflammation	1 No 2 Yes, one occurrence 3 Yes, _____cases 4 Not sure/Don't remember	1 First occurence _____month_____year. 2 Last case _____month_____year 3. Don't remember
3. Cervical inflammation or erosion	1 No 2 Yes, one occurrence 3 Yes, _____cases 4 Not sure/Don't remember	1 First occurence _____month_____year. 2 Last case _____month_____year 3. Don't remember
4. Inflammation of uterine body, ovaries and oviducts	1 No 2 Yes, one occurrence 3 Yes, _____cases 4 Not sure/Don't remember	1 First occurence _____month_____year. 2 Last case _____month_____year 3. Don't remember
5. Cystitis	1 No 2 Yes, one occurrence 3 Yes, _____cases 4 Not sure/Don't remember	1 First occurence _____month_____year. 2 Last case _____month_____year 3. Don't remember

703. Have you ever had ulcerations, bubbles, wart-like or other neoplasms (new growths) on the external genitalia or in their neighborhood?

1. yes
2. no

If yes, then which one(s). Please circle them:

Symptom	Have you had it?	When was it?
1. Multiple small ulcerations	1 No 2 Yes, one occurrence 3 Yes, _____cases 4 Not sure/Don't remember	1 First occurence _____month_____year. 2 Last case _____month_____year 3. Don't remember
2. Isolated ulcer	1 No 2 Yes, one occurrence 3 Yes, _____cases 4 Not sure/Don't remember	1 First occurence _____month_____year. 2 Last case _____month_____year 3. Don't remember
3. Wart likeneoplasms	1 No 2 Yes, one occurrence 3 Yes, _____cases 4 Not sure/Don't remember	1 First occurence _____month_____year. 2 Last case _____month_____year 3. Don't remember
4. Bubble clusters	1 No 2 Yes, one occurrence 3 Yes, _____cases 4 Not sure/Don't remember	1 First occurence _____month_____year. 2 Last case _____month_____year 3. Don't remember
5. Cysts	1 No 2 Yes, one occurrence 3 Yes, _____cases 4 Not sure/Don't remember	1 First occurence _____month_____year. 2 Last case _____month_____year 3. Don't remember
6. Uterine cervix polyps	1 No 2 Yes, one occurrence 3 Yes, _____cases 4 Not sure/Don't remember	1 First occurence _____month_____year. 2 Last case _____month_____year 3. Don't remember

704. Have you suffered from any of the diseases listed below?

1. yes
2. no
3. I don't know

If yes, then which one(s)? Please circle them:

N	Name of disease	Suffered or not	First time diseased	Treatment	Result
1.	Gonorrhea	1 Yes 2 No 3 Unaware/Nor sure	1 _____ month _____ year 2 Unaware/Nor sure	1 Only me 2 Only husband 3 Both of us 4 No treatment	1 Full cure 2 Improvement 3 Symptoms still available 4 Frequently repeated
2.	Syphylis	1 Yes 2 No 3 Unaware/Nor sure	1 _____ month _____ year 2 Unaware/Nor sure	1 Only me 2 Only husband 3 Both of us 4 No treatment	1 Full cure 2 Improvement 3 Symptoms still available 4 Frequently repeated

3.	Chlamydiosis	1 Yes 2 No 3 Unaware/Nor sure	1 _____ month _____ year 2 Unaware/Nor sure	1 Only me 2 Only husband 3 Both of us 4 No treatment	1 Full cure 2 Improvement 3 Symptoms still available 4 Frequently repeated
4.	Hepatitis B	1 Yes 2 No 3 Unaware/Nor sure	1 _____ month _____ year 2 Unaware/Nor sure	1 Only me 2 Only husband 3 Both of us 4 No treatment	1 Full cure 2 Improvement 3 Symptoms still available 4 Frequently repeated
5.	Herpes	1 Yes 2 No 3 Unaware/Nor sure	1 _____ month _____ year 2 Unaware/Nor sure	1 Only me 2 Only husband 3 Both of us 4 No treatment	1 Full cure 2 Improvement 3 Symptoms still available 4 Frequently repeated
6.	Thrichomoniasis	1 Yes 2 No 3 Unaware/Nor sure	1 _____month _____ year 2 Unaware/Nor sure	1 Uիայն ես 2 Uի1 Only me 2 Only husband 3 Both of us 4 No treatment	1 Full cure 2 Improvement 3 Symptoms still available 4 Frequently repeated
7.	Mycosis	1 Yes 2 No 3 Unaware/Nor sure	1 _____ month _____ year 2 Unaware/Nor sure	1 Only me 2 Only husband 3 Both of us 4 No treatment	1 Full cure 2 Improvement 3 Symptoms still available 4 Frequently repeated
8.	Gardnereliosis	1 Yes 2 No 3 Unaware/Nor sure	1 _____ month _____ year 2 Unaware/Nor sure	1 Only me 2 Only husband 3 Both of us 4 No treatment	1 Full cure 2 Improvement 3 Symptoms still available 4 Frequently repeated
9.	Toxoplasmosis	1 Yes 2 No 3 Unaware/Nor sure	1 _____ month _____ year 2 Unaware/Nor sure	1 Only me 2 Only husband 3 Both of us 4 No treatment	1 Full cure 2 Improvement 3 Symptoms still available 4 Frequently repeated
10.	Citomegalovirus infectiopn	1 Yes 2 No 3 Unaware/Nor sure	1 _____ month _____ year 2 Unaware/Nor sure	1 Only me 2 Only husband 3 Both of us 4 No treatment	1 Full cure 2 Improvement 3 Symptoms still available 4 Frequently repeated

