



EUROPE

THE EPIDEMIOLOGY OF INDUCED ABORTIONS IN RUSSIA: PILOT TRIAL

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PERIOD OF RESEARCH: April–May 1996

PLACE OF RESEARCH: City of Moscow and Moscow Region

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EUR/RUS/FMLY 04 23 04
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HEALTHY LIVING

By the year 2000, there should be continuous efforts in all Member States to actively promote and support healthy patterns of living through balanced nutrition, appropriate physical activity, healthy sexuality, good stress management and other aspects of positive health behaviour.

ABSTRACT

The prevailing high rates of abortion in the Russian Federation have been a concern of the public health authorities during the past years. In order to find out why many women have to resort to abortions and to lay the foundations for more effective strategies of abortion prevention, a pilot study on the epidemiology of abortions in Moscow and the Moscow region was conducted by the Research Centre of Obstetrics, Gynecology and Perinatology in cooperation with the Sexual and Family Health unit of the WHO Regional Office for Europe. Given the choice, most women would probably prefer to rely on a contraceptive method which they feel safe about rather than having to use abortion. Information and education on proper contraceptive methods must therefore be a prime concern of the public health, education and information sector.

Keywords

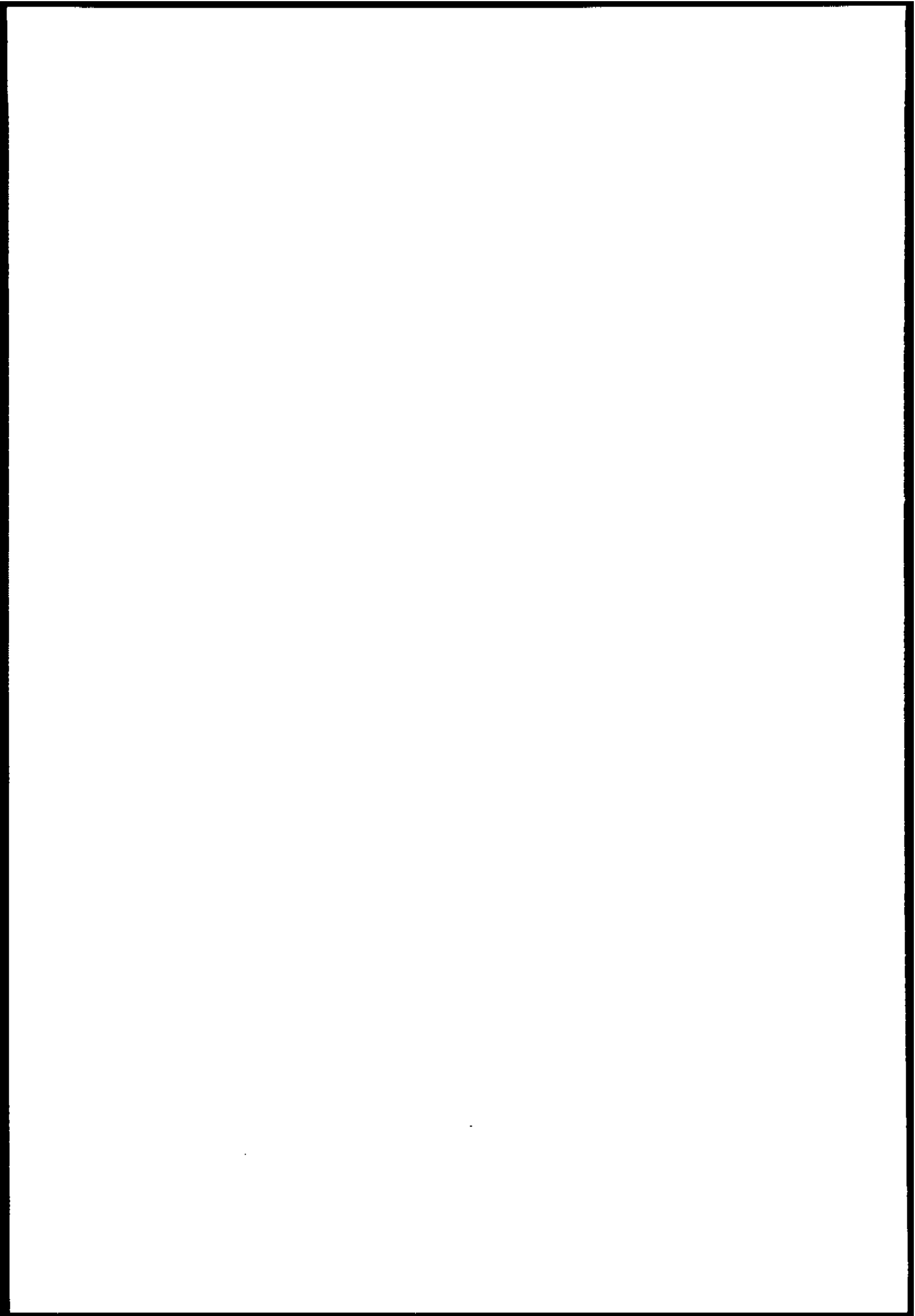
ABORTION, INDUCED
EPIDEMIOLOGY
CONTRACEPTION
RUSSIAN FEDERATION

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EXECUTIVE SUMMARY

Epidemiology of Abortions in Russia

by Professor Ekaterina M. Vikhlyaeva and Dr E. Niklolaeva

The prevailing high rates of abortions in Russia have been a concern of the Public Health authorities during the past years. The Ministry of Health as well as Oblast health authorities have been making efforts to provide information and to make modern contraceptives available at an affordable price where possible. Despite this, many women still seem to see abortion as the main or only effective mean of fertility regulation.

In order to find out why many women have to resort to abortions and to lay the foundations for more effective strategies of abortion prevention, a pilot study on the epidemiology of abortions in Moscow and the Moscow region was conducted by the Research Center of Obstetrics, Gynecology and Perinatology in cooperation with the Sexual and Family Health Unit of the European Regional Office of the World Health Organization.

