

## FAMILY PLANNING IN WOMEN OF DIFFERENT AGE

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Objectives of family planning that are usually mentioned are unwanted pregnancy prevention, extensive population growth reduction, health improvement of women, children and population as a whole.

The study objective was to make an assessment about the state of knowledge and characteristics of using methods for family planning in women of different age in the Municipality of Nis. The study included 1584 women aged 15-49. The data were collected by conducting the poll.

Contraception was defined as the method of family planning mostly by interviewees older than 35 years of age, while this was the least case with interviewees younger than the age of 20. The interviewees younger than the age of 20 usually get information from several sources, the older, from newspapers and media. The interviewees up to 35 years of age think that condom is the most efficient method of contraception. The interviewees aged 36-49 think that the most efficient method of contraception is the intra-uterus spiral. Most of the interviewees (88.8%) estimate their knowledge about contraception as satisfactory. 81.9% of interviewees, having sexual relations protect themselves from unwanted pregnancy permanently or occasionally. Modern means of contraception are used by 72% of interviewees younger than the age of 20. Interviewees of all age categories mostly make the decision on their own about the contraception use. 35% of interviewees estimate their method of contraception as completely safe. The greatest number of interviewees with intentionally interrupted pregnancies came from the age group 36-49 (53.8%).

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**Key words:** *contraception, family planning, age*

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### Introduction

Family planning presents a part of entire demographical and population policy of each country and the planet as a whole. In almost every surrounding, objectives of family planning that are usually mentioned are unwanted pregnancy prevention, extensive population growth reduction, health improvement of women, children and population as a whole (1). In our country, the objective of family planning is "equalization of birth rate up to the level that will provide the common reproduction rate in the territory of the whole country" (2).

Insufficient knowledge about the family planning and, more important, methods of family

planning lead to increased number of unwanted pregnancies. According to WHO, approximately 120 million couples in the world continue not to use contraception and 300 million are not satisfied with the applied method (3).

There are more than 80 million unwanted pregnancies annually registered in the world and more than a half of them are ended with abortion. There are 78000 women who die each year due to the consequences of jeopardized abortion. This number may decrease with the family planning (4).

The issue of unwanted pregnancies, where majority is ended with abortion, is present in our country, too. Observing the number of women in the generative period, in 1989 (the last year of reliable registration), abortions had their highest rate in the central Serbia (95.1 per 1000 women in the generative age), then in Vojvodina (74.1), Montenegro (48.4) and Kosovo and Metohia (24.1) (5).

It is of particular concern that there is a great number of abortions amongst adolescents, which reaches the number between 1 and 1.4 million per year in the world (6).

## Objective of the study

Objective of the study was to make an assessment about the state of knowledge and characteristics of using methods of family planning in women of different age in the Municipality of Nis.

## Method of the study

General methodological procedure: We have applied observational cohort study as the fundamental method in the assessment of the problem.

Sample: The study included 1584 women aged 15-49, who lived in the Municipality of Nis: 65 younger than 20 years of age (4,1%), 1025 aged 20-35 (64,7%) and 494 older than 35 (31,2%). The interviewees were selected according to the accidental sampling method.

Study instruments: The data were collected by conducting the poll in the Municipality of Nis, from February to September 2002.

In order to test the established scientific hypotheses, we applied the statistical method of quantitative analysis. In the description of data we used standard statistical parameters (arithmetic mean -  $\bar{x}$ , standard deviation - SD, structure index - %). Pearson Chi-Squared and Fisher exact test were performed. Values of  $p < 0,05$  were considered significant. Statistical calculator was used for data processing, within the Epi Info program (Ver 6.04).

## Results and discussion

1. Knowledge about the idea of contraception

The greatest number of interviewees (74.3%) defines contraception as protection from unplanned pregnancy. Only 19.3% know that this is the method of family planning, and 6.4% define contraception as unplanned pregnancy.

WHO studies showed that women in many underdeveloped countries do not have enough knowledge about the contraception. Hence, women in Tanzania almost did not know anything about contraception and in Nigeria only 34% of women heard about contraception, while only 21% knew about the modern ways of contraception - the best known was condom, then oral pills and intra-uterus spiral (6).