705. Have you ever had the following symptoms listed below:

	YES	NO	DR
A. Pain in the lower half of the abdomen or waist	1	2	8
B. Abundant secretion from vagina	1	2	8
C. Irritation and itching in the vaginal area or in external genitalia	1	2	8
D. Pain, burning in the course of urination	1	2	8
E. Frequent urination with difficulties	1	2	8
F. Pain during sexual relations	1	2	8

706. Have you or your husband received treatment for the above mentioned symptoms:
1. yes
2. no

707. Have you received a uterine erosion treatment?
1. yes
2. no

If yes, then which of these:
1. tampons
2. suppositories
3. cryosurgery
4. thermal surgery
5. extraction

708. Do you or does your husband/partner smoke currently?
1. No.
2. If yes, then how many cigarettes per day?

<u>Woman:</u>
a) up to 10 cigarettes
b) up to 10-20 cigarettes
c) 20 and more cigarettes

<u>Man:</u>

a) up to 10 cigarettes
b) up to 10-20 cigarettes
c) 20 and more cigarettes

8. Information gathered regarding the treatment received

800. Have you received an antibiotic treatment within the last 3 weeks?
1. yes
2. no

COMPLETION OF THE INTERVIEW

1. DATE AND TIME OF THE INTERVIEW; date: _____ hour: _____:_____

THE INTERVIEW WAS CONDUCTED BY:

Name: _____ Signature _____

ID number_____

2. Date when the Questionnaire was submitted for review: Date: _____

The questionnaire was reviewed by:

1. Name of the interviewer _____ Signature _____

2. Name of the interviewer _____ Signature _____

3. Date of submitting the questionnaire to the operator for entry: Date _____

4. Date of questionnaire entries: Date _____

Name of person entering information _____ Signature ____ _____

Insert

RA MINISTRY OF HEALTH
RA NATIONAL STATISTICS SERVICE
UNITED NATIONS POPULATION FUND

The data will be used solely for statistic analysis purposes and are not subject to publication

A CLINICAL AND EPIDEMIOLOGICAL STUDY OF THE PREVALENCE OF THE CERVICAL PRECANCER/CANCER AND SEXUALLY TRANSMITTED DISEASES

Number of quest ionnaire

ID number of the household

Period of study: month, 2004թ.

Location

name *code*

Marz

name *code*

Number of the interviewer

Number of the reviewer

Minutes

of the clinical examination of eproductive organs/uterus cervix patology
and study of sexually transmitted diseases (STD)

1. weight - kg
2. height - sm
3. ADI -

External genitals

1. normal
2. hypoplastic
3. subjected to hypertrophy
4. presence of ulcers, blisters, warts
5. color of the endometrium: 5.1 – rosy, 5.2 - with white patches, 5.3 - red

Vagina

1. normal
2. narrow
3. color of the endometrium: 3.1 – normal, 3.2 - hyperemic, 3.3 - with white patches
4. swollen, 4.1 – irritated, 4.2 - atrophic
5. presence of warts, ulceration
6. excretion – insignificant
7. excretion – abundant
8. with unpleasant smell

Uterus cervix

1. cone-like
2. tube-like
3. subjected to hypertrophy
4. lacerated, deformed
5. subjected to elongation
6. color of the endometrium: 6.1 – normal, 6.2 – hyperemic, 6.3 - with white patches
7. nabothian ovulae
8. endometroid lesions
9. endometrium ulcerated

External opening

1. roundish
2. slot-like
3. with scar alterations

Uterus

1. size - normal
2. enlarged to 6-week pregnancy size
3. enlarged to 12-week pregnancy size
4. enlarged to more than 13-week pregnancy size
5. soft consistence
6. hard consistence
7. palpation painful
8. palpation painless
9. surface – 9.1 smooth, 9.2- unsmooth, with knots

Appendages

1. not felt through palpation
2. enlarged, painful
    a. right-side appendages
    b. left-side appendages

3. tumor-like neoplasm felt through palpation, 3.1 - from the right 3.2 - from the left

Sonographic data

1. Size of the uterus

1.1 normal
1.2 enlarged
1.3 hypoplastic
1.4 unavailable
1.5 subjected to hysterectomy

2. Ovary sizes

2.1 normal				
2.2 enlarged	2.2.1.	right	2.2.2.	left
2.3 hypoplastic	2.3.1.	right	2.3.2.	left
2.4 unavailable	2.4.1.	right	2.4.2	left
2.5 subjected to ovariectomy	2.5.1	right	2.5.2	left

8. Laboratory tests
    1. smear taken for the microscopic examination of the vaginal secretion
    2. smear taken for chlamydiosis
    3. Pap smear taken

9. Tentative diagnosis ----------

Recommendations

1 secondary observation
2 colposcopy
3 biopsy
4 examination and treatment in specialized medical institutions

Results of the laboratory tests

Identification of sexually transmitted diseases (STD)

1. gonorrhea
2. trichomoniasis
3. chlamydiosis
4. gardnerella
5. mycosis
6. bacterial coccus

Results of the cytological examination

1. normal epithelium
2. the smear is not informative, it's low quality
3. reactive change of the epithelium
4. endocervicosis -- simple, advancing, healing
5. dysplasia I, II, III,
6. ca in situ
7. invasive cancer

12. Clinical Diagnosis _____

13. Treatment _____