Three hundred and fifty two women who had just had an abortion were interviewed by means of a standardised questionnaire by their consultant physicians. 221 women were from the city of Moscow and 131 women lived in the rural areas around Moscow. The age distribution in both groups was comparable, covering women from the age of 15 to 44 years. The majority of women questioned were of Russian nationality (93.9% in the rural, and 83.2% in the urban areas). About 73% of the women were married, 17% were in union with one partner, the rest were single, divorced or widowed.

The majority of women in both the urban and rural group were civil servants or employees, about one quarter to one third were factory or farm workers, only 8% in the urban and only 5% in the rural population were housewives. The majority of husbands or partners in the urban areas were employees, in the rural areas workers. A question regarding the profession of parents of women coming for abortions was also included - in both groups, the majority of both mothers and fathers were employees.

Russian women marry young

Most patients had their first sexual contact before the age of 19, with an equal distribution in the age groups of 15 to 17 and 18 to 19. Less than one quarter of patients had had their first sexual experience when they were over 20. The average marital age was surprisingly young with 49% of patients having married before their twentieth birthday. On average, husbands were five years older than their wives.

The first pregnancy is welcomed

Most (89%) of the patients presenting for an abortion had already had previous pregnancies. Over three quarters of the first pregnancies had been carried to term and resulted in live birth. Of the following pregnancies, many had been terminated by abortions, so that only about one

third (31.6%) of all previous pregnancies had resulted in live births. Only 10 % of abortions were performed on the first pregnancy.

At the time of the present abortion, over 80 % of the women from urban and rural had children. About 15% of these children were still under one year old.

“We can’t afford more children”

The reasons given for the present abortion were as follows: The majority of pregnancies were unplanned (96%), nearly half of the women said that the living and economic conditions were too difficult. Many women were worried about their own health status. Several women gave the health status of the husband or alcohol abuse by the husband as a reason for the abortion.

Physical examination showed that, in fact, about 40% of the patients presented with inflammatory diseases and infections of the vulva, vagina, uterus or adnexes. Benign and malignant tumours were discovered in 4.2% of cases. Of the infections treated prior to the abortion, candida had been diagnosed in 187 cases, there were two cases of gonorrhoea, and two of syphilis.

“We wish we had been told more about contraceptives”

Only very few (15% of the urban and 13 % of the rural women) had been counselled on contraception before beginning their sexual life. After the first deliveries or abortions, this figure rose to 45 and 36% respectively. More women had been counselled on contraception after deliveries than after abortions.

There is not enough post abortion counselling

At the time of the present conception, over 30% of the urban women and 18% of the rural women were using modern contraceptives (mainly condoms), and about 20% in each group were using coitus interruptus as a method of fertility regulation. This means that contraceptive failure or improper use of contraceptives accounted for about 50% of the present unplanned pregnancies.

Teachers and parents do not give girls enough information

Information on contraceptives had been received mainly from the mass media (41.5%), from medical personnel (36.6%), from friends (32.7%). Only a minority of women said they had received information from school teachers or from their mothers.

Most patients said they would have liked to have received more information on contraceptives from their schools. Women who had not been using contraceptives at the time of conception said they did not have enough information (33%) or insufficient information and fear of side effects or ineffectiveness. No patient mentioned the price of contraceptives as an obstacle.

Unwanted pregnancies are not seen as a joint responsibility

Less than half of the patients had taken the decision to have an abortion together with their husband, the majority of women had taken the decision alone.

About 76 % of the women experienced the present abortion as psychological torture, and 35 % experienced moderate or severe pain. Nevertheless, 42.3% said they would have an abortion again, 37 % said they did not know, and about 20% wanted to give birth.

In summary

- The age at first sexual contact as well as the marital age of women in Russia is relatively young.
- The first pregnancy usually occurred within the first six months of sexual life.
- The first pregnancy usually results in childbirth (in over 76% of cases).
- Abortion is mainly used as a method of fertility regulation after the desired family size is reached.
- There is a lack of correct information on modern contraceptive methods, and a lack of counselling by medical staff, and a lack of information through schools.
- Abortion is experienced as mental and physical hardship, and not as a method that is easier to use than contraception.

Given the choice, most women would probably prefer to rely on a contraceptive method which they feel safe about rather than having to use abortion. Information and education on proper contraceptive methods must therefore be a prime concern of the Public Health, Education, and Information sector.

INTRODUCTION

The present study has been conducted within the framework of the Agreement between the Research Centre of Obstetrics, Gynecology and Perinatology of the Russian Academy of Medical Sciences and the Unit of Sexual and Family Health of the WHO Regional Office for Europe of 25 September 1995.

With the aim to prepare the final version of the investigation on the epidemiology of abortions in Russia as a multicentre trial, the present pilot trial has been carried out on the basis of medical establishments of Moscow and Moscow region. 352 women were examined post-abortion by way of preliminary elaborated and tested questionnaire involving 221 inhabitants of Moscow and 131 women from Moscow region (rural). The questionnaires were filled in by a physician in the process of discussion with the patient after abortion. The questionnaires have involved all women admitted into the clinics for pregnancy interruption up to 12 weeks of gestation.

DATA COLLECTION

The distribution of the examined patients according to age has not revealed significant differences between the inhabitants of Moscow and women from rural areas (Table 1.1).

Table 1.1 Distribution of the patients according to their age.

Age (yrs)	Moscow City N (%)	Moscow region N (%)	Total N (%)
16-19	15 (6.8)	13 (9.9)	28 (8.0)
20-24	61 (27.6)	34 (26.0)	95 (27.0)
25-29	56 (25.3)	27 (20.6)	83 (23.6)
30-34	44 (19.9)	30 (22.9)	74 (21.0)
35-39	36 (16.3)	19 (14.5)	55 (15.6)
40-44	9 (4.1)	8 (6.1)	17 (4.8)
Total	221 (100.0)	131 (100.0)	352 (100.0)

As it can be seen in Table 1.1 every second respondent was 20 - 29 years old.