A study undertaken in the central Serbia, Vojvodina and Kosovo (7) showed that 59% of women in Serbia, 61% in Vojvodina and 44% in Kosovo were able to define contraception as the method of unwanted pregnancy prevention.

Contraception was defined as the method of family planning mostly by interviewees older than the age of 35 (24.9%), while this was the least case with interviewees younger than the age of 20 (6.1%) (Table 1).

There is a statistically significant difference in the knowledge about contraception between different age groups - the greatest difference between interviewees aged 15-19 and 36-49 ( $\chi^2=12,4$ ;  $p < 0,005$ ).

Table 1. Structure of the interviewees according to the knowledge about the idea of contraception

" contraception "	Age						In total	
	15-19		20-35		36-49			
	N	%	N	%	N	%	N	%
Unplanned pregnancy	7	10,8	65	6,3	30	6,1	102	6,4
Protection from unplanned pregnancy	54	83,1	782	76,3	341	69,0	1177	74,3
Method of family planning	4	6,1	178	17,4	123	24,9	305	19,3
In total	65	100	1025	100	494	100	1584	100

Table 2. Structure of the interviewees according to the sources of information about contraception

Source of information	Age						In total	
	15-19		20-35		36-49			
	N	%	N	%	N	%	N	%
Parents	4	6,1	90	8,8	34	6,9	128	8,1
School	23	35,4	225	22,0	95	19,2	343	21,6
Doctors	1	1,5	74	7,2	89	18,0	164	10,3
Partner	3	4,6	56	5,5	28	5,7	87	5,5
Friends and relatives	4	6,1	96	9,4	34	6,9	134	8,5
Newspapers and media	14	21,5	272	26,5	167	33,8	453	28,6
Several sources	16	24,6	212	20,7	47	9,5	275	17,4
In total	65	100	1025	100	494	494	1584	100

## 2. The source of information about contraception

Most of the interviewees reported that their source of information about contraception were newspapers and media (28.6%), then school (21.6%). 17.4% had several sources of information - doctors were the source to 10.3%, parents to 8.1%, friends and relatives to 8.5% and partners to 5.5. Interviewees younger than the age of 20 usually get information from several sources (24.6%), older (up to 35) - from newspapers and media (26.5%) as well as the older than 35 years of age (33.8%).

Only 1.5% of the interviewees aged 15-19 received the information from the doctor as well as 7.2% of the interviewees aged 20-35 and 18% of those older than 35 years of age (Table 2).

There is a statistically significant difference between the interviewees aged 15-19 and 36-49 ( $\chi^2 = 31,3$ ;  $p < 0,0005$ ) and between the interviewees aged 20-35 and 36-49 ( $\chi^2 = 71,7$ ;  $p < 0,00001$ ) according to the source of information about contraception.

Women from underdeveloped countries, such as Malawi, receive the basic information about contraception from health professionals when they come to the hospitals for any reason (8).

A study of 5338 married women from poor parts of 6 biggest cities in Pakistan showed that, thanks to the education undertaken at the clinics for family planning, there was an increase of 5% in the knowledge about the methods of family planning, increase of 15% in the knowledge about sterilization and increase of 7% in the knowledge about intra-uterus spiral (9).

A study including women from Belgrade (10) showed that  $\frac{1}{4}$  of interviewees got the information about sexual life and contraception from parents, having in mind that such issues were rarely discussed at home in 25.2%, occasionally in 24.4% and often - only in 9.6%. Most of the interviewees who got the information from their parents were older and had higher education.

## 3. Opinion about the most efficient method of contraception

39.2% of interviewees think that condom presents the most efficient method of contraception, 23.2% think it is pills, 21% - spiral, 10.3% - interrupted coition, 5.8% - calendar of fertile days and 0.5% choose local contraceptive means. Interviewees up to 19 years old think that condom is the most efficient method of contraception (76.2%). This opinion is, in a lesser percentage, shared by the interviewees aged 20-35 (45.1%). Interviewees aged 36-49 think that the most efficient method of contraception is intra-uterus spiral (29.5%) (Table 3).

