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ON ABORTION DATA ISSUE IN SERBIA

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On Abortion Data Issue in Serbia

Abstract

Ever since the 1990's the number of registered abortions in Serbia has been decreasing from year to year. Are the abortion data of the Public Health Institute complete? In other words, has there been a qualitative shift in the sphere of reproductive behavior of Serbia's population in the last two decades? This paper deals with the raised question in three ways. First, in an indirect way, by analyzing whether a radical change in birth control since the 1990's has been possible, having in mind the complexity of the abortion issue in Serbia, as well as the broad social context regarding the last decade of the last century and beginning of this one. The second way deals more directly with the quality of the official data on abortions. Namely, the great decrease in the number of induced abortions, theoretically observed, may be a consequence of the increased level of births, or possibly acceleration in the birth control transition from the use of traditional and inefficient contraception to the usage of modern and efficient methods and means for conception control. For this reason, population fertility trends were analyzed, with a special review on the time period from the 1990's till present day and the results of the available surveyed researches on the structure of contraception usage in order to determine whether objective assumptions exist for the decrease in the number of induced abortions or not. The third way to reach an answer to the raised question was attempted by estimating the incidence of induced abortions. In that sense, relevant literature was consulted and the Westoff method chosen for calculating the total abortion rate in Serbia (excluding Kosovo and Metohia) in the year 2006.

After examining the set task from all three sides, there seemed to be no doubt that the official data on the number of abortions in Serbia and its districts are not realistic. The basic reason for incomplete official data on abortions seems to be the fact that in most cases induced abortions performed in private health clinics were not included. Moreover, nurses, namely doctors often experience the filling out of prescribed forms for registration of fetal death as unnecessary, imposed, an additional obligation, without sensing the meaning and not understanding the significance of data as such.

The abortion problem in Serbia is serious, complex and demands solving. This assumes the carrying out of many measures, including solving the matter of induced abortions registration. Determination of the realistic number of abortions in a community is very important, because in that way attention is drawn to this health and social problem and enables evaluation of actions to be taken for its alleviation. It remains that the state is to pay due attention to the problem of abortions in Serbia and to put private health clinics in which gynecologists perform abortions under control, as well as to promote the role and significance of statistics among health workers.

The main question analyzed in this paper may also be put to at least several countries in economic transition.

Key words: *induced abortions, subregistration of abortions, Serbia*

Le problème de la qualité des données sur les avortements en Serbie

Résumé

Durant les années 1990 le nombre d'avortements en Serbie baisse d'une année l'autre. Les données de l'Institut de Santé Publique sur les avortements sont-elles complètes? Ou bien s'agit-il d'un pas favorable dans le domaine du comportement reproductif de la population de la Serbie? La présente communication cherche la réponse à la question ainsi posée de trois manières. D'abord de manière indirecte par l'examen de la possibilité que le système du contrôle des naissances ait subi un changement radical depuis 1990 compte tenu de toute la complexité de la question des avortements dans le contexte plus large de la dernière décennie du 20ème et la première décennie du 21e siècle. Mais la qualité des données officielles sur les avortements est sujette à un examen autre, direct, adopté par cette communication. En effet une baisse considérable pourrait être due à l'augmentation du nombre des naissances, mais aussi à l'accélération de la transition du contrôle des naissances depuis la contraception par des moyens traditionnels d'efficacité incertaine aux méthodes et moyens préventifs modernes et efficaces. Ceci a mené à l'analyse de l'évolution de la fécondité de la population avec en particulier l'accent sur la période depuis 1990. Les résultats des enquêtes sur la structure de l'usage de la contraception ont eu pour but de savoir des possibilités de diminuer le nombre des interruptions intentionnées de la grossesse. La réponse à la question posée par le titre de la présente étude a été cherchée également par la troisième méthode, celle de l'estimation du nombre des avortements. A la suite de la consultation des œuvres relevantes c'est la méthode de Westoff qui fut adoptée pour établir le pourcentage de la totalité d'avortements en Serbie (sans le Kosovo).

A la suite de l'examen des résultats obtenus par les trois méthodes choisies, les données officielles sur les avortements en Serbie, toutes ses départements compris, ne semblent pas réelles. La raison principale expliquant les lacunes des données officielles sur les avortements serait un grand nombre d'interventions faites dans des cliniques privées. D'autre part le personnel médical, parfois le médecin compris, considère le formulaire réglementaire sur la mort fœtale comme une obligation inutile et imposée sans en saisir le sens de l'information en tant que telle.

Le problème de l'avortement est en Serbie un problème sérieux, complexe, et il exige une solution, il demande toute une suite de mesures dans plusieurs domaines y compris celui de l'enregistrement des interruptions intentionnées de la grossesse. L'établissement du total des avortements dans une année est essentiel, car le problème sanitaire et social y attire l'attention tout en justifiant les mesures qui l'allègeraient. C'est donc à l'Etat d'accorder au problème de l'avortement l'attention due en instaurant le contrôle obligatoire des cliniques privées où des gynécologues font des avortements et en faisant promouvoir le rôle et l'importance de la statistique dans les milieux médicaux.