83.2% of women from Moscow were of Russian nationality, and among rural patients the Russians have made up 93.9%.

The distribution of the patients according to marital status is presented in Table 1.2

Table 1.2. Marital status.

	Moscow City N (%)	Moscow region N (%)	Total N (%)
Married	162 (73.3)	93 (70.9)	255 (72.4)
One partner	38 (17.2)	23 (17.6)	61 (17.3)
Divorced	11 (5.0)	10 (7.6)	21 (6.0)
Widowed	6 (2.7)	1 (0.8)	7 (2.0)
Single, accidental partners	4 (1.8)	4 (3.1)	8 (2.3)

The number of sexual partners of the investigated women is presented in Table 1.3.

Table 1.3. Number of sexual partners per 1 patient.

Number	Moscow City	Moscow region	Total, N (%)
1	79	50	129 (36.6)
2-5	100	67	167 (47.4)
6-10	15	7	22 (6.3)
11-15	8	2	10 (2.8)
>15	8	5	13 (3.7)
No answer	11	-	11 (3.2)
Total	221	131	352 (100.0)

The characteristics of sexual activity of the responders is presented as follows: sexual contacts every 1-2 days 38.1%, 1-2 times per week 52.6%, 1-2 times per month 6.5%, less 2.8%. Table 1.4 presents the data of education. There were no differences in the level of education between the rural and urban respondents.

Table 1.4. Education

	Moscow City N (%)	Moscow region N (%)	Total N (%)
Initial	-	3 (2.3)	3 (0.9)
Secondary	75 (33.9)	38 (29.0)	113 (32.1)
Special secondary	81 (36.7)	67 (51.1)	148 (42.0)
Incomplete high	19 (8.6)	-	19 (5.4)
High	46 (20.8)	23 (17.6)	69 (19.6)

Among the women from Moscow, 64.7% are employees and 22.6% workers, 8.1% housewives, students 4.5%; among rural patients - 57.2%, 33.6%, 5.3%, and 1.5%

respectively, besides, 2.3% of rural patients were farmers. The occupation of husbands - partners of the urban representatives has included the following: employees 46.1%, workers 39.9%, students 1/4%; 12.7% of the patients has failed to answer this question. Among rural patients the correspondent data are as follows: 33.6%, 59.5%, 0.9%, and 6.1%. The distribution of the mothers of investigated patients according to occupation are as follows: urban patients: employees 59.9%, workers 30.3%, housewives 7.2%, collective farmers 1.8%, 7.7% - no answer; among the mothers of rural patients: 42.7%, 45.8%, 2.3%, 5.3%, and 3.8% correspondingly. The similar data of the profession of the fathers of the studied women are as follows: for urban patients - employees 36.2%, workers 44.3%, farmers 2.7%, no data 16.7%; for rural patients - 21.4%, 61.8%, 3.1%, 13.8%, correspondingly. Thus, the general data of the investigated cohorts of respondents turned out to be identical according to the above-mentioned signs.

REPRODUCTIVE HISTORY

The study of reproductive history included the data of menarche age, reproductive behavior, number and outcomes of pregnancy and gynecological diseases. Table 2.1 presents the data of menarche age.

Table 2.1. Menarche age.

Age (yrs)	Moscow City N (%)	Moscow region N (%)	Total N (%)
10-11	18 (8.1)	12 (9.2)	30 (8.5)
12-14	165 (74.7)	101 (77.1)	266 (75.6)
15 и >	38 (17.2)	18 (13.7)	56 (15.9)

The age of first sexual contacts and marriages is given in Tables 2.2 and 2.3

Table 2.2. The age of first sexual contacts

Years	Moscow City N (%)	Moscow region N (%)	Total N (%)
10-14	3 (1.4)	4 (3.0)	7 (2.0)
15-17	81 (36.6)	43 (32.8)	124 (35.2)
18-19	79 (35.7)	47 (35.9)	126 (35.8)
20-24	51 (23.0)	33 (25.2)	84 (23.9)
25-29	7 (3.2)	4 (3.0)	11 (3.1)

A special attention to reproductive behavior of the respondents is drawn to the early start of sexual life. Thus, 71% of the patients started sexual contacts at the age of 15 - 19. At the same time 49.2% of them got married at this age. The age of husbands at marriage among

urban patients is distributed as follows ; 18 - 19 years - 8 (4.3%), 20 - 24 years - 113 (60.4%), 25 - 29 years - 55 (29.4%), 30 - 39 years - 9 (4.3%), 40 - 49 years - 3 (1.6%).

Table 2.3. The age of civil or juridical marriage

Years	Moscow City N (%)	Moscow region N (%)	Total N (%)
16-17	15 (8.0)	13 (12.3)	28 (9.6)
18-19	74 (39.6)	42 (39.6)	116 (39.6)
20-24	80 (42.8)	44 (41.5)	124 (42.3)
25-29	18 (9.6)	7 (6.6)	25 (8.5)
Total	187 (100.0)	106 (100.0)	293 (100.0)

Table 2.4. The time of the first pregnancy after initiation of sexual activity or stopping contraception

Months/ years	Moscow City N (%)	Moscow region N (%)	Total N (%)
1-6	122 (62.2)	82 (69.5)	204 (65.0)
7-12	38 (19.4)	24 (20.3)	62 (19.7)
2-3 years	28 (14.3)	6 (5.1)	34 (10.8)
4-5	8 (4.1)	6 (5.1)	14 (4.5)
Total	196 (62.4)	118 (37.6)	314 (100.0)

