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MEDICO-SOCIAL PROBLEMS AND ATTITUDES TO OPTIONAL ABORTIONS IN BULGARIA

AUTHORITY

of a dissertation for the award of
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Prof. Dr. Valentina Majova, MD

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The dissertation contains 154 typewritten pages and is illustrated with 63 tables, 38 figures and 2 appendices. The list of cited literature includes 144 titles, of which 36 in Cyrillic and 108 in Latin.

The dissertation was discussed and directed for public defense by the Department Council of the Department of General Medicine at the Medical University "Professor Dr. Paraskev Stoyanov" - Varna.

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The public defense of the dissertation will be held on February 14, 2022 from ……. Hours in ………………………………………………………. the city of Varna at an open meeting of the Scientific Jury.

The materials on the defense are published on the website of the Medical University "Professor Dr. Paraskev Stoyanov -Varna" and are available at the Department of General Medicine at MU - Varna.

Note: The numbers of the tables and figures in the abstract do not correspond to those in the dissertation.

Contents

1. Introduction

Pregnancy, pregnancy and childbirth is the most complex biological process in nature, so failures are common. There are many reasons for this reproductive failure.

Statistics show that the population of Bulgaria is rapidly declining due to low birth rates, high mortality and emigration of young people. At the same time, there are over 200,000 childless couples in the country.

Now the number of abortions in our country is significant. Abortion is a termination of pregnancy mainly due to the unfavorable development of external factors, in which the child is unwanted by the parents. There are no absolute criteria for assessing external factors.

Decisions to terminate a pregnancy are made under the influence of cultural and material criteria, different for the Bulgarian, Gypsy and Muslim population and under the influence of emotional factors, different for individuals. A great reserve for overcoming the demographic collapse of the Bulgarian population can be the perceived public support for fewer abortions.

The public needs to be more active in addressing the problems of abortion and reproductive health and health behavior in the context of a deepening demographic crisis and to develop effective strategies to improve it.

1. Purpose and tasks.

2.1 Purpose.

The aim of the dissertation is to study the medical and social problems and attitudes of women of reproductive age to abortions at will in our country in order to optimize the activities of GPs and obstetricians to promote women's health and family planning.

2.2 Tasks.

1. To study the main medical and social problems of abortion in our country.

2. To make an up-to-date review and analysis of the normative regulations for abortions in Bulgaria and the EU.

3. To study the reproductive behavior of patients visiting obstetrics and / or GP on the territory of Varna and the region.

4. To study the attitudes for and against voluntary abortion in women of reproductive age, as well as those of GPs and obstetricians.

5. To propose measures for optimizing the activity of GPs and AG specialists for the promotion of women's health and family planning.

3. Material and methods of the research

3.1 Materials

Respondents were 200 patients of reproductive age (15 - 49 years) who visited obstetrics and / or GP practices in the city of Varna on the occasion of an upcoming abortion or consultation on other medical issues.

50 doctors working as GPs and obstetricians on the territory of Varna were also interviewed.

3.2. Research methods:

1. Documentary - analysis of documents and literature sources;

2. Sociological - use of direct individual surveys;

3. Statistical - statistical data processing with Jamovi v.2.11 - statistical software.

The statistical analysis of the study includes two parts - descriptive and analytical. Descriptive analysis includes a frequency description of the data used to describe the main characteristic of the sample and the indicators included in the study.

Alternative analysis was used to calculate and compare structural distributions of different indicators using the non-parametric test Chi-square (X^2), as well as to search for relationships between indicators using correlation analysis by the method (rho);

4. Graphic - graphical presentation of results with Excel, Windows 10.

4. Own results

Demographic characteristics of the surveyed persons

For the purposes of the study are the surveyed women of childbearing age who visited their personal doctor or obstetrician-gynecologist in the city of Varna.

Of the women of childbearing age we surveyed, we found that 28% of them were over 40 years old; 21% aged 31-40 years; 19% aged 26-30 years; 21% in the range of 20-25 years and 11% between the ages of 14 and 19. The data are shown in Figure 1.

%

- over 40 years old
- aged 31-40 years
- aged 26-30 years
- in the range of 20-25 years
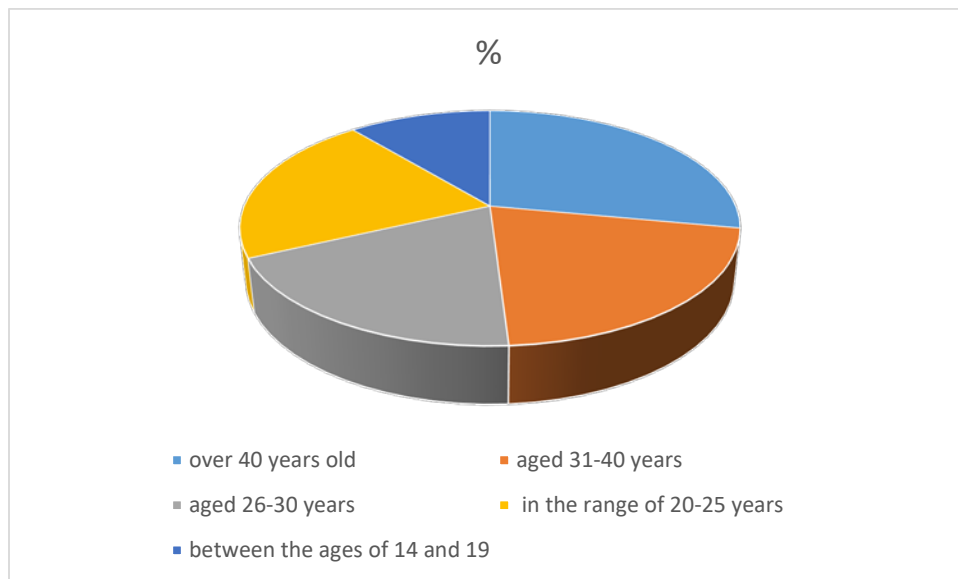- between the ages of 14 and 19

Fig. 1 Distribution of the surveyed women by age

The analysis of the questionnaires indicated the following distribution according to the marital status of women, presented in Fig.2.
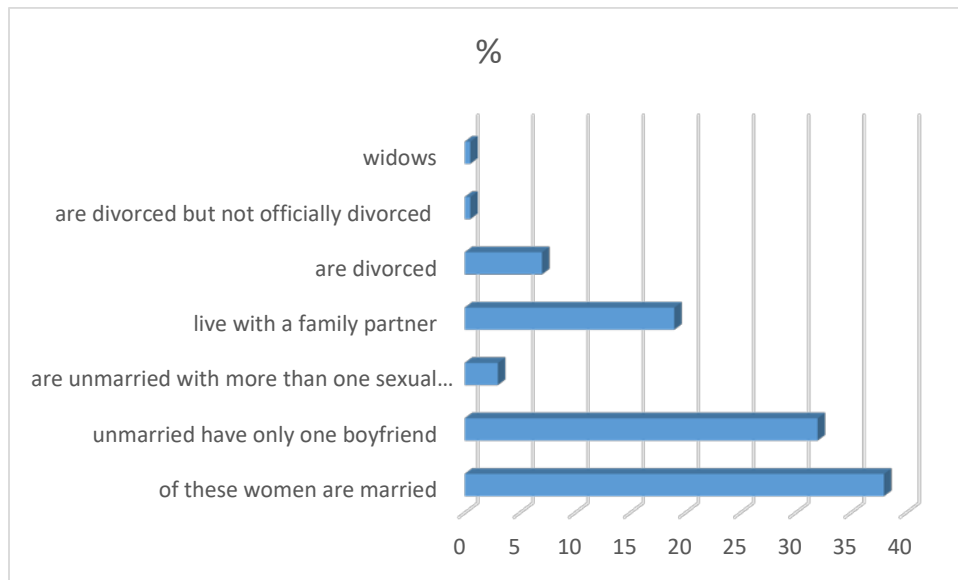
Fig.2 Distribution of women by marital status

38% of these women are married, 32% unmarried have only one boyfriend, 3% are unmarried with more than one sexual partner, 19% live with a family partner, 7% are divorced, 0.5% are divorced but not officially divorced and 0 .5% widows. (Figure 2)

When asked "where do you live?", 88.5% of respondents indicated in a large city, 7% in a smaller city and 4.5% in a village. (Figure 3)
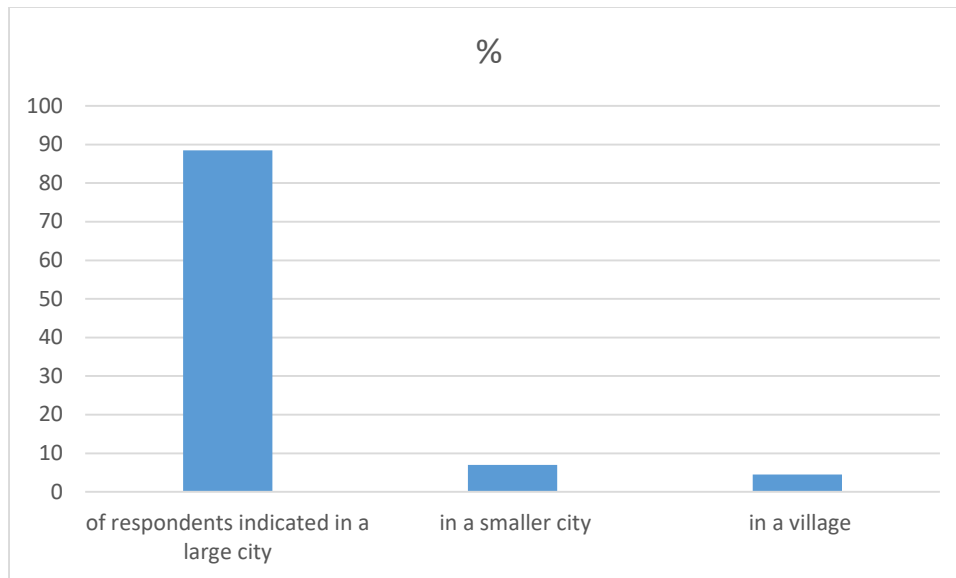
Fig. Distribution of the surveyed women by place of residence

The majority of the interviewees are of Bulgarian affiliation - 90%; Turkish - 7.5%, 1.5% are defined as Roma and other ethnicity 0.5% (Russian, Ukrainian, Macedonian and Greek), presented in Figure 4.