There is a statistically significant difference between women of different age in regard to the opinion about the most efficient method of contraception. Apparently, the majority of women aged 15-19 (92.3%) are in favor of modern methods of contraception compared with the

women aged 20-35, who are in favor of such methods in 80.5% ( $\chi^2 = 15,1$ ;  $p < 0,05$ ). 74.3% of women older than 35 think that modern methods of contraception are more efficient than traditional ones, so there is a statistically significant difference between women aged 15-19 and 35-49 ( $\chi^2 = 81,1$ ;  $p < 0,005$ ) and women aged 20-35 and 35-49 ( $\chi^2 = 4,6$ ;  $p < 0,05$ ).

## 4. Estimation of the personal knowledge about contraception

Most of the interviewees (88.8%) estimate their knowledge about contraception as satisfactory. Only 11.2% think that their knowledge is not satisfactory. There is no statistically significant difference of estimation of the personal knowledge about contraception between interviewees of different age.

## 5. The use of protection from unwanted pregnancy

81.9% of interviewees, having sexual relations, protect themselves from unwanted pregnancy permanently or occasionally. 18.1% of interviewees do not use protection. There is no statistically significant difference of using protection from unwanted pregnancy between the interviewees of different age.

According to the WHO data, the use of contraception increased from 9% (40 years ago) to 60%. Approximately, 120 million couples in the world do not use contraception, and 300 million people are not safe with the method used. A study comprising 4877 adolescents in USA aged 15-19 showed that 57% regularly used contraception, 16% - occasionally, while 27% did not use contraception (11). In Vietnam, 65% of married women aged 15-49 use contraception. There is a reported increase in contraception use and decrease in fertility, number of unwanted pregnancies and abortions in this country (12). A study undertaken in Serbia (7) showed that only 15.9% of women in Serbia used contraception, while another study in the Municipality of Nis (13) showed that approximately two thirds of interviewees (67.1%) used some form of protection from unwanted pregnancy.

## 6. Selection of contraception method

Among women who use contraceptive protection, 57.9% use traditional (unsafe) methods of contraception (32.8% - interrupted coition, 25.1% - calendar of fertile days), while 42.1% use modern ways (23.6% - condom, 9.7% - contraceptive pills, 8.2% - intra uterus spirals and 0.6% - other methods).

The modern means of contraception are used by 72% of interviewees younger than 20 years of age, while only 41% of women aged 20-35 and 36-49 use such methods. Women older than 20 years of age are far (above 58%) more likely to choose traditional (unsafe) methods of contraception (Table 4). There is a statistically significant difference in selection of method of contraception between interviewees aged 15-19 and 20-35 ( $\chi^2 = 9,3$ ;  $p < 0,005$ ) and between interviewees aged 15-19 and 36-49 ( $\chi^2 = 8,8$ ;  $p < 0,005$ ).

Table 3. Structure of the interviewees according to the opinion about the most efficient method of contraception

Method of contraception	Age						In total	
	15-19		20-35		36-49			
	N	%	N	%	N	%	N	%
Calendar of fertile days	1	1,6	50	5,1	36	7,9	87	5,8
Interrupted coition	2	3,2	97	10,0	54	11,8	153	10,3
Pills	5	7,9	210	21,6	131	28,7	346	23,2
Spiral	7	11,1	171	17,6	135	29,5	313	21,0
Condom	48	76,2	438	45,1	99	21,7	585	39,2
Local contraceptive means	0	0	6	0,6	2	0,4	8	0,5
In total	63	100	972	100	457	100	1492	100

Table 4. Structure of the interviewees according to the selection of method of contraception

Methods of contraception	Age						In total	
	15-19		20-35		36-49			
	N	%	N	%	N	%	N	%
Traditional methods	7	28,0	466	58,6	228	58,3	701	57,9
Modern methods	18	72,0	329	41,4	163	41,7	510	42,1
In total	25	100	795	100	391	100	1211	100

Among 1526 adolescents who go to 79 clinics for family planning in USA, 13% use the rhythm method or interrupted coition, 6% do not use contraception (14). In Finland, 91% of sex-ually active teenagers use oral contraception (15).

There was a strategy undertaken in South Africa for the promotion of condoms among young people, because only 14% of men and 17% of women used condoms (16).