Table 2.5. The age of patients at the first pregnancy

Years	Moscow City N (%)	Moscow region N (%)	Total N (%)
14	-	1 (0.8))	1 (0.3)
15-17	19 (9.7)	15 (12.7)	34 (10.8)
18-19	69 (35.2)	38 (32.2)	107 (34.1)
20-24	85 (43.4)	55 (46.6)	140 (44.6)
25-29	18 (9.2)	8 (6.8)	26 (8.3)
30-34	5 (2.6)	1 (0.8)	6 (1.9)
Total	196 (62.4)	118 (37.6)	314 (100.0)

Before the present abortion, 88.7 % (196) of urban and 90.1% (118) of rural patients had pregnancies. For 38 (10,8%), the present pregnancy was the first. The time and age of the first

pregnancy are presented in Tables 2.4 and 2.5. In 65.0% of the patients the first pregnancy occurred within the first six months after the beginning of sexual life or contraception withdrawal. Every tenth patient had the first pregnancy at the age of 14-17 years.

Table 2.6. Outcomes of the first pregnancy

Outcomes	Moscow City N (%)	Moscow region N (%)	Total N (%)
Live birth	146 (74.5)	93 (78.8)	239 (76.1)
Stillbirth	2 (1.0)	-	2 (0.6)
Spontaneous abortion	11 (5.6)	8 (6.8)	19 (6.1)
Induced abortion	32 (16.3)	15 (12.7)	47 (15.0)
Menstrual regulation	5 (2.6)	2 (1.7)	7 (2.2)
Criminal abortion	-	-	-
Ectopic pregnancy	-	-	-
Total	196 (100.0)	118 (100.0)	314 (100.0)

Table 2.6 presents the data of the first pregnancy outcomes. In 3/4 of the cases they outcome was live birth. Spontaneous pregnancy interruption occurred in 6%. Every sixth respondent (16.9%) had an induced abortion of the first pregnancy. The data of the total number and the outcomes of the following pregnancies are of big interest to reproductive behavior (Table 2.7)

Table 2.7. Outcomes of the following pregnancies

Outcomes	Moscow City N (%)	Moscow region N (%)	Total N (%)
Live birth	266 (32.1)	166 (32.1)	432 (32.1)
Stillbirth	4 (0.5)	1 (0.2)	5 (0.4)
Spontaneous abortion	40 (4.8)	28 (5.4)	68 (5.0)
Induced abortion	414 (50.0)	307 (59.4)	721 (53.6)
Menstrual regulation	99 (12.0)	13 (2.5)	112 (8.3)
Criminal abortion	3 (0.4)	1 (0.2)	4 (0.3)
Ectopic pregnancy	2 (0.2)	1 (0.2)	3 (0.3)
Total	828 (100.0)	517 (100.0)	1345 (100.0)

The comparison of outcomes of the first and the following pregnancies in the rural and urban patients revealed various tendencies. Thus, the first pregnancy outcome was live birth in 76.1% of the respondents, and the following pregnancies were artificially interrupted in 61.9%.

A thorough analysis of the peculiarities of reproductive behavior of the examined women allowed to detect the total number of unplanned pregnancies in their history. There

were 547 unplanned pregnancies among Moscow inhabitants and 360 unplanned pregnancies among rural patients. Thus, 2.9 unplanned pregnancies account for every investigated urban patient, and 3.2 for every rural one, that made on average 3.0. The outcomes of unplanned pregnancies were presented for the cohort of the urban patients as follows: live birth - 10 (1.8%), stillbirth - 3 (0.5%), miscarriages - 16 (2.9%), medical abortions - 513 (93.8%), criminal abortions - 3 (0.5%), ectopic pregnancies - 2 (0.4%).

The corresponding data for rural patients were as follows: 22 (6.1%), 1 (0.3%), 16 (4.4%), 320(88.9%), 1(0.3%). It was also found that one unplanned labor outcome with live birth occurred in 11.6%, two unplanned labors in 2% of respondents. Since according to the above data there were no differences in the number of induced abortions between the rural and urban patients, the general data on the number of abortions are presented in Fig.2.1 As it is seen, 187 or 59.5% of the investigated patients had from two to four abortions in their medical history.