%

- Bulgarian affiliation
- Turkish
- are defined as Roma
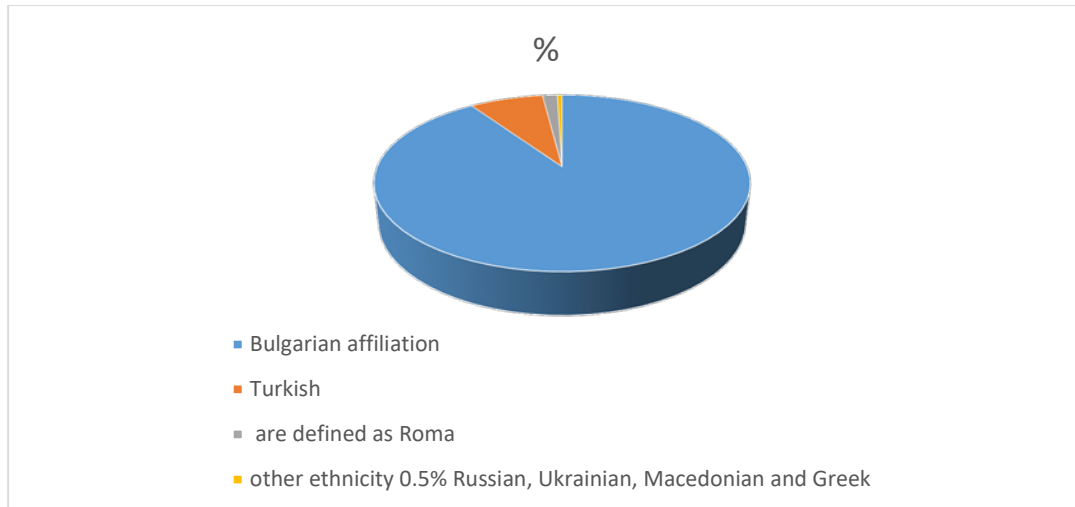- other ethnicity 0.5% Russian, Ukrainian, Macedonian and Greek

Fig. 4 Distribution by ethnicity

The majority of women have higher education - 66.5%; 29% have secondary education; with mainly 3.5% and 1% without education. Figure 5
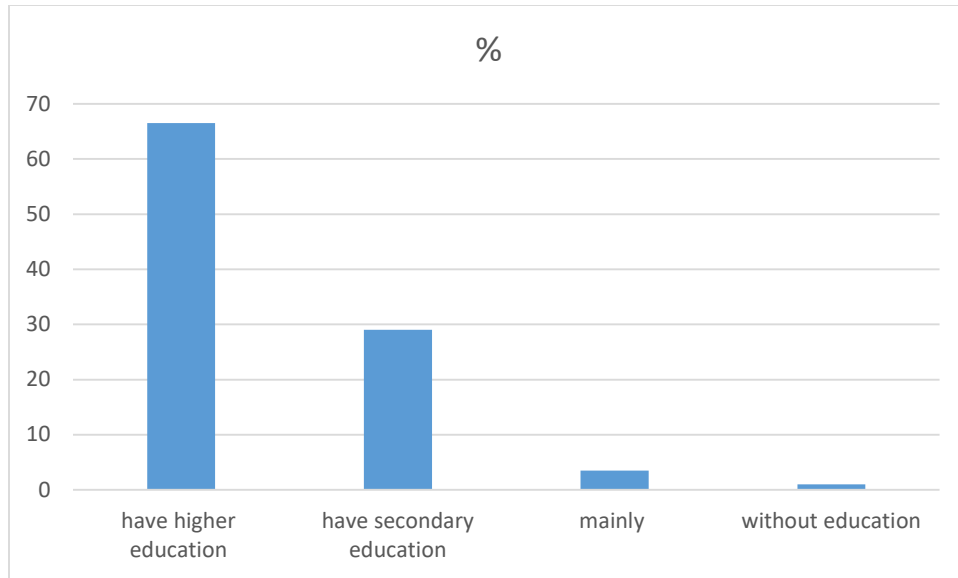
Fig.5 Distribution of the surveyed women by education

The total number of women with permanent employment is 75%, and the percentage of health insured is close to almost the maximum - 98.5%.

Respondents set their standard of living as high at 12.5%, medium at 76% and low at 11.5%, presented in Figure 6 and Table 1.

Table 1. Distribution of respondents by standard of living

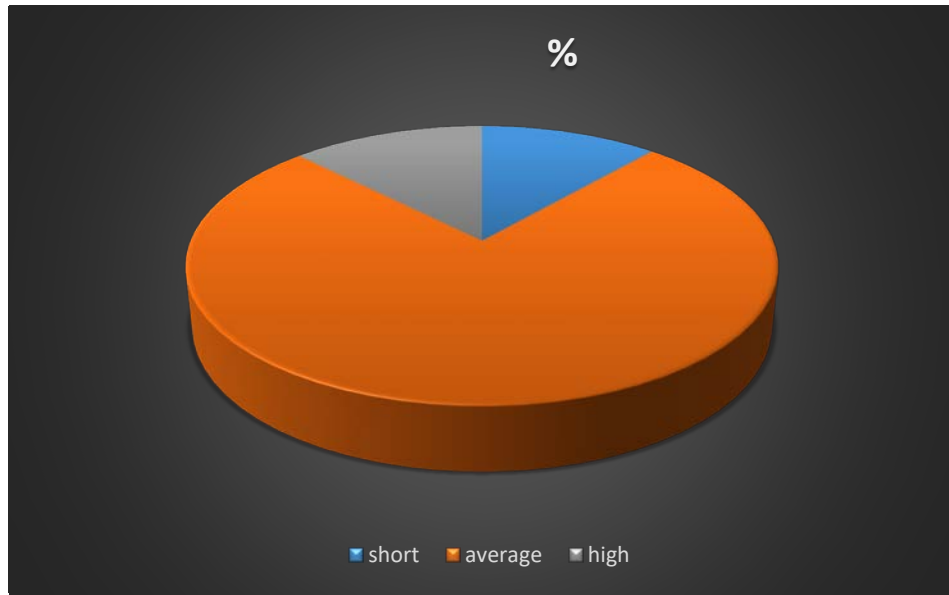| Standard	number	%
Short	23	11.500
Medium	152	76.000
High	25	12.500
Total	200	100.000

Fig. 6. Distribution of respondents according to their standard of living

It is noteworthy that the majority of respondents have an income between BGN 600 and BGN 1,000, which shows a low material standard. (Table 2 and Figure 6)

Table 2. Distribution of interviewed women in% by income

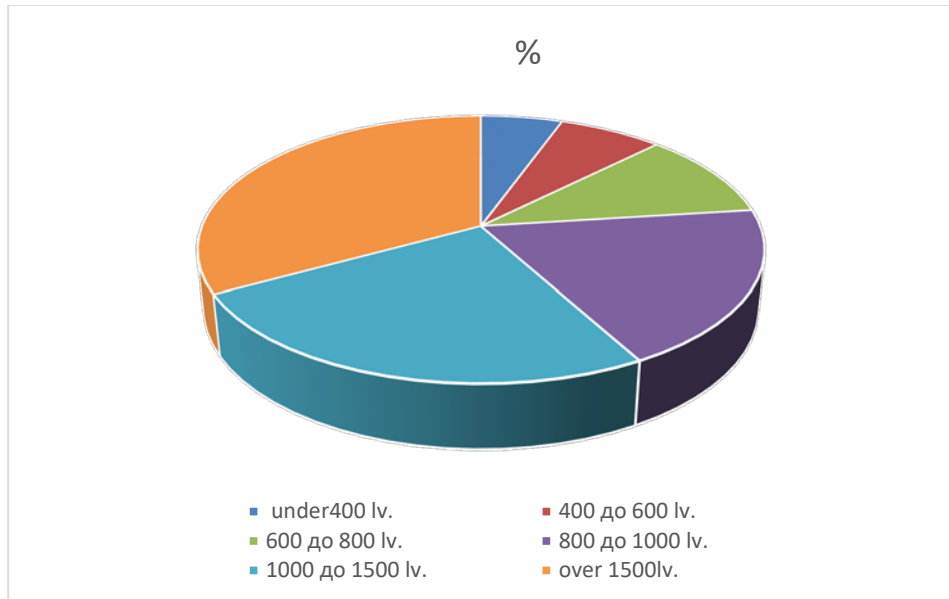| Income	number	%
Under 400lv.	11	5.500
400-600lv.	14	7.000
600-800lv.	21	10.500
800-1000lv.	38	19.000
Under 1000lv.	50	25.000
Under 1500lv.	66	33.000
Total	200	100.000

Fig.7 Distribution of women by income

Table 3 shows that on average a household consists of three people, usually two parents and one child.

Table 3 Average number of family members

Average number of people in a family	
Av.aritm.	3.181
Standard off	1.138
At least	0.000
Maximum	9.000

Against the background of low income, the high percentage included in the survey reported about own housing nearly 65%. (Table 4 and Figure 8)

Table 4 Owning a home

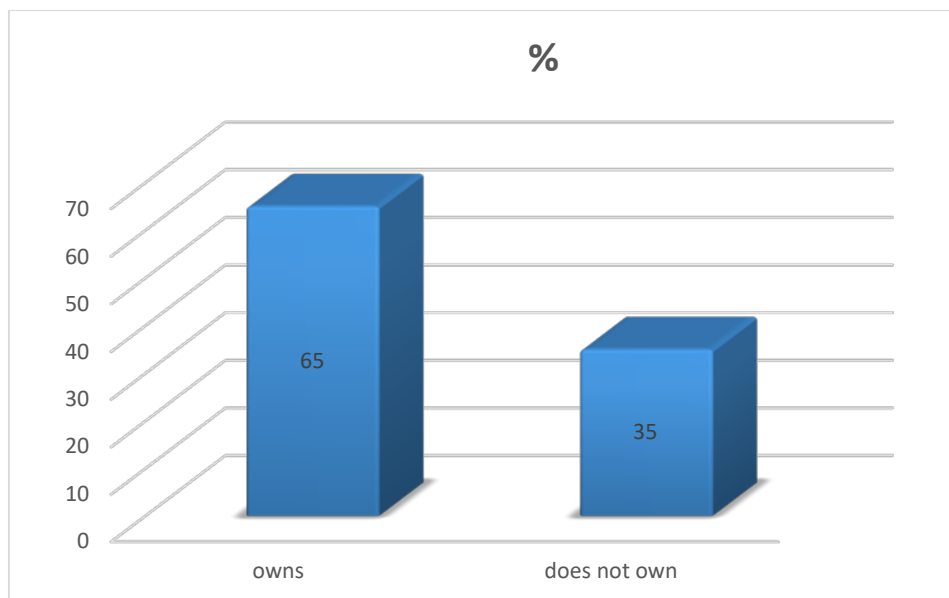| Own home	Number	%
Yes	130	65.000
No	70	35.000
Total	200	100.000

Fig. 8 Own own home

Nearly two-thirds of women say they live in three or more rooms. Table 5 and Figure 9 clearly show the percentage distribution.