Approximately 53% of British women aged 16-49 use contraception. Contraceptive pills (25%) and condoms (22%) are mostly used. Younger women usually use combination of these two methods (17). A study in the Republic of Serbia (7) showed that 67.1% of interviewees used traditional methods of contraception. Oral contraception is used by 28.4%. 1.8% of interviewees used intra uterus spiral. A study in the Municipality of Nis (13) showed that 22.2% used safe methods (these are all women with higher education) and unsafe – 74.8%. The most usual method is interrupted coitus (69.6%).

7. Accepting the advice about the use of contraception

Interviewees who use contraception mostly choose particular method on their own will, without being consulted (52.9%), only 24.5% ask for a doctor's advice, 15.4% talk to their husband (partner), and 7.2% of interviewees accept the advice from others (friends, relatives etc.). Interviewees of all age categories mostly make the decision about the contraception use on their own, having in mind that most of these women (56.5%) are between 20 and 35 years of age. Then, there are 46.5% of women aged 36-49 and only 40% of women younger than 20 years of

age. A husband is consulted by 32% of women younger than the age of 20, 16.9% of women aged 20-35 and 11.5% of women older than the age of 35 (Table 5).

There is a statistically significant difference in acceptance of advice about the use of contraception between interviewees aged 15-19 and 36-49 ( $\chi^2=15,2$ ;  $p < 0,05$ ) and between interviewees aged 20-35 and 36-49 ( $\chi^2=60,6$ ;  $p < 0,00001$ ).

In some countries, women are not independent in making the decision about the use of contraception. Thus, in Turkey, a husband makes the decision and this is why interrupted coition presents mostly used contraceptive method (18). In Indonesia and Bangladesh, between 1999 and 2003, health officials trained 1850 volunteers in 650 villages for the promotion of family planning. Thanks to their work there was an increase in use of contraception by 78% (19).

8. Safety estimation of contraception method

58.2% of interviewees estimate their method of contraception as partly safe, 6.8% as unsafe and 35% as completely safe. 42.2% of interviewees older than the age of 35 estimate their method of contraception as completely safe. 31.6% of women between 20 and 35 years of age have the same estimation about the method of contraception they use and 32% of women younger than the age of 20. Most of the women younger than 20 years of age (64%) estimate their method as partly safe, while 4% of women younger than the age of 20 estimate it as unsafe. 6.5% of women aged 20-35 and 7.4% of women older than 35 years of age estimate their method

of contraception as unsafe (Table 6). There is a statistically significant difference in estimation of safety contraception method between the interviewees aged 20-35 and 36-49 ( $\chi^2 = 14,7$ ;  $p < 0,001$ ).

#### 9. Intentionally interrupted pregnancies

29.3% of interviewees had intentionally interrupted pregnancies, while 70.7% of interviewees who had sexual relations did not. On average, every interviewee, who had her pregnancy intentionally interrupted, had 1.9 abortions (SD=1,41).

The biggest number of interviewees with intentionally interrupted pregnancies came from the age group 36-49 (53.8%). Women aged 20-35 had three times less abortions (17.5%) and only 3.6% of women under 20 years of age (Table 7).

There is a statistically significant difference in intentionally interrupted pregnancies between interviewees of different age groups: between

interviewees aged 15-19 and 20-35 (Fisher's test = 0,034;  $p < 0,05$ ) and between interviewees aged 20-35 and 36-49 ( $\chi^2 = 204,5$ ;  $p < 0,000001$ ).

In 2000 in Philippines, the abortion rate was 27 per 1000 women aged 15-44. The highest rate was in Manila, where it was 41 in 1994 and it increased to 52 in 2000. Furthermore, 12% of maternal death rate comes as a result of illegal abortions (20).

In England in 2004, the abortion rate was 17.8% per 1000 women aged 15-44 (in 1990 it was 15) and in USA in 2001 this rate was 16. The lowest abortion rate is reported in Germany – 8, and the highest – in Ukraine – 45.4 per 1000 women (21). A study in the Republic of Serbia (7) showed that 58.9% of women had intentional miscarriages. A study in the Municipality of Nis (13) showed that 60.5% of women had intentional miscarriages (to some extent more women from the village – 63.4%).