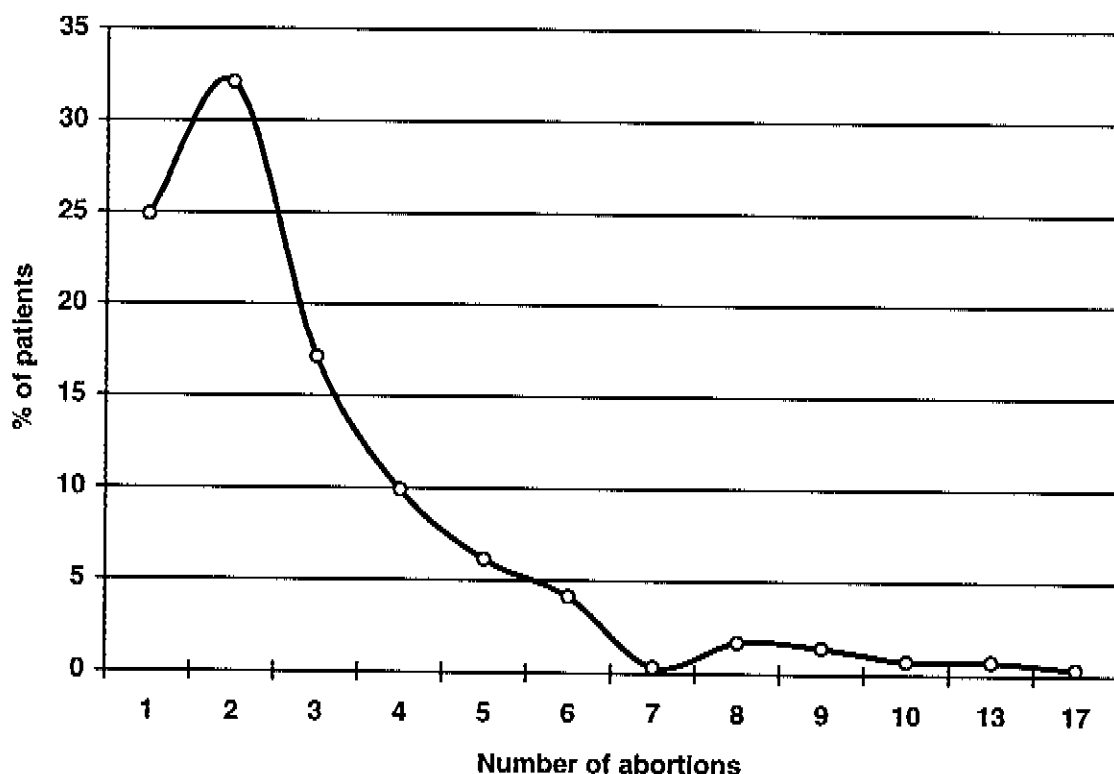


Fig. 2.1. Distribution of the respondents according to the number of induced abortions in the history, %.

In the characteristics of reproductive history the outcomes of the prior to that abortion pregnancies are of not less importance. This information is presented in Table 2.8 and follows the pattern of Table 2.7

Table 2.8. Outcomes of pregnancies prior to present abortion

Outcomes	Moscow City N (%)	Moscow region N (%)	Total N (%)
Live birth	63 (32.1)	36 (30.5)	99 (31.6)
Stillbirth	1 (0.5)	-	1 (0.3)
Spontaneous abortion	7 (3.6)	4 (3.4)	11 (3.5)
Induced abortion	123 (62.8)	78 (66.1)	201 (64.0)
Criminal abortion	-	-	-
Ectopic pregnancy	2 (1.0)	-	2 (0.6)
Total	196 (100.0)	118 (100.0)	314 (100.0)

At the moment of the present investigation, 177 urban patients (80.1%) and 110 rural patients (84.0%) had live children, i.e. 287 women out of the entire cohort. 59.1% of the respondents had one child in the family, two children in 36.2%, three in 4.7%. The children are 225 boys and 206 girls. The age of the youngest child is presented in Table 2.9. These data have been calculated for the total number of women (287) having live children.

Table 2.9. The age of the youngest child

Age	Moscow City N (%)	Moscow region N (%)	Total N (%)
up to 6 months	6 (3.4)	2 (1.8)	8 (2.8)
7 - 12 months	25 (14.1)	11 (10.0)	36 (12.5)
> 1-4 years	61 (34.5)	36 (32.8)	97 (33.8)
5 - 9 years	44 (24.9)	32 (29.0)	76 (26.5)
10-14	37 (20.9)	23 (20.9)	60 (20.9)
15-18	4 (2.3)	6 (5.5)	10 (3.5)
Total	177 (100.0)	110 (100.0)	287 (100.0)

Among the investigated patients 15.3% had children aged under 12 months, and 33.8% under 4 years. Answering the question why 287 parous women did not wish to have more children they answered as follows:

- no wish to have more children: 107
- because of living conditions: 151
- due to health concerns: 29
- because of husband's health: 4
- due to alcohol and drug abuse of the husband: 3
- because of fear of childbirth: 7
- other reasons: 13.

There were combinations of several reasons in a number of cases.

The peculiarities of reproductive behavior with a clear tendency to family planning by way of abortions have some effect on gynecological morbidity. Due to frequent combinations of several pathologies in one and the same patient we have found it necessary to present the data of the total number of women first treated for gynecological diseases. There were 154 cases (69.7%) among urban patients and 86 (65.6%) among rural ones, all in all 240 or 68.2% of the women presenting for the current abortion.

In the structure of prior gynecological diseases (taking into account their combinations) there the following diagnosis were made:

- diseases of the cervix uteri: 179 out of 240 cases (74.6%)
- inflammations of the vulva and vagina 38 (15.8%)
- inflammatory diseases of the uterus and adnexa 94 (39.2%)
- leiomyoma uteri: 17 (7.1%)
- tumors and tumor-like masses of the ovaries: 10 (4.2%)
- disorders of menstrual cycle: 41 (17.1 %)
- hirsutism: 4 (1.7%)
- infertility: 19 (7.9%)
- polyps of the cervix and uterus: 6 (2.5%)
- mastopathy: 9 (3.8%).

Six (2,5%) women were treated for other diseases. Among 19 infertile patients, 15 women suffered from infertility during < 5 years, one patient 5-9 years, three - 10 - 20 years. One-hundred seven women (30.4%) underwent various surgical interventions in the past, among them 71 urban and 36 rural women.

The data of STDs according to the terms of the present trial can not be considered sufficiently informative. AIDS tests were performed in 99.4% of respondents and was negative in all of them. Among the patients there were 99 urban smokers (44.8%) and 43 rural smoking women (32.8%). This group of smoking women could be divided into two groups according to the intensity of smoking: 4 -5 cigarettes per day and 10 and more cigarettes per day. Almost half of the smoking cohort of patients smoked during pregnancy.

CONTRACEPTIVE HISTORY

This section presents the data of the prevalence of various methods of contraception, patients' attitude of the reliability of this or that method, sources of information on contraception, etc. Table 3.1 gives the results of questionnaire concerning the use of various methods of contraception in the process of sexual life (more often, during the last year and month of the conception). The present cohort of respondents have not used injectable methods or diaphragm.