Table 5. Number of rooms in the inhabited dwelling

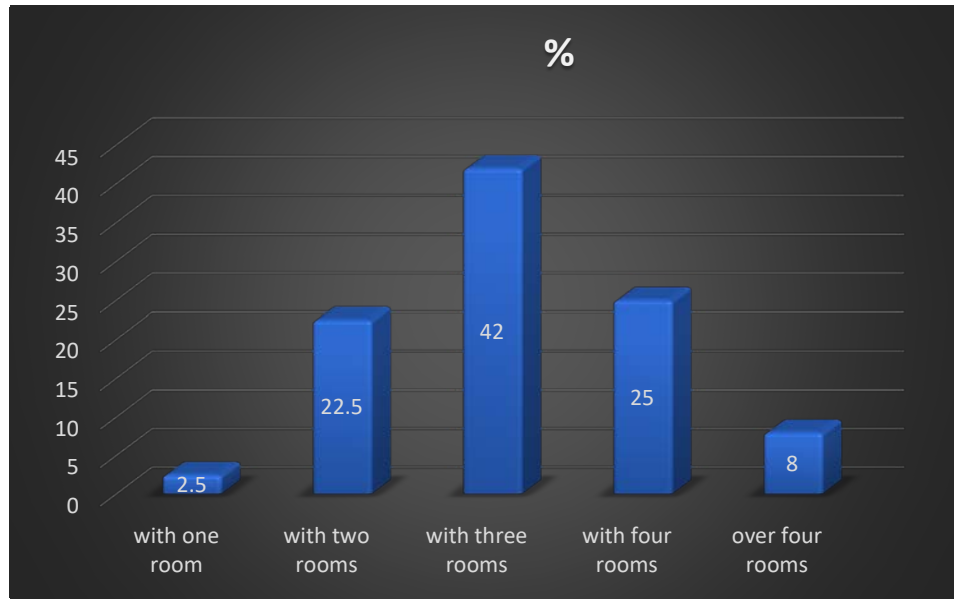| No. of rooms	Number	%
1 room	5	2.500
2 rooms	45	22.500
3 rooms	84	42.000
4 rooms	50	25.000
On 4 rooms	16	8.000
Total	200	100.000

Fig. 9 Number of rooms in the home they own

Unfortunately, the trend for one and two children in a family is maintained and accounts for about 50% of couples. (Table 6 - Figure 10)

Table 6 How many children does a household include?

children	number	%
1 kid	51	25.500
2 children	47	23.500
3 children	13	6.500
More than 3 children	89	44.500
Тотал	200	100.000

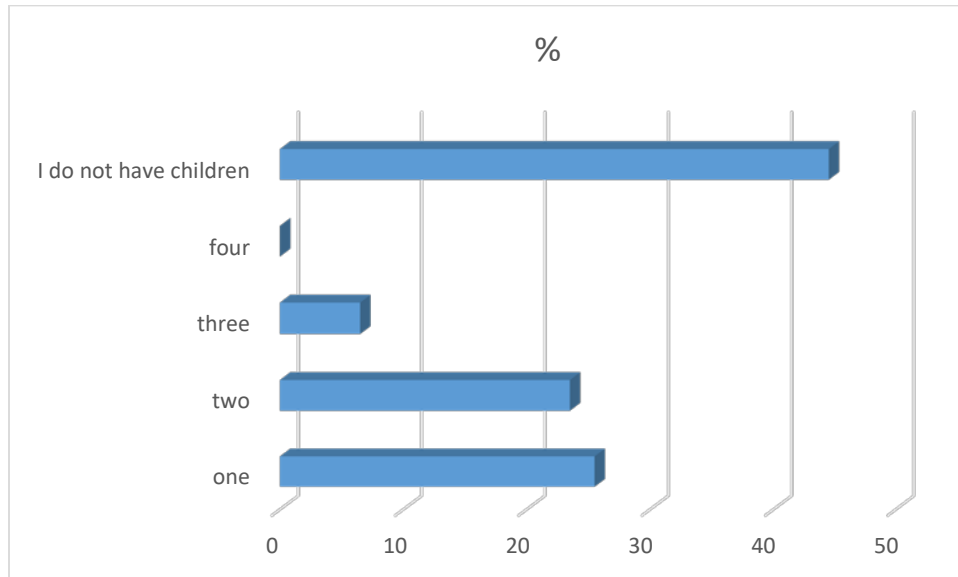Graphically, this trend is shown in Fig.10.

Figure 10. Distribution of respondents according to the number of children in the family

One of the important indicators for us to increase the birth rate is the desire for more children in one family. According to this indicator, most of the interviewed women, nearly 70%, state that they do not want more than two children. (Table 7 - Figure 11)

Table 7. Desire for the number of children in the family

Indicators	Nomber	%
Not a single child	3	1.500
1 kid	23	11.500
2 child	136	68.000
3 child	33	16.500
4 and more than	5	2.500
Общо	200	100.000
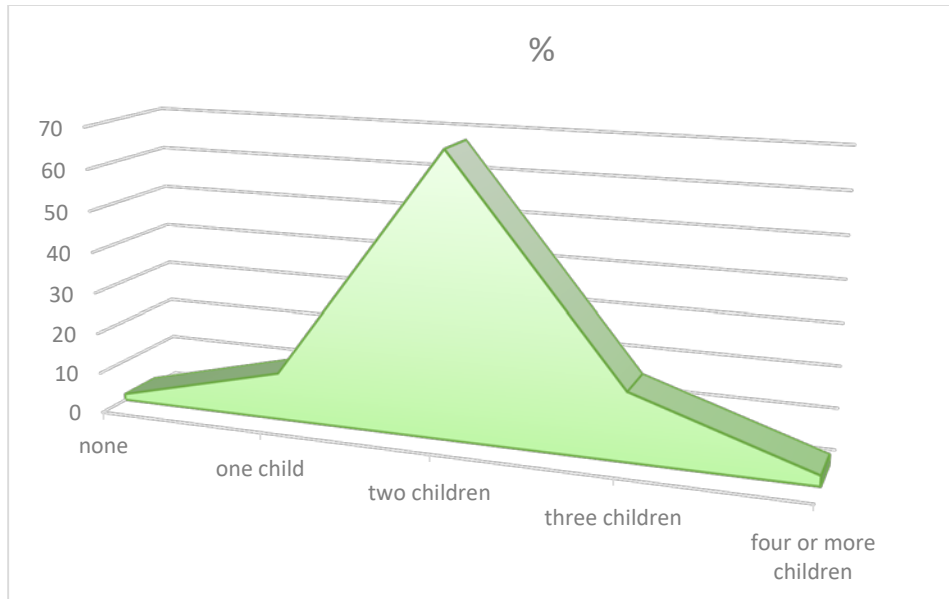
Fig. 11. Distribution of the desire for the number of children in a family

Most of the interviewed women think that their general health is satisfactory and good. Only about 19% of them give an excellent grade for themselves (Table 8 - Figure 12).

Table 8 Assessment of your health condition

Health assessment	Number	%
Bad	5	2.500
Satisfactory	40	20.000
Good	118	59.000
Excellent	37	18.500
Total	200	100.000

Fig. 12 Assessment of current health status

About 16% of the women in the survey have chronic diseases, and the most common diseases they report are: hypertension, diabetes, bronchial asthma, thyroid pathology and others. (Table 9)

Table 9. Presence of chronic diseases in the interviewed women

Chronic disease	Number	%
Yes	31	15.500
No	169	84.500
Total	200	100.000

Unfortunately, the abortion rate for women remains high at more than 21%.

(Table 10 - Figure 13)

Table 10 percent of women had abortions

Abortions / number	number	%
Yes	15	7.500
No	158	79.000
One abortion	12	6.000
Two abortions	8	4.000
Three abortions	3	1.500
Total	200	100.000

Optional abortion in women also remains above 30% (Table 13)

Table 11 Women had an abortion of their choice

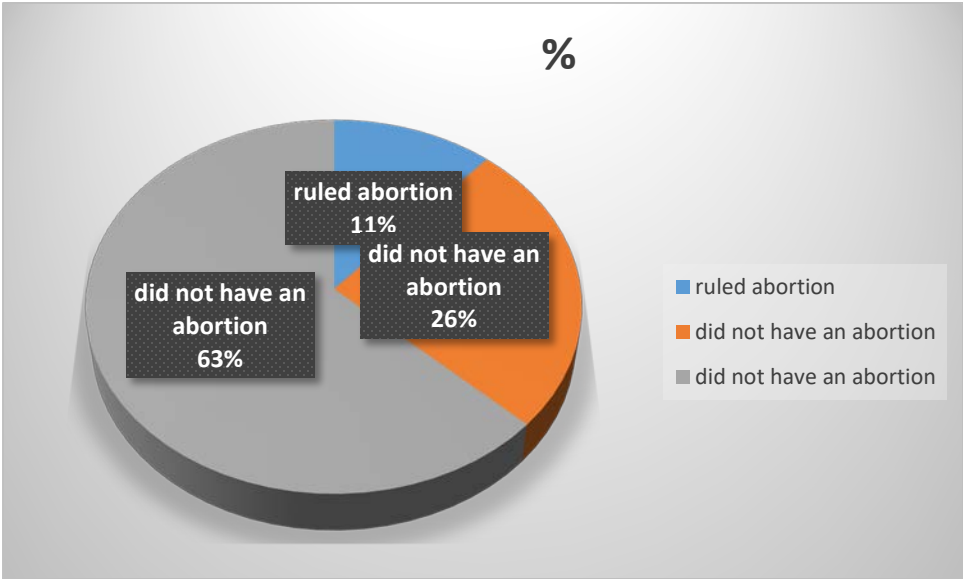| Optional abortion	Number	%	% without not responding
Yes	23	11.500	31.081
No	51	25.500	68.919
They did not answer	126	63.000	
Total	200	100.000	

Fig. 13 Women had an abortion

The reasons for abortion desire in women are many, but the most common of them are well seen in Table 12 and Figure 14. First of all, low living standards, followed by fulfilled reproductive plans and career / professional development.

Table 12 Main reasons for voluntary abortion

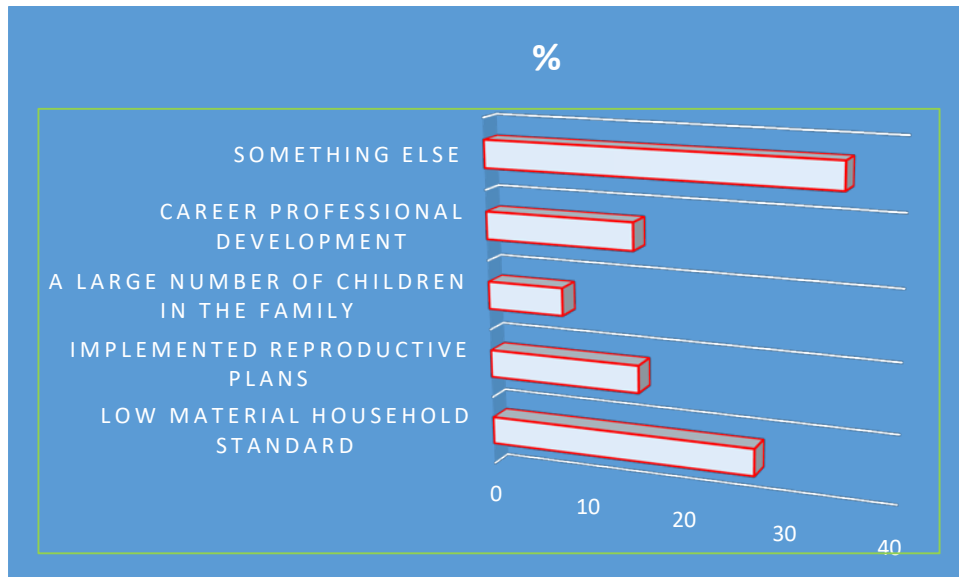| Reason for optional abortion	Number	%	% without not responding
Low material standard	7	3.500	26.923
Fulfilled reproductive plans	4	2.000	15.385
A large number of children in the family	2	1.000	7.692
Career / professional development	4	2.000	15.385
Something else	9	4.500	34.615
They did not answer	174	87.000	
Total	200	100.000	

Fig. 14 Reasons for optional abortion

Unfortunately, first-time abortion women are mostly between the ages of 18 and 30. These are the most active years for creating a generation for every woman. Also worrying is the fact that nearly 20% of women have an abortion for the first time before the age of 18. (Table 13 and Figure 15)