La question examinée par cette communication est importante pour plusieurs pays en transition.

Mots clés: *interruption volontaire de grossesse (IVG), sous déclaration des avortements, Serbie*

Introduction

Domination of the traditional model of birth control is characteristic for the population of Serbia in the 20th century. Traditional inefficient contraception, largely incorporated in the system of values, has become a natural part of sexual relations in our country and represents a rational preventive choice from the individual standpoint. Consequentially, when pregnancy is unwanted or cannot be accepted, abortion is used as a resort. Thus the long history of a large number of abortions in Serbia. The high incidence of abortions in our country was first called to attention at the 17th Congress of Yugoslav Physicians as far back as 1935 (Novak, 1964). After the Second World War the Public Health Bureau, namely the Public Health Institute, first through surveys and then through regular registration of abortions, began collecting data on the number of induced abortions carried out in health institutions. These data point out to an almost continual increase of induced abortions and document the existence of endemic abortion in Serbia until the last decade of the 20th century (Rašević, Sedlecki, 2006). Although reporting every fetal death is a legal obligation, there has been doubt from the 1990s on the gathering of data on induced abortions because fewer and fewer abortions are registered every year.

Are the abortion data of the Public Health Institute complete? In other words, has there been a qualitative shift in the sphere of reproductive behavior of Serbia's population in the last two decades? This paper deals with the raised question in three ways. First, in an indirect way, by analyzing whether a radical change in birth control since the 1990's has been possible, having in mind the complexity of the abortion issue in Serbia, as well as the broad social context regarding the last decade of the last century and beginning of this one. Namely, this is what needs to be analyzed – whether the long-standing tendencies and characteristics of induced abortions, including the deterministic basis of the traditional model of birth control in our country, indicate spontaneous drastic changes in the reproductive behavior of the population? At the same time it is important to determine whether the existence of Serbia's population in the last 15 years or so contains elements which could deeply influence different behavior regarding control of the natural potential for having children or not?

The second way deals more directly with the quality of the official data on abortions. Namely, the great decrease in the number of induced abortions, theoretically observed, may be a consequence of the increased level of births, or possibly acceleration in birth control transition from the use of traditional and inefficient contraception to the usage of modern and efficient methods and means for conception control. For this reason, population fertility trends were analyzed, with a special review on the time period from the 1990's till present day and the results of the available surveyed researches on the structure of contraception usage in order to determine whether objective assumptions exist for the decrease in the number of induced abortions or not. The third way to reach an answer to the raised question was attempted by estimating the incidence of induced abortions. In that sense, relevant literature was consulted and the Westoff method (Westoff, 2007) chosen for calculating the total abortion rate in Serbia (excluding Kosovo and Metohia) in the year 2006.

The main question which is analyzed in this paper may also be put to at least several countries in economic transition.

The complexity of the abortion issue

Trends and characteristics

The problem of a large number of abortions in our country was first called to attention at the 17th Congress of Yugoslav Physicians (Belgrade, 1935). The Head Health Care Council estimated the total number of abortions (legal and illegal) at about 300,000 a year (Novak, 1964). Although there are no estimates of the number of abortions performed in that period of time in Serbia, it could be assumed that abortion was practiced on a large scale.

The data on the number of induced abortions performed in Serbia in 1960 (81,516), 1961 (95,196) and 1967 (131,502) are incomplete, but even so, they are indicative of a large number of abortions performed in medical institutions. It was the result of the expansion of the network of medical institutions qualified for abortions and the gradual liberalization of the right to perform abortions. This was corroborated by a survey conducted by the Federal Public Health Bureau in 1964, the results of which showed that more than 95 percent of the total number of legal abortions were performed on social grounds, and only 5 percent on medical, legal and ethic ones (Mojić, 1967).

Reliable data on induced abortions in Serbia exist from 1969, the year of complete liberalization of abortions, up to 1989 and they substantiate the existence of endemic abortions in that time period. Namely, from 1969 to 1985 the number of induced abortions continuously increased. It grew from 162,643 in 1969 to 214,806 in 1985 or by one third (index 132). It should be underlined that in this period the number of induced abortions increased considerably faster up to 1980. The data for the years 1986, 1987 and 1988 indicate a gradual decrease of the absolute number of abortions in Serbia (212,400; 205,343 and 193,558 respectively). At the level of 193,755 in 1989, the total number of induced abortions was minimally higher than in the previous calendar year.

Relatively expressed, induced abortions showed the same trends. A relative increase in the number of induced abortions had been noted up to 1985 or 1986, when the number of abortions measured to live births and the number of

women in their fertile period began to decrease. The number of abortions estimated on 100 live-born children in 1969 amounted to 107.0, in 1986 – 138.0, and in 1989 – 133.7. The abortion rates indicate that every fourteenth woman in her reproductive age had an abortion in 1969, every eleventh in 1985 and every twelfth in 1989. According to world review data on induced abortion (Henshaw, Morrow, 1990), the only countries with a higher abortion rate in the 1980s were the Soviet Union and Romania (111.9 and 90.9 per 1,000 women of reproductive age, respectively).