Table 3.1 The applied methods of contraception

Methods	Groups of patients, %	
	More often / During the last year / During the month of the present conception	
	Moscow City	Moscow region
None	16.7/ 24.5/ 43.4	16.9/ 25.4 /46.5
OC	8.1/ 9.1/ 5.0	8.5/ 8.5/ 7.8
IUD	9.5/ 3.2/ 1.4	13.1/ 4.6/ 1.6
Barrier	23.5/ 25.9/ 17.6	19.2/ 18.5/ 9.3
Interrupted intercourse	9.5/ 14.5/ 15.8	16.2/ 20.0/ 17.8
Lactation	0.5/ 1.8/ 2.3	-/ 0.8/ 0.8
Other	32.2/ 20.9/ 14.5	26.1/ 22.3/ 16.3

As it is seen in Table 3.1 the most popular methods of contraception among the rural and urban respondents are the barrier methods and combination of various methods. The urban patients used IUDs, OC and coitus interruptus more often and with equal frequency rate (9.5%, 8.1%, 9.5%). At the same time the rural patients used coitus interruptus more often (16.2%) as compared to the urban patients (9.5%). The tendencies were the same in women of various age groups.

Most remarkable were the changes of attitude of respondents to contraception during the years prior to the present abortion, and especially, during the month of conception. During the last year before the abortion 50% of the respondents aged from 16 till 19, 31.3% aged 25 - 29, 26% aged 30-34, and 35.3% aged 40 and more did not use any contraceptives.

The analysis of intercorrelates between marital status, educational level and the use of contraception planned in the year after the present induced abortion was of particular interest. The portion of women with higher university education which did not use contraception was the lowest (22.4%) comparing with those with secondary education (77.6%).

Before the initiation of sexual contacts only 16.3% of the urban and 13.1% of the rural respondents had consultations about contraception; after the first labor 37.5% and 28.8%, and after the first abortion 37.6% and 30.0% correspondingly. The influence of the obtained information on the use of various means of contraception is presented in Table 3.2.

Table 3.2. Influence of information on the rate of contraception use.

Information received	None	Oral	IUD	Barrier	Interrupted intercourse	Lact	Other
Before sexual life, n=53	7 13.2%	8 15.1%	7 13.2%	14 26.4%	3 5.7%	0 0.0%	14 26.4%
After 1st birth, n=100	12 12.0%	6 6.0%	16 16.0%	19 19.0%	11 11.0%	0 0.0%	36 36.0%
After 1st abortion, n=112	17 15.2%	17 15.2%	18 16.1%	19 17.0%	7 6.3%	0 0.0%	34 20.4%

It is obvious that the period of information gain did not have any effect on the rate of the usage of various contraceptive means. At the same time, it should be stressed that the portion of the respondents using oral and intrauterine contraceptives has increased to some extent as compared to the whole cohort. The comparison of contraceptive history and the number of abortions performed until the present pregnancy has not revealed any differences. There have been no true changes found in the rate of live birth between the groups of women which used contraception and which did not use it. It testified first of all of the conscious approach towards family planning in the process of decision making in the problem of child birth.

The information on the reproductive behavior culture has been obtained by way of questionnaire about the patients' attitude of the reliability and convenience of the methods of contraception (Fig.3.1). The respondents of both groups consider IUDs (37.1%), condoms (17.1%), and OC (14.3%) as most reliable and comfortable methods.

The information on contraceptive means was mostly obtained from medical personnel (36.8%), from friends (25.1%) and mass media (22.5%). School teachers failed to be the source of information (1.1%). Some respondents (9.7%) gained information from their mothers (Fig.3.2).

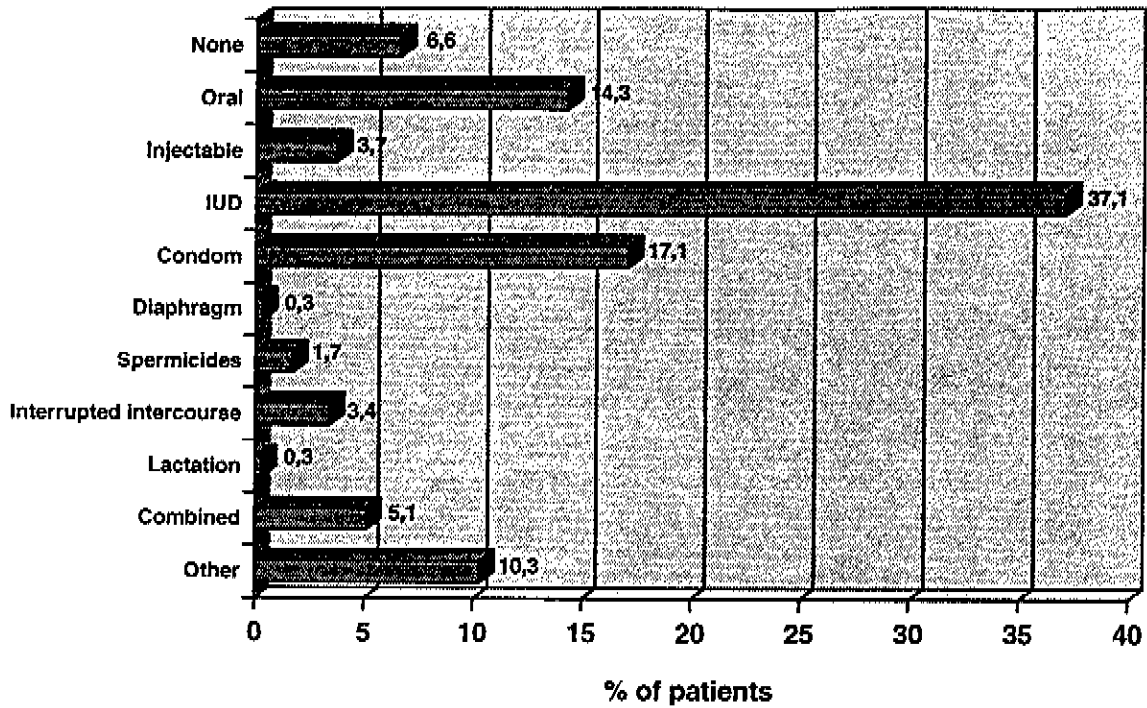


Fig. 3.1. The respondents' attitude to the reliability of contraception, %.