Table 13 By age, women had abortions

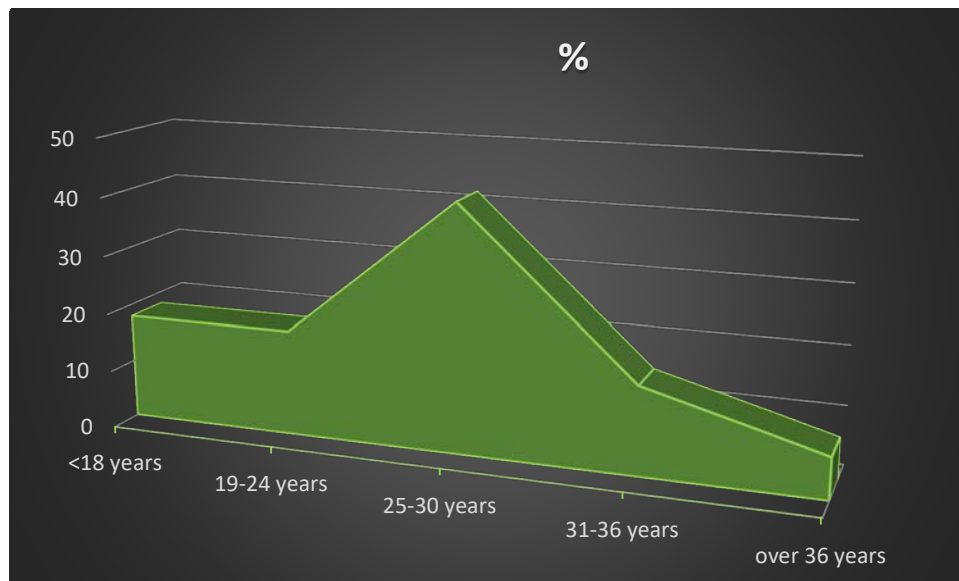| Age first abortion	Nomber	%
<18 years	8	18
19-24 years	8	18
25-30 years	19	42
31-36 years	7	15
Над 36years	3	7
Total	44	100.000

Fig.15 Age distribution of abortive women

Over 93% of women are convinced that every woman should have the right to choose whether and when to have an abortion. (Table 14 - Figure 16)

Table 14 Opinion on the right to choose an optional abortion

Opinion on the right to choose abortion at will	Number	%
Yes	186	93.000
No	9	4.500
They did not answer	5	2.500
Total	200	100.000
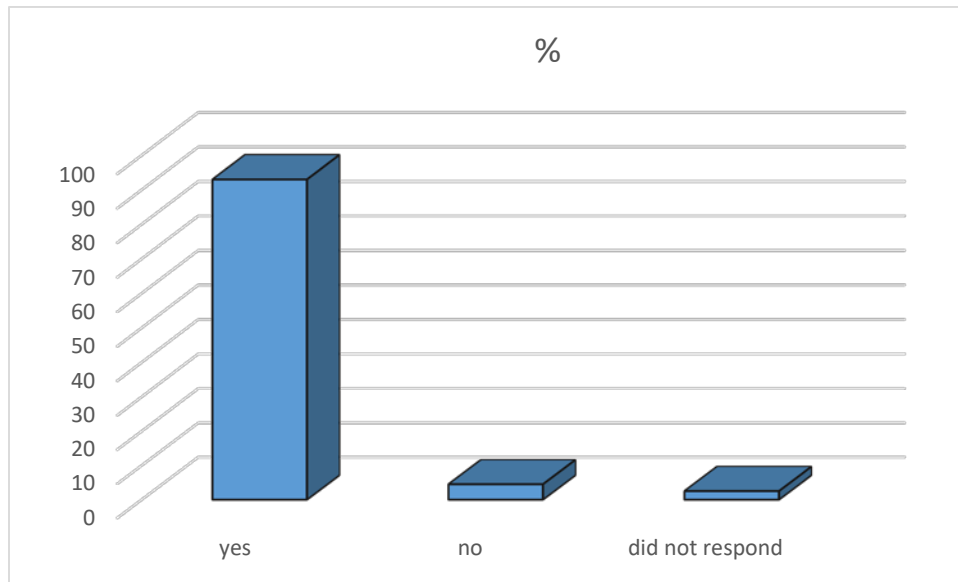
Fig. 16 The right of every woman to choose an abortion of her choice

The percentage of women over 89% who know about the possible complications during and after the manipulation necessary to terminate the pregnancy is also high (Table 15 and Figure 17).

Table 15. Aware of the possible complications of abortion

Clarity about possible complications	Number	%
Yes	178	89.000
No	20	10.000
They did not answer	2	1.000
Total	200	100.000

Fig. 17 Percentage distribution of clarity for possible complications of abortion by the woman.
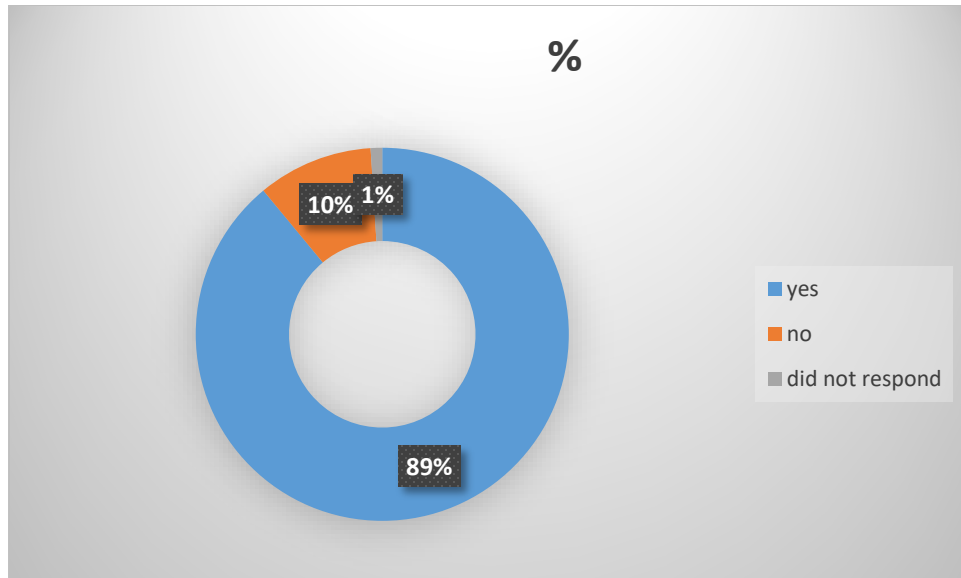
Nearly 100% of women surveyed know what a contraceptive is and do not want an unplanned pregnancy. (Table 16 - Figure 18)

Table 16. Knowledge of contraceptives

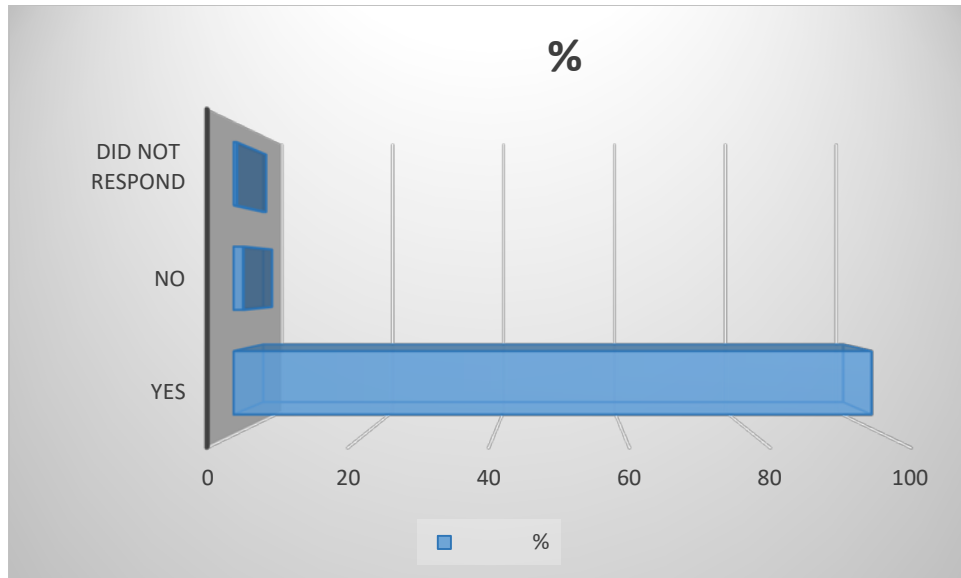| Do you know what a contraceptive is?	Number	%
Yes	196	98.000
No	3	1.500
They did not answer	1	0.500
Total	200	100.000

Fig. 18 Know what a contraceptive is for women

Nearly 95% of women in the survey tend to protect themselves from unwanted pregnancies (Table 17 - Figure 19).

Table 17 Prone to protect women from unwanted pregnancies

Tendency to prevent unwanted pregnancies	Number	%
Yes	189	94.500
No	9	4.500
They did not answer	2	1.000
Total	200	100.000
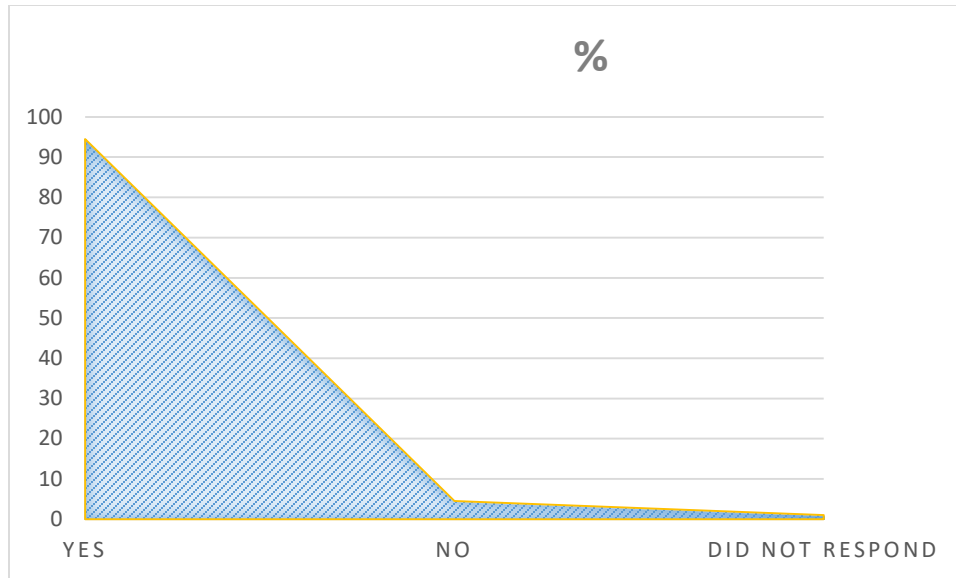
Fig. 19 Women wishing to protect themselves from unplanned pregnancy.

Unfortunately, methods of preventing unwanted pregnancies remain far from modern ways of doing so, namely modern hormonal contraceptives. Outdated and less effective means of preventing unwanted pregnancies continue to be used, given in percentages below in Table 18 and Figure 20.