Table 5. Structure of the interviewees according to acceptance of the advice about the use of contraception

Acceptance of the advice	Age						In total	
	15-19		20-35		36-49			
	N	%	N	%	N	%	N	%
Doctor	4	16,0	143	18,0	150	38,4	297	24,5
Husband (partner)	8	32,0	134	16,9	45	11,5	187	15,4
On their own will	10	40,0	449	56,5	182	46,5	641	52,9
From others	3	12,0	69	8,7	14	3,6	86	7,1
In total	25	100	795	100	391	100	1211	100

Table 6. Structure of the interviewees according to the safety estimation of the method of contraception

Estimation of the safety method	Age						In total	
	15-19		20-35		36-49			
	N	%	N	%	N	%	N	%
Completely safe	8	32,0	251	31,6	165	42,2	424	35,0
Partly safe	16	64,0	492	61,9	197	50,4	705	58,0
Unsafe	1	4,0	52	6,5	29	7,4	82	6,8
In total	25	100	795	100	391	100	1211	100

Table 7. Structure of the interviewees according to the intentionally interrupted pregnancies

Intentionally interrupted pregnancies	Age						In total	
	15-19		20-35		36-49			
	N	%	N	%	N	%	N	%
Had not	27	96,4	789	82,5	228	46,2	1044	70,7
Had	1	3,6	167	17,5	265	53,8	433	29,3
In total	28	100	956	100	493	100	1477	100

## Conclusion

Women's knowledge about family planning and the use of methods of contraception is not satisfactory. Older interviewees were better informed than the interviewees under the age of 20.

Four fifths of interviewees protect themselves from unwanted pregnancy. A little more than a half of interviewees who protect themselves from unwanted pregnancy use traditional methods of contraception. More of the interviewees younger than 20 years of age chose modern methods. More than a half of interviewees make the decision about the use

of contraception on their own, without consulting a doctor or a husband (partner). Only one third of interviewees think that their method of contraception is completely safe. This way of contraceptive protection results with relatively big number of abortions (one third of interviewees), which are most common in women older than 35.

Therefore, it is necessary to promptly begin with promotion of protection of reproductive health and promotion of the use of modern methods of family planning in order to prevent the occurrence of unwanted pregnancies and reduce the number of abortions and preserve the reproductive health of women.

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## PLANIRANJE PORODICE KOD ŽENA RAZLIČITE STAROSNE DOBI

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Ciljevi planiranja porodice su: prevencija neželjene trudnoće, poboljšanje zdravstvenog stanja žena, dece i ukupne populacije.

Cilj istraživanja bio je sagledavanje znanja i karakteristika korišćenja metoda za planiranje porodice kod žena različite starosti na teritoriji opštine Niš. Istraživanjem je obuhvaćeno 1584 žena starosti 15-49 godina koje žive na teritoriji opštine Niš. Podaci su prikupljeni anketnim istraživanjem koje je sprovedeno u periodu februar-septembar 2002. godine.

Kao metod planiranja porodice, kontracepciju su u najvećem broju definisale ispitanice starije od 35 godina, a u najmanjem ispitanice mlađe od 20 godina. Kao izvor znanja o kontracepciji najveći broj ispitanica navodi novine i medije. Za najefikasniji metod kontracepcije, ispitanice do 19 godina starosti smatraju kondom. Ispitanice starosti 36-49 godina smatraju da je najefikasnije kontraceptivno sredstvo intrauterina spirala. Najveći broj ispitanica (88,8%) ocenjuje svoje znanje o kontracepciji kao dovoljno. Od neželjene trudnoće se stalno ili povremeno štiti 81,9% ispitanica. Moderne načine kontracepcije koristi 72% ispitanica mlađih od 20 godina. Ispitanice svih starosnih kategorija uglavnom svojevoljno odlučuju o korišćenju kontracepcije. Metod kontracepcije koji koriste, ispitanice u 35% ocenjuju kao potpuno siguran. Namerne prekide trudnoće je imalo najviše ispitanica starosti 36-49 godina (53,8%), tri puta manje (17,5%) abortusa imale su žene starosti 20-35 godina, a najmanje (3,6%) žene mlađe od 20 godina.

Znanje i korišćenje metoda za planiranje porodice kod žena različite starosti je nezadovoljavajuće. Zbog toga je neophodno što ranije, početi sa promocijom korišćenja savremenih metoda za planiranje porodice. *Acta medica Medianae 2006;45(3):13-19.*

**Ključne reči:** kontracepcija, planiranje porodice, starosna dob