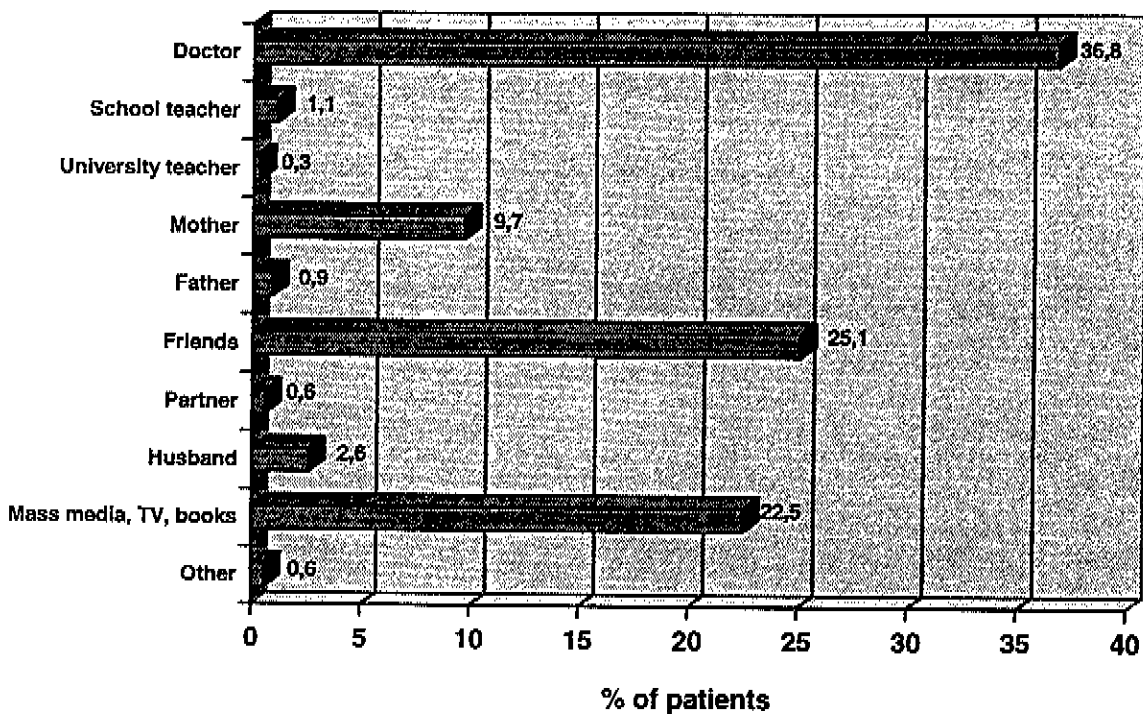


Fig. 3.2. Sources of information about contraception methods, %.

We have also studied the interrelations between the source of information on contraception and its actual usage in the sexual life of the respondents. It is stressed that the portion of women using IUD (44.7%) prevails as well as those using OC (27.6%) in case of getting

information from the doctors. At the same time mass media has produced less effect on the use of efficient contraceptives: interrupted intercourse has been used by 31.0%, barrier methods by 28.6%, oral contraceptives by 20.7%, and IUDs by 13.2%.

A number of patients (87.8%) would wish to have more literature about contraception during their school life, 93.5% before marriage, 93.2% after labor, 95.5% after abortion. Eighty-six per cent wished to have literature about sexual life and 94.8% about contraception.

Among the reasons for induced abortion as a method of birth regulation the responders noted: lack of necessary information about modern contraceptive means (31.6%), lack of information about other methods of contraception (14.1%), reluctance to use other methods (8.3%), "because all do the same" (6.6%). The comparison of the personal attitudes of the respondents toward the abortion as family planning method and the true use of contraception demonstrates that most of those (59.3%) who have not used contraceptives do not know or have no information about contraceptives.

It was more often the patient who decided to interrupt pregnancy by way of abortion herself (52.0%) than together with the husband (42.6%). The abortion procedure was paid by 46.6% of women.

Practically all the responders underwent the operation in clinics. It is worthwhile paying a special attention to the question about the decision making in case of the next pregnancy (after the present abortion). Thirty-seven point eight per cent of women did not know the answer, 42.3% intended to have an induced abortion again, the rest 19.9% of the responders were going to deliver in case of the further pregnancy.

Anaesthesia during prior abortions was absent in 13.4% of cases because it was not available. During the procedure of abortion severe pains were found in 11.3%, moderate pains in 24.2% and mild pains in 2/3 of the cases. Abortion was regarded as cruelty by 75.8% of women. The present pregnancy was unplanned in 96% and unwanted in 93.8% of patients. Due to the fact that the pregnancy was unplanned the reasons for non-use of contraception were the lack of efficacy of the applied methods of contraception, the fear of side-effects of IUDs and OC as well as unwillingness of husbands/ partners.

The direct reasons for induced abortion are presented in Fig.3.3. In most of the cases it was connected with financial/living conditions. Every fourth woman had no desire to have more children.