Table 18 Ways to prevent unwanted pregnancy

A way to prevent unwanted pregnancies	Number	%
Spiral	36	18
Hormonal agents	46	23
Interrupted coitus	26	13
Calendar method	22	11
Condoms	31	15.5
Combination of the listed methods	39	19.5
Total	200	100.000

Fig. 20 Protecting women from unwanted pregnancies

More than 86% of the surveyed women are aware of what a sexually transmitted infection is and the consequences and risks of its transmission (Table 19 - Figure 21).
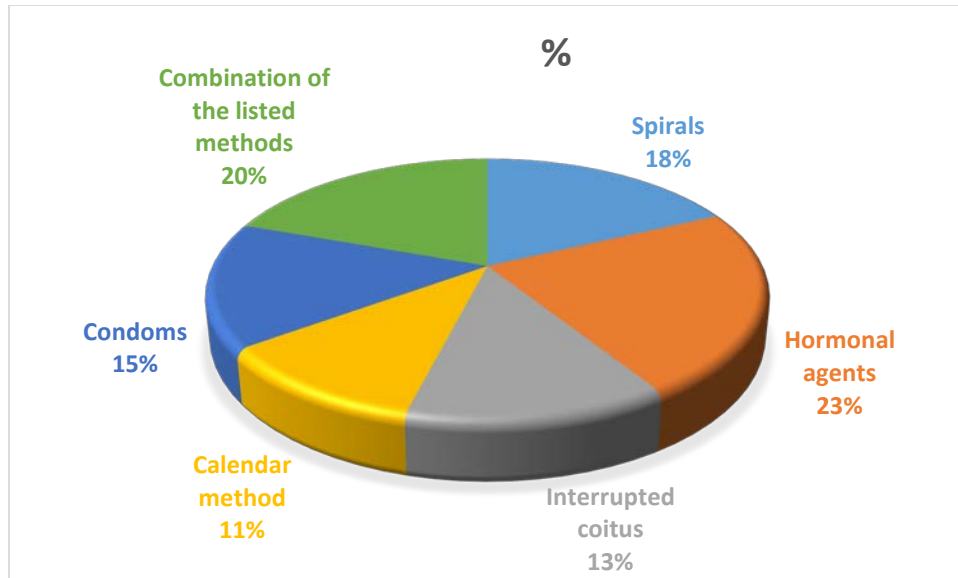
Table 19 Knowing what a sexually transmitted infection is

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Do you know what a sexually transmitted infection is?	Number	%
Yes	172	86.000
No	28	14
Total	200	100.000
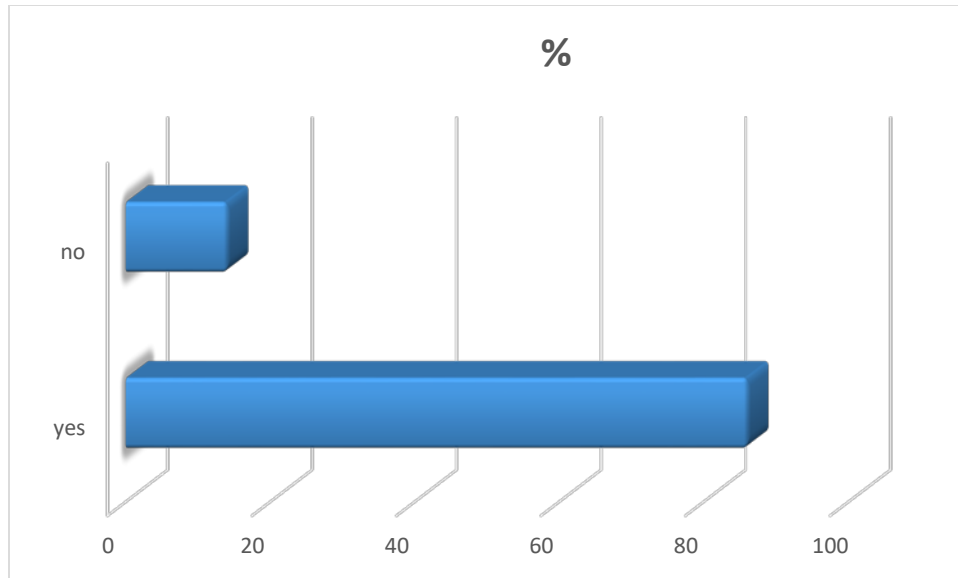
Fig. 21 Knowledge of sexually transmitted infection

The study found that over 30% of women receive the necessary information about sexually transmitted infections and sexual health from their personal gynecologist 30%, who has a key role in obtaining the necessary information, followed by friends and acquaintances25% and the Internet 17%. From GPs, the press, television and radio, they receive a negligible amount of this information in total below 10% (Table 20 - Figure 22).

How do you keep informed?	Number	%
GP	10	5
Gynecology	60	30
Press	4	2
Internet	34	17
TV/Radio	6	3
friends and acquaintances	50	25
specialized literature	1	0.5
combination of answers	35	17,5
Total	200	100.000
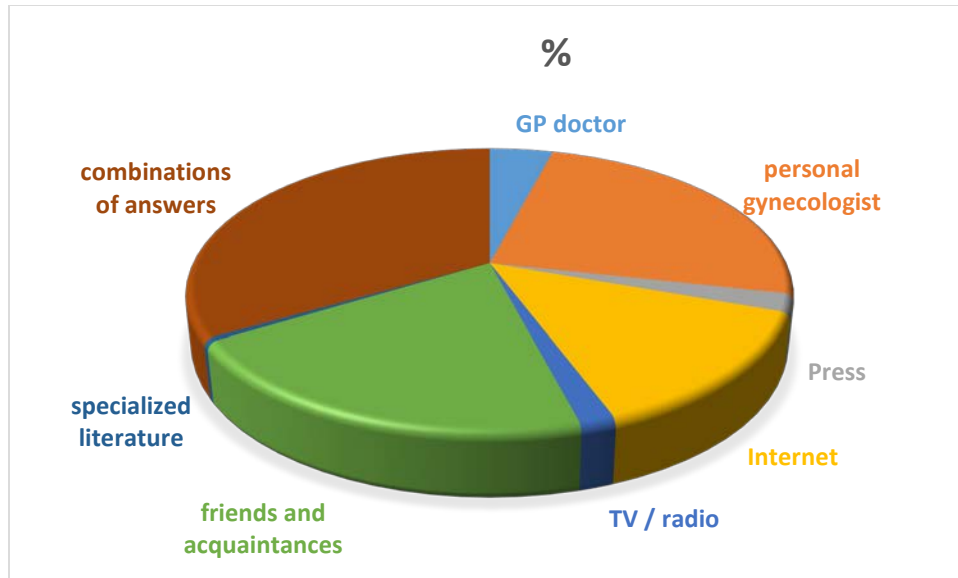
FIG. 22 Way to obtain health information

Of all women interviewed, only 7% reported being diagnosed with a sexually transmitted infection, and a large proportion over 85% were women without clinical problems. (Table 21)

Table 21 Acquired diseases

Diagnosis related to:	Nomber	%
Sexually transmitted infections	14	7.000
Sterility	6	3.000
Malignant disease	3	1.500
No open problems	171	85.500
They did not answer	6	3.000
Total	200	100.000

Less than half of women are fully informed about 41%, unfortunately more than half of them remain insufficiently informed (Table 22 - Figure 23).

Table 22 Level of awareness of women

Are you sufficiently informed?	Number	%
Yes, completely	82	41.000
Yes, in a sense	98	49.000
Yes, but relatively weak	13	6.500
I am not informed	6	3.500
Total	199	100.000
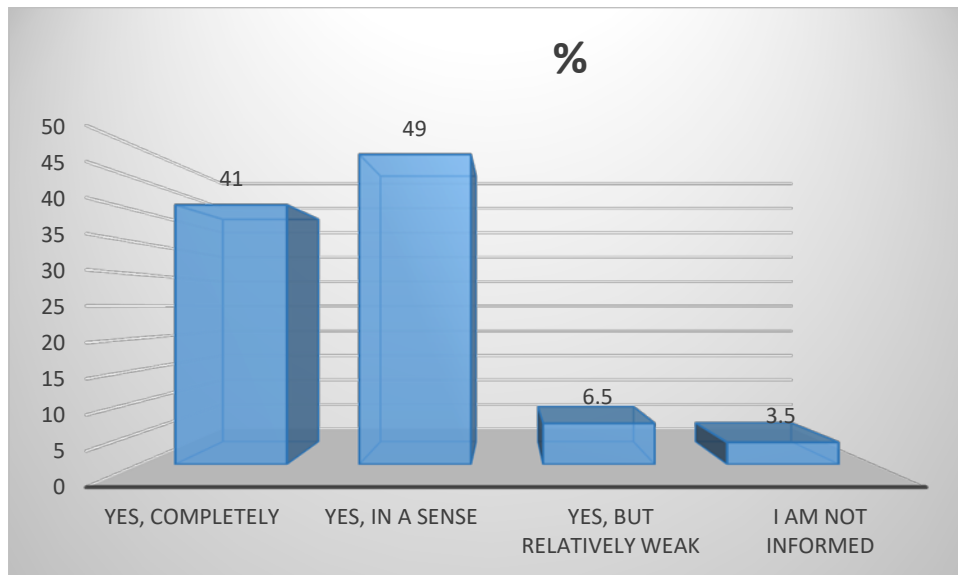
Fig. 23 Percentage of awareness among women

Nearly 70% of them actively seek information only when a certain health problem occurs. Unfortunately, the percentage of active information seekers is very low below 14% of women (Table 23 - Figure 24).

Table 23 Seeking information from women

Seekers of information	Number	%
Yes, I'm constantly looking	28	14.000
Yes, when a specific problem arises	136	68.000
No, I think I know enough	20	10.000
No, I don't think it matters	14	7.000
They did not answer	2	1.000
Total	200	100.000
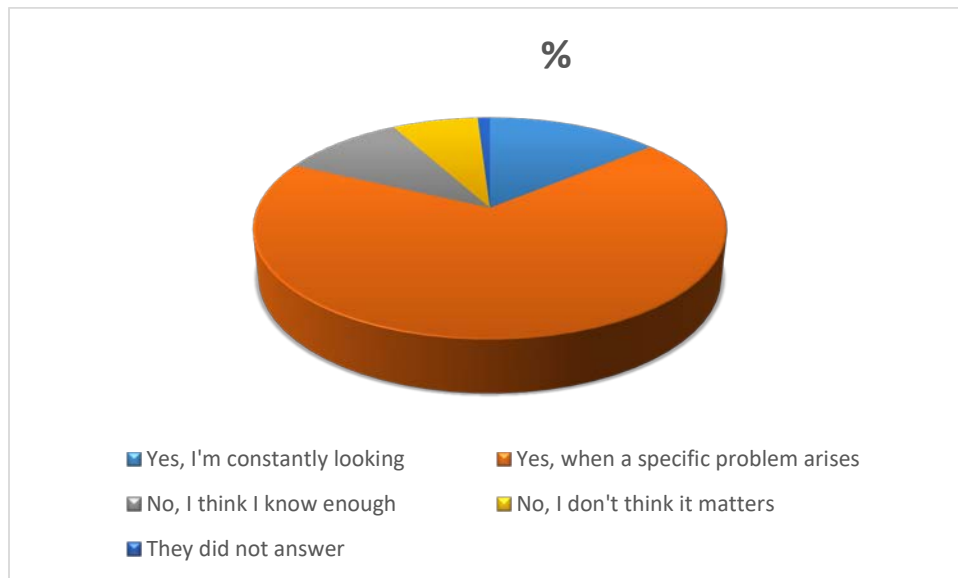
Fig. 24 Actively finding information in women

Attempts to improve women's reproductive health remain too low above 52% (Table 24 - Figure 25).