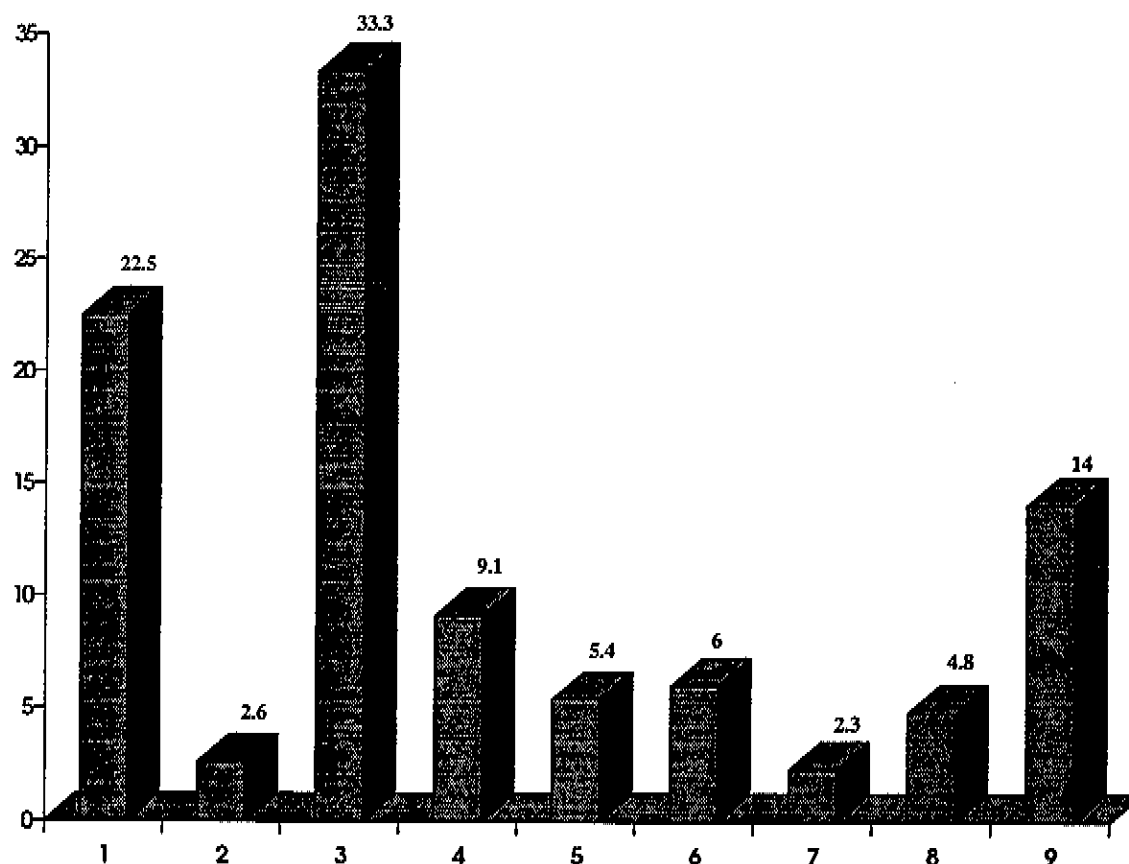


Fig. 3.3. The reasons of induced abortions,%:

- 1 - " I don't want to have more children / children at all"
- 2 - Husband / partner doesn't want to have children / more children
- 3 - Financial problems, low living conditions
- 4 - Failure of contraceptive
- 5 - Fear of the chance to give birth an ill baby
- 6 - Because of health status
- 7 - " I don't know"
- 8 - Other reasons
- 9 - Several reasons

DISCUSSION

In the recent past the problem of family planning and reducing the induced abortion rate in the Russian Federation has been receiving special attention. These efforts have contributed to the true tendency towards the decrease of abortions performed in the country. The total number of abortions according to official statistical data has decreased for the period from 1991 till 1995 from 3.526 million to 2.575 million and made up 100.3 and 68.1 per 1000 fertile women, correspondingly [2, 8]. At the same time abortion still remains the most widespread method of birth control [5, 6, 7], and in this respect the elaboration of the strategy for the further prevention of unplanned pregnancy has not lost its priority. The target epidemiological trials may contribute to the more precise detection of the possible directions in this field. The pilot trial was carried out in Moscow and Moscow region following all the

necessary rules for epidemiological investigation of abortions. Thus, after preliminary training of the interviewers, immediately after the procedure of abortion in the 1st trimester of pregnancy (up to 12 weeks) 221 inhabitants of Moscow and 131 women from Moscow region were studied. Unlike the literature data for 1991-1993 [2, 4] there were no significant differences between both groups of patients. In general, reproductive and contraceptive history testified the absence of significant differences in living conditions and working conditions and urbanization of Moscow region.

The investigated cohort of women homogenous Russian nationality (90%) consisted of healthy mainly young (20 - 29 years - 50,6%), married (72,4%) women, who were sexually active, mostly with secondary or high education.

In reproductive history it is interesting to pay attention at an early start of sexual contacts - 15 - 17 years — 35.2%, 18 - 19 years — 35.8%. The first pregnancy occurred within the first 6 months of sexual life in 65.0% or after withdrawal of contraception. The outcomes of the first pregnancy were practically identical among urban and rural patients and resulted in live birth in 76.1% out of them and induced abortion in 17.2%, spontaneous abortions in 6.1%. At the moment of interview 81.5% had live children. It should also be stressed that among the respondents which underwent abortions 15.3% had children aged under 12 months.

Thus, the results of investigation have revealed additional reserves for preventing unplanned pregnancies. They include not only the improvement of sexual education of the adolescents but mostly the target activities on the improvement of culture of reproductive behavior of women after labor and abortions. According to the data of the questionnaire most of the respondents would have preferred IUDs (37.1%), barrier methods (19.1%), and OC (14.3%). But in fact, the barrier methods and interrupted intercourse are used most frequently. It is also interesting to compare the data of the true incidence rate of the used methods of contraception in the investigated cohort of patients with the materials of the international multicentre trial in which eight countries of the Western Europe have taken part [3]. No use of any contraceptives has been registered in 4% (the Netherlands) and it varies till 30% of women (Italy), interrupted intercourse is used by 1 - 14%, barrier methods contraception by 7 - 23%, IUDs from 6% (Italy) till 45% (the Netherlands).

The results of this pilot trial testify of the necessity to conduct the analogous interview among women after labor and to elaborate a special programme of experimental studies among female population after labor and abortion in other regions of Russia.

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