Table 24 Attempts to improve reproductive health

Attempts to improve reproductive health	Number	%
No	84	43.000
Yes, unsuccessful	20	10.000
Yes, successful	94	47.000
Общо	200	100.000
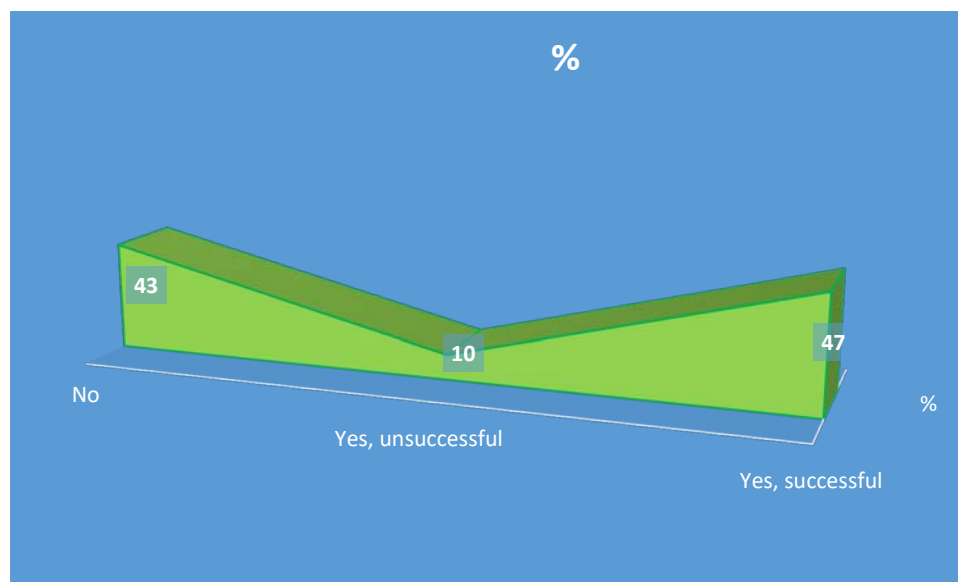
Fig.25 in percentages presenting the attempts to improve general health

Women are convinced that quality prevention requires additional resources and time and they are ready to provide the necessary ones over 80% of them.
(Table 25 - Figure 26)

Table 25 Women 's tendency to spend extra money and time on reproductive health.

Tendency to spend money and time on reproductive health	Number	%
Yes of course	156	80.412
I would like to, I don't have the opportunity	24	12.371
No	14	7.216
Total	194	100.000
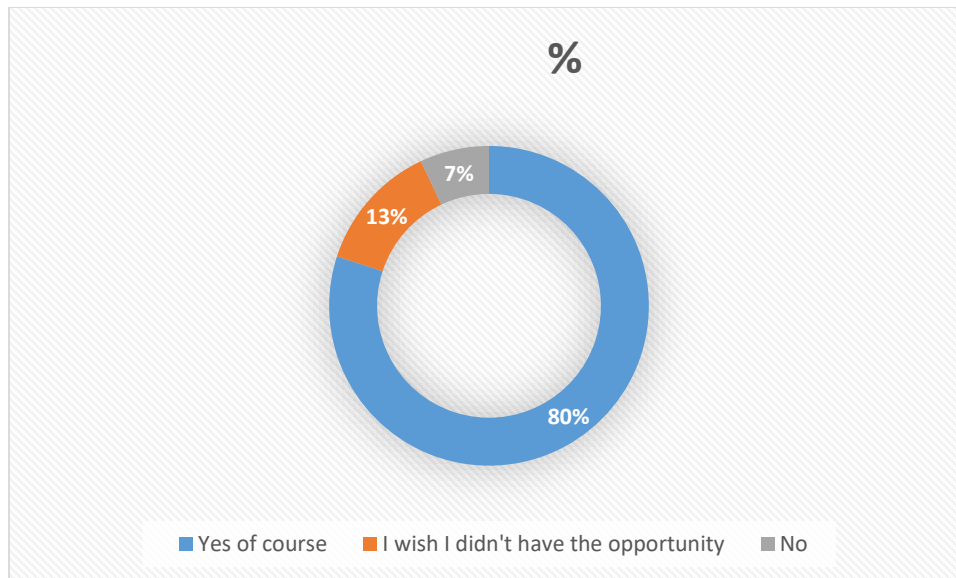
Fig. 26 Percentage representation of the desire for additional funds from women for reproductive health prevention

The percentage of interviewed women remains significant, about 35% who rarely visit obstetricians for prevention.

(Table 26 - figure 27)

Table 26 Period since the last preventive examination

Last prophylactic examination with a gynecologist	Брой	%
During the last year	130	65.657
More than 1 year ago	35	17.677
More than 2 years ago	13	6.566
A few years ago	9	4.545
I do not remember	8	4.040
I have not had a prophylactic examination	3	1.515
Total	198	100.000

Fig. 27 Time until the next preventive examination for women
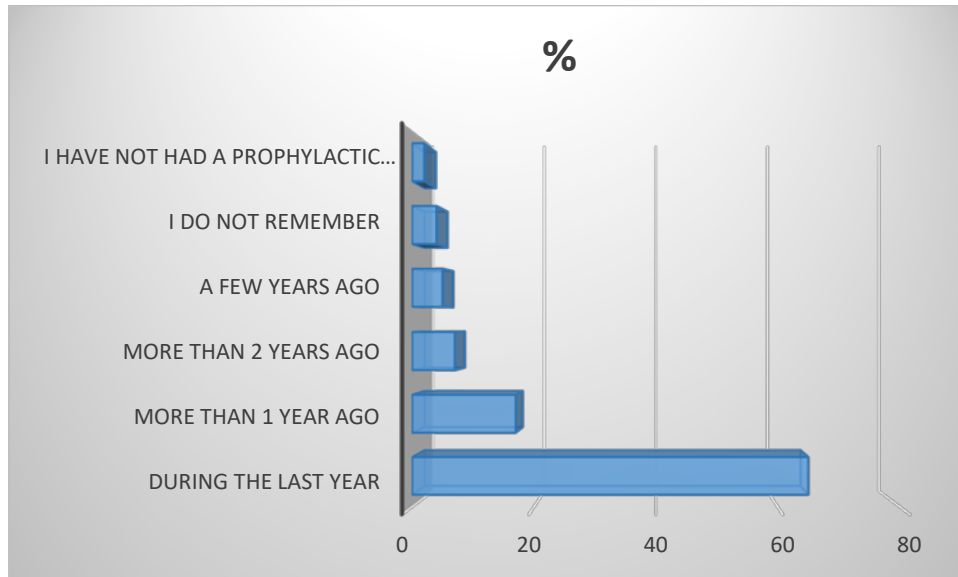
As an explanation for this, about 33% stated that they feel healthy and just as much that they do not have the habit of visiting their personal doctor and / or personal gynecologist. Two other groups, with about 10% each, point to a lack of time and fear of visiting their GP or gynecologist. About 13% of the group of women who regularly attend annual check-ups remain very low. (Table 27 - figure 28)

Table 27 Reasons for non-appearance of prophylactic examination

Why don't you come to the annual preventive examinations?	%
I don't have time	8.228
I have no habit	32.278
I feel healthy	32.278
I'm afraid	10.127
I don't know where and to whom to go	3.797
I walk regularly	13.291
Total	100.000

Fig. 28 Percentage representation for the reasons for missing the prophylactic examinations

The correlation analysis we used to study the relationships between different indicators and to establish the strength of their influence showed interesting relationships. The estimation of the strength of the dependence between the variables was based on the results of the Spearman coefficient (rho), and the degree of association between the variables was determined to be significant at rho> 0.5 <rho = 0.7; large at 0.7 <rho = 0.9 and extremely large at rho> 0.9 at p ≤ 0.05.

The obtained results did not show significant relationships between abortion at will with the variable indicators education (rho = -0.024, p = 0.839) and income (rho = -0.055, p = 0.642). An association was found only between the values: income and education (rho = 0.296, p = 0.001), and the correlation was positive in the interviewed women (ie higher education is associated with higher income) and moderate.

We found a correlation only between ethnicity and settlement (rho = 0.305, p = 0.001), the correlation was positive (ie women with Roma and Turkish identities are more likely to live in rural areas) and moderate in degree.

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The correlation analysis of the level of education and the number of children in the family showed the opposite, ie. negative relationship between level of education and available children in a family (rho = -0.152, p = 0.032). This means that higher education is associated with fewer children in the family. Also, income (rho = -0.157, p = 0.026) and the living standard (rho = -0.159, p = 0.025) turned out to be important variables determining the desire for children of the respondents.

When applying the Spearman method, our analysis did not find a relationship between abortions and the number of prophylactic examinations (rho = -0.053, p = 0.463). We found a positive correlation between income and living standards of respondents; higher incomes indicate a higher standard of living (rho = -0.315, p = 0.001) as well as between the number of rooms in their home and the standard of living. (rho = -0.210, p = 0.003). Interestingly, the results showed a weak but statistically significant relationship between abortions and the presence of the respondents' own home (rho = -174, p = 0.015). This shows the tendency of women who do not have their own home to have an abortion.

The results clearly showed that there is a statistically significant relationship between ways to prevent pregnancy and their level of awareness (rho = -0.149, p = 0.037), as well as between the level of awareness and the desire of women to learn more about reproductive health (rho = 0.185, p = 0.009).

According to the Spearman's Correlations method, we did not find a relationship between the number of abortions and the age of the first abortion (rho = -0.073, p = 0.637).

According to the "Spearman's Correlations" method - we did not find a relationship between the variable level of education and the way of protection.

The analysis of the survey data did not reveal any correlations between the variables - standard of living, voluntary abortion and medical abortion.

COMPARATIVE ANALYSIS

The method of "chi-square test" was used as a non-parametric test, which looks for significant differences in the frequency of representation of category values. Statistical significance in nonparametric tests is assumed at $p \leq 0.05$.

We found a discrepancy between those who stated that they had an abortion and the number of declared abortions. Therefore, we used abortions at will and for medical reasons for the same analysis.

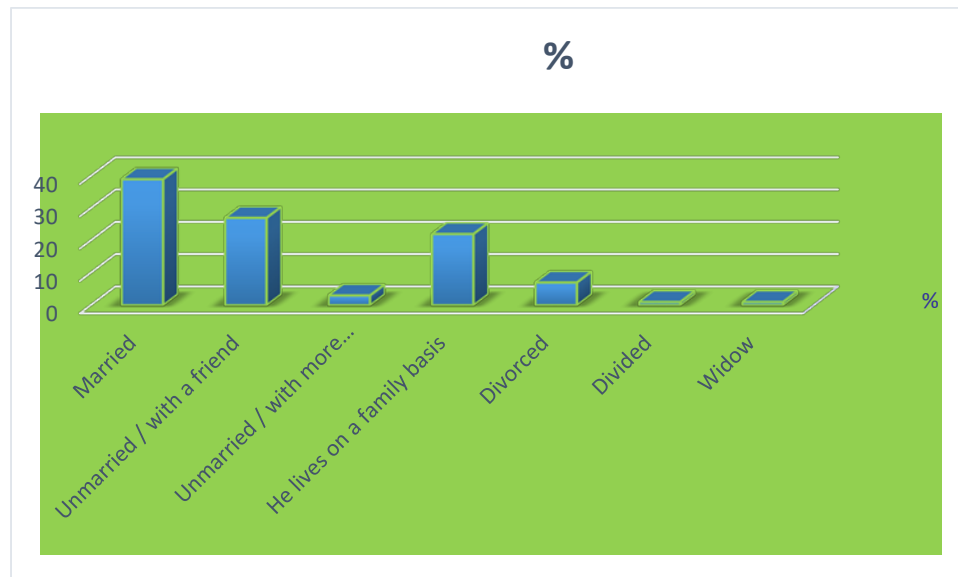In Fig. 29 interviewed women by marital status are visually presented.

Fig. 29 Marital status

The chi-square analysis did not find a relationship and significant differences between the types of marital status and voluntary abortion ($X2 = 7.76$, $p = 0.265$). However, it is noteworthy that most abortions are performed among married women.

The analysis with the chi-square test did not find a connection and significant differences between the types of marital status and medical abortion ($X2 = 6.69$, $p = 0.342$). However, it is noteworthy that most abortions are performed among married women. (Figure 29)

The analysis with the chi-square test did not find a connection and significant differences between the different locations and the abortion of choice ($X2 = 3.72$, $p = 0.155$). However, it is noteworthy that most abortions are performed in large cities.

The analysis with the chi-square test did not find a connection and significant differences between the different locations and abortion for medical reasons ($X2 = 1.80$, $p = 0.406$). However, it is noteworthy that most abortions were performed in large cities.

The analysis with the chi-square test did not find a connection and significant differences between abortion at will among different ethnic groups ($X2 = 3.07$, $p = 0.383$). However, it is noteworthy that most abortions were performed by women of Bulgarian descent (25.67%). The results are similar for medical abortions.
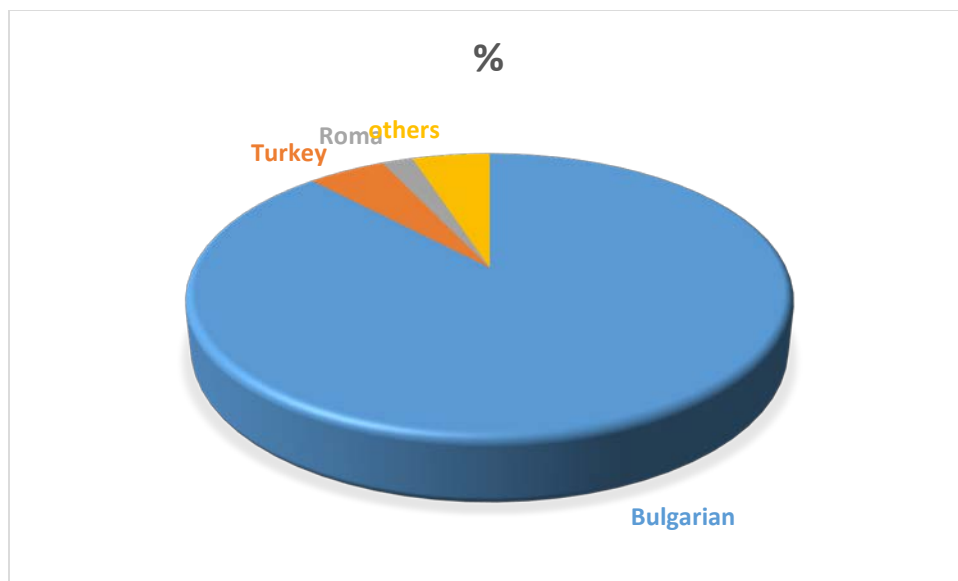
Fig. 30 Relationship between the location of women interviewed and abortion for medical reasons

The analysis with the chi-square test did not find a connection and significant differences between abortion for medical reasons among different ethnic groups (X2 = 2.48, p = 0.479). However, it is noteworthy that most abortions are performed by women of Bulgarian descent. (Figure 30)
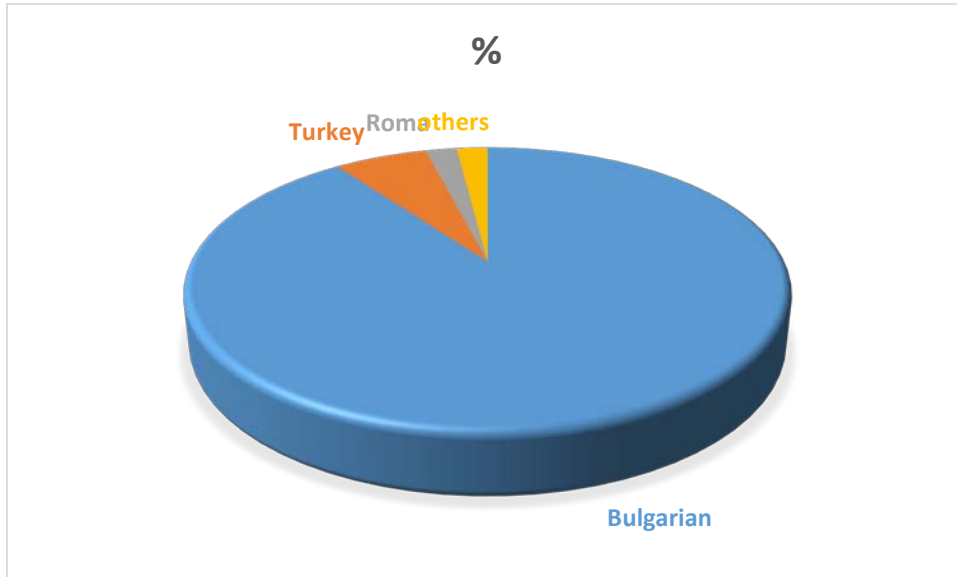

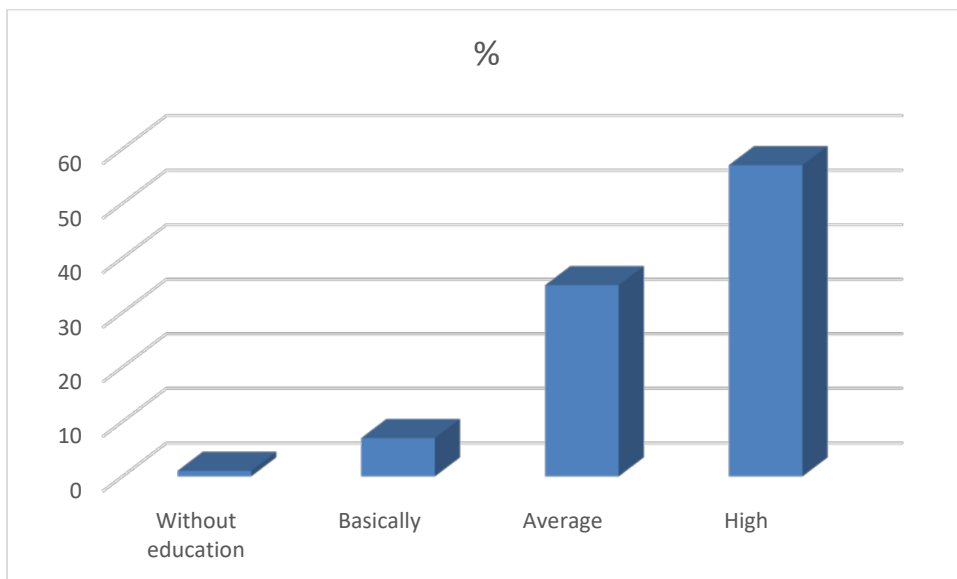Fig. 31 Abortion for medical reasons among different ethnic groups

FIG. 32 Optional abortion among women with different levels of education

The analysis with the chi-square test did not find a connection and significant differences between voluntary abortion among women with different levels of education (X2 = 3.280, p =

0.350). However, it is noteworthy that most abortions are performed by women with higher education (Figure 32).

The analysis with the chi-square test showed that women with higher education are more likely to have abortions for medical reasons, and this difference from other women is not accidental, ie. it is statistically significant ($X2 = 15.27$, $p = 0.002$)

The results of the table after a chi-square analysis and the frequent distribution of data show that most abortions were registered among women who rated their lives standard as medium the results of medical abortions are similar.

No connection was found between the personal self-assessment for the level of awareness on the problems of reproductive health and the performed abortions at will and for medical reasons ($X2 = 4.738$, $p = 0.315$)

No link was found between personal self-assessment of the level of awareness on reproductive health issues and voluntary abortions ($X2 = 1.21$, $p = 0.876$). It is noteworthy that these women identified themselves as informed, among those who had the most abortions.

Survey - doctors results:

Total number of surveyed doctors, 50 of which were 39 GPs and 11 specialists in OA (Table 28)

Table 28 Number of GPs and GPs participated in the survey

	Number	**%**
GP	39	78.000
AG	11	22.000
Total	50	100.000

When asked how much work experience you have in the specialty, the interviewed doctors answered on average about 18 years and a total work experience as doctors on average 24 years.

The average age of the doctors who took part in the survey is 52 years, the youngest is 26 and the oldest is 77.

 A large percentage are medical professionals who profess a religion.

A total of 77.5% of the respondents are GPs, while 22.4% are GPs. Abortions are performed by specialists in obstetrics and gynecology. GPs are more prone to abortions and fewer abortions

Statistically, no differences in attitudes towards improving the health culture of GPs and OA were found (tables below); however, there are percentage differences. Unfortunately, the promotion of health culture by medical professionals remains relatively low at this stage.

Chi-square analysis did not find a statistical difference in attitudes between GP and AG $(X2 = 0.402, p = 0.526)$

Chi-square analysis found a statistical difference in the percentage difference between contraceptives prescribed by GPs and hypertension $(X2 = 0.817, p = 0.016)$, ie GPs are more likely to prescribe contraceptives.

Here the percentage differences between hormonal and non-hormonal prescribed drugs is not significant $(X2 = 0.274, p = 0.254)$, ie. we can only see the trend of the percentages, but not draw any conclusions.

Chi-square analysis did not find a statistical difference in attitudes between GPs and OA $(X2 = 2.21, p = 0.137)$, but the percentage differences stand out.

Chi-square analysis did not find a statistical difference in attitudes between GPs and AG $(X2 = 0.036, p = 0.850)$, but the percentage differences stand out. Again, GPs are more likely to prescribe modern contraceptives.

Chi-square analysis showed a statistical difference in attitudes between GPs and hypertension $(X2 = 11.558, p = 0.001)$.

The data clearly show that a high percentage of women remain in our region, for whom abortion remains a means of preventing unwanted pregnancies. The share of women who perform abortions at will is high.

5. Discussion

In our study, we surveyed 200 women of reproductive age who visited a GP and / or an obstetrician. Demographic analysis shows that they are distributed almost equally in the four age groups: 28% of them are over 40 years old; 21% aged 31-40 years; 19% aged 26-30 years; 21% in the range of 20-25 years and 11% between the ages of 14 and 19. Almost 50% are married or living with a family partner, and almost 90% live in a big city. Over 60% of women have higher education and 75% of women with permanent employment, and the percentage of health insured is close to almost the maximum - 98.5%.

Over 70% of women define their standard of living as average, and the rest are divided equally - with low and respectively high standard of living. Against this background, the high percentage (65%) of respondents with their own home is impressive.

Unfortunately, the trend for one and two children in one family remains - 47% of respondents, and even more worrying is the fact that 44% of women do not have children. On average, a household consists of three people.

No less disturbing is the fact that women of Bulgarian ethnicity with secondary and higher education want only one, at most two children. Minority women tend to want a total of 3 children in their lifetime.

Our results overlap with the results of a 2017 survey by Todorka Boeva, which shows that the majority of married and childbearing children do not plan to have a second child.

Statistical analysis showed a negative correlation between the number of children in the family on the one hand and the education of the woman on the other. Women with a higher level of education have a smaller number of children.

Over 95% of women interviewed are firmly convinced that every woman should have the right to choose to have an abortion.

This confirms the results of a survey conducted by the Bulgarian Association for Family Planning and Sexual Health (BFPA) in October 2006, which aims to analyze attitudes and attitudes towards voluntary abortion among Bulgarian women and their views on the right to choose abortion. The results show that a very large part of the surveyed women - 227 (81.1%), express liberal positions on the right of women to choose abortion on broad social grounds. More than half of the women interviewed did not answer the question "Have you had an abortion of your choice", which implies moral concern. About 30% of respondents had an abortion of their choice.

The large percentage of women who have abortions, unfortunately, are of childbearing age between 18 and 30 years, mostly of Bulgarian ethnicity, with higher education, with an average standard of living self-esteem, living in big cities.

Worrying is the fact that 21% of women surveyed have had at least one abortion so far, with the first abortion taking place between the ages of 18 and 20, with women having an abortion at the age of 16, despite the high percentage (over 80%).) awareness among them about possible complications after abortion.

The correlation analysis did not show statistical significance between voluntary abortions on the one hand and education and income on the other. It is noteworthy that most abortions occur among married women and women living in large cities with Bulgarian affiliation. Optional abortions are also most common in women of this ethnic group with higher education with an average standard of living. The analysis with the chi-square test showed that women with higher education are more likely to have abortions for medical reasons, and this

difference from other women is not accidental, ie. it is statistically significant (X2 = 15.27, p = 0.002)

There is a tendency to increase the share of mothers with low education and reduced social and material status. Determining factors leading to their "desire" for abortion are the difficult socio-economic conditions in the family. These results correspond to the results of a study by T. Boeva in 2017, which found that the most important factor in deciding to terminate a pregnancy is the unstable or poor financial situation, followed by reluctance to have more children.

Our study showed that there are several reasons for voluntary abortion, first of all a low material standard, followed by implemented reproductive plans, and a desire for career / professional development. The results showed a weak but statistically significant relationship between abortions and having one's own home from respondents (rho = -174, p = 0.015). This shows the tendency of women who do not have their own home to have an abortion.
In a study by L.S. Kostrykina et al. It has been found that the main reason for termination of pregnancy in young people is the unwillingness to become fathers, and in girls is the young age and the desire for career development.

About 19% of the women interviewed described their health as excellent and the rest as satisfactory and good. The women surveyed are healthy and this is not the reason for fewer children in a family. Another worrying fact is that nearly half of the respondents are women without children.

Contrary to our results is a study by MO Karpov in 2004, which found that 76% of women surveyed who resort to abortion already have a live-born child.

Our results correspond to the results of a study by MO Karpov in 2004. He examines the causes of abortion in three groups of women: under 25 years, 25-30 years and over 30 years. In the first group the main reasons for abortion for incomplete education, material well-being, lack of a reliable partner. In the second group, the main reasons for abortion were successful careers, self-sufficiency and avoidance of family patriarchy. In the third group, the main reasons were health and financial problems. This study confirms the lack of statistical correlation between education and abortion, which correlates with our results. (Karpov MO, 2004)

In the sexual behavior of all women there is an unfavorable trend of underutilization of modern methods of contraception and prevention of unwanted (unplanned) pregnancy, although nearly 100% of women know what a contraceptive and do not want an unplanned pregnancy. Unfortunately, prevention methods are far from the well-known modern contraceptives. Only about 22% of women in Bulgaria use modern contraception (condoms, IUDs and oral contraceptives). We found that less than 20% of women surveyed use hormonal contraceptives.

Our results confirm the findings of a study on "Contraception and the Bulgarian woman today", conducted from 5 to 13 February 2008. It involved 600 women aged 18 to 35 from Sofia, Varna and Plovdiv. This study found that only 4% of Bulgarian women trust planned contraception. According to the survey, 46% of Bulgarian women do not use any methods to prevent pregnancy, although they know about birth control pills.

In developed countries, over 50% of women of childbearing age systematically use contraceptives and methods. Half of them use oral preparations, about 20% use condoms, and intrauterine devices occupy 12 - 15%, interrupted coitus 8 - 10%, the rest: diaphragms, spermicides, natural methods - a total of 5%. (Markova.S 2004)

In contrast to our results, a study by L.S. Kostrykina et al. in 2013 shows that the surveyed students have virtually no knowledge of contraception methods. (Kostrakina L, 2013)

Unfortunately, abortion still remains a means of regulating unwanted pregnancies over 20%.

Prophylactic examinations and visits to obstetricians are mostly women over 40 and between 20 and 25 years, over 90% of this group live in a big city. Women under the age of 20 rarely visit doctors' offices.

The percentage of women who do not visit AG specialists remains relatively high - over 35%, and the reasons are many, but the most common are: lack of time, lack of the necessary habit and fear of meeting with a specialist.

Half of the women say that they are not sufficiently informed about the health problems and the way of prevention by general practitioners and obstetricians. Only 14% of respondents are looking for active information.

Women are convinced that additional funds are needed for quality prevention and more than 80% are willing to allocate additional funds for this.

In general, the reasons for more abortions can be found in:

- low material status - inadequate payment;

- low level of education and low sexual and contraceptive culture;

- Uncertainty in the legislature - frequently changing laws and regulations;

- the conviction of the family woman in Bulgaria for completed reproductive plans after the birth of one or two children is strengthened, although the desire for more than two children in a family is over 70% of the interviewees, which is an important potential for development;

- Lack of sufficient time for preventive activities and discussion of health problems, both by women and doctors.

These results of ours overlap with the results of the analysis of the Agency for the Prevention of Abortion, according to which the main factors for the widespread use of abortions in Bulgaria are: insufficiently high level of contraceptive and sexual culture of the population; based on archaic stereotypes and norms of guilt in a man's intimate relationships and the woman and the pregnancy as a result of them; financial inaccessibility of modern contraceptives, etc.

Family planning, reproductive health and contraception. Analysis of practices and attitudes in seven countries in Eastern Europe and Central Asia. BASPSZ, IPPF, UNFPA, 2012. - In: www. semeinoplanirane.com; www. zdravenmediator.net/pic/articles/Contra ceptive.

Our study found that the main source of information on women's reproductive health is medical professionals. This is followed by: family conversations; conversations with friends; electronic media publications; online forums;

Despite the difficulties of the transition period, in which the Bulgarian healthcare is, GPs and obstetricians are the main sources of information in case of specific problems. Nearly 70% of the interviewed women actively seek information only when a certain health problem arises. Unfortunately, the percentage of active information seekers is consistently very low below 14% of women.

This corresponds to the results of a study by P. Petrov, in which the interviewed Roma share that their most common source of knowledge to prevent unwanted pregnancies are medical gynecological consultations, school lessons and the exchange of knowledge between friends. The role of Roma parents in the transmission of relevant knowledge is relatively small.

About 35% of the surveyed women underwent a preventive gynecological examination more than a year ago. About 33% of them cited as a reason that they feel healthy, almost the same percentage that they do not have the habit of visiting their personal doctor and / or personal gynecologist. Two other groups, with about 10% each, point to a lack of time and fear of visiting their GP or gynecologist. About 13% of the group of women who regularly attend annual check-ups remain very low.

Over 80% of women are convinced that quality prevention and maintenance of good reproductive health requires additional resources and time and they are ready to provide the necessary ones. (Petrov P, 2009)

In the process of her reproductive years, the woman receives attention and care from health institutions as a potential mother through the prenatal care provided by specialists in OA and GP.

The doctors surveyed by us are distributed as follows: 77.5% of them are GPs and 22.4% are AG specialists. Their average length of service is 18 years. GPs have a greater tendency to maintain pregnancy and fewer abortions.

We found that the promotion of health culture is higher in the group of GPs by 76% compared to AG specialists, where it is only 23%.

Doctors who try to dissuade their patients from performing abortions at will and maintaining the pregnancy are mostly GPs.

The main group of doctors willing to perform abortions at will are obstetricians.

All surveyed doctors (GPs and OG specialists) are of the opinion that women do not visit them often enough for prevention. They believe that women's health and reproductive culture is not at a good level.

Regarding the use of contraceptives in our country, doctors say that they are not yet the necessary means to protect women from unwanted pregnancies, as in other European countries.   GPs are more likely to prescribe contraceptives than AG specialists: Chi-square analysis found a statistical difference in the percentage difference between contraceptives prescribed by GPs and AG ($X2 = 0.817$, $p = 0.016$). No difference was found in the two groups of physicians in their preferences for hormonal and non-hormonal contraceptives.

GPs are more likely to prescribe modern contraceptives. All doctors who took part in the survey share that in our region there is still a high percentage of women who perform abortions as a means of preventing unwanted pregnancies.

The opinion of the surveyed doctors is that higher activity is needed, both on their part and on the part of the women themselves, the state and the health institutions to reduce the number of abortions in our country.

6. CONCLUSIONS

1. The large percentage of women who perform abortions at will are of childbearing age between 18-30 years, mostly of Bulgarian ethnicity, with higher education, average standard of living according to self-assessment and living in big cities.

   2. There is a tendency to increase the share of women with low education and reduced socio-material status, who have had an abortion due to the difficult socio-economic conditions in the family.

3. The current legislation in Bulgaria allows such a decision for women

4. Women of Bulgarian ethnicity with secondary and higher education en masse want only one, at most two children. For women of minority origin, there is a desire for 3 children in the family.

 5. Nearly half of the respondents are women without a child. Unfortunately, the trend for one and two children in a family is maintained and accounts for about 50% of couples with children. On average, a household consists of three people.

6. About 50% of women surveyed have had at least one voluntary abortion so far, with the first abortion occurring between the ages of 18 and 20.

7. In the sexual behavior of all women there is an unfavorable trend of insufficient use of modern methods of contraception and prevention of unwanted (unplanned) pregnancy, although nearly 100% of women know what a contraceptive and do not want an unplanned pregnancy.

8. Abortion still remains a means of regulating unwanted pregnancies.

9. GPs and OG specialists are the main source of information for patients in case of specific problems, as the promotion of women's health is higher in the group of GPs, compared to OG specialists.

10. It is necessary to develop programs for affordable counseling in connection with reproductive and sexual health, implemented by GPs and obstetricians.

11. It is necessary to conduct training courses on the types of contraception, especially among adolescents, for which the help of non-governmental organizations in close connection and collaboration with GPs can be used.

7. Contributions to the dissertation

Original contributions:

1. For the first time the existing problems of voluntary abortions in our region are studied and concrete initiatives for their reduction are proposed.

2. The current main demographic and social factors predisposing to voluntary abortions have been identified.

3. There is a worrying trend that despite the knowledge of modern oral contraceptives, only about 25% of women still use them.

4. It has been established that GPs play a major role in prescribing modern oral contraceptives.

5. Clear recommendations and practical proposals have been provided to GPs and AG specialists, MU, Municipal authorities and MH in order to improve coordination and efficiency of institutions.

Confirmatory contributions:

1. The need to reduce voluntary abortions and increase the natural contribution of the Bulgarian ethnic group is confirmed;

2. Reaffirms the importance of prevention and increasing sexual culture to reduce voluntary abortions

3. The role of GPs and obstetricians in the fight to reduce voluntary abortions and promote women's health is confirmed.

8. List of publications related to the dissertation

1. S. Fartunov, J. Ruseva, V. Madzhova. "Primary amenorrhea - main directions in diagnosis and treatment. Recommendations for general medical practice.
Mr. "General Medicine", 2018, Volume XX, Issue 2, pp.76-79

2. S. Fartunov, J. Ruseva and V. Madzhova. Analysis of some indicators and trends related to births and abortions at will in our country and in Europe and opportunities for their optimization. General Medicine, 2021, 23 (2): 20-24