Observed on a regional level, the crucial influence on the abortion problem in Serbia come from the low-natality regions. In terms of the number of abortions per 1000 women aged 15-49, induced abortions were the most widespread in Central Serbia in 1989 (95.1 of every 1000 women in their fertile period), then in Vojvodina (74.1) but far less in Kosovo and Metohia (24.1). The low level of abortions in Kosovo and Metohia is primarily explained by the moderately high level of fertility in this region.

Distrust in the reliability of data regarding registration of induced abortions appeared in 1990. It was based on a completely different tendency of abortions in regions with the same reproductive model. Namely, Central Serbia registered a mild decrease, while Vojvodina a high increase (24.8%) of the number of abortions. In the following years the number of abortions decreased from year to year on the level of Serbia. Thus 154,449 abortions were registered in 1991, 135,907 in 1992, 113,720 in 1993, 94,382 in 1994, 92,785 in 1995, 80,003 in 1996, 60,723 in 1997, 55,360 in 1998, 43,771 in 1999 and 42,322 in the year 2000. There were also fewer abortions registered in the period 2001-2008. The official data are 34,255, 30,794, 29,856, 29,650, 26,645, 25,665, 24,273 and 24,159 respectively.

The cited data do not include the number of induced abortions carried out in Kosovo and Metohia, partly for 1991 (Rašević, 1995) and completely for the year 2001. Having in mind that this region was characterized by a low abortion rate up to 1989, contrary to the tendency on the number of induced abortions recorded in the last decade of the last century and first years of this century in Serbia, it cannot be even partially explained by sub-registration or noninclusion of data on performed abortions in the region of Kosovo and Metohia.

Relatively considered, the number of registered abortions in 2008 amounted to 35.0, expressed per 100 live births and 14.1 measured on 1000 women in their fertile period. Analysis of the abortion rate by districts, smaller territorial units, shows large regional differences. They cannot be explained by significantly different reproductive models in different regions in Serbia but by the quality of data. The following example is very illustrative in that sense. Two bordering districts, Northern Bačka and Southern Bačka, are found at the very top (second place), namely at the bottom of the scale according to the abortion rate in Serbia. Namely, the number of registered abortions in the Northern Bačka district amounted to 60.1 per every 100 live births, i.e. 21.9 per every 1000 women between 15 and 49 years old. The corresponding data for the Southern Bačka district are 10.0 and 4.4.

Deterministic basis

The long-lasting phenomenon of abortion points out to numerous and stable factors which cause it. The main ones being easy access to induced abortion coupled with substantial obstacles to efficient use of contraception, insufficient relevant knowledge and a resistance to modern contraceptives among women and men in need and health care providers, a firm social basis for traditional birth control, and limitations in the family planning programme.

Liberalization of abortion came early, according to the model from the Soviet Union, at a time when modern contraceptives were neither fully developed nor widely available. Socio-medical indications were accepted as grounds for abortion from 1952 onwards. In 1969 the law was further liberalized. Abortion was then permitted, without any 'waiting period', at the woman's request up to ten weeks gestation and, beyond ten weeks, with the approval of a medical commission. Introduction of combined oral contraception and intrauterine device is harder in conditions when liberated access to abortion already exists for a long time. Inertia is also an important behavioral factor in birth control, especially in conditions when legal regulation of induced abortions was not accompanied by the carrying out of a family planning program which would promote different values regarding reproductive behavior.

The promotion of modern contraception is rare, and is usually presented as part of much broader activities. Family planning related documents concentrate more on pregnancy care than on birth control. Contraception guidance is not part of the curriculum of medical faculties, and has not been properly dealt with during residency training of gynecologists. This is illustrated by the fact that during the last decade, contraceptive counseling services were attended by less than 5% of women in their fertile period, whereas over 90% of pregnant women attended pregnancy advisory services (Institute of Public Health of Serbia, 2008). Also, sex education of young people has not been established as a part of regular programmes in elementary and secondary schools.

Regulations with respect to introducing contraceptives into the market are complicated and financially discouraging for pharmaceutical companies. Because of this, combined oral contraceptives, the levonorgestrel-intrauterine system, condoms and spermicides are the only available contraceptives and none are free of charge. Unfortunately, copper intrauterine devices, implants, injectables, progestogen-only pills, the contraceptive patch and the vaginal ring are not on the market. In addition, neither female sterilization nor vasectomies are available in Serbia, due to the lack of both relevant legislation and customary law, making it impossible for gynecologists to perform these procedures (Sedlecki, Rašević, 2006).

Traditional contraception and induced abortion have a firm social basis in Serbia which tends to make the population, not question, status quo. Generations of women and men prevented conception by resorting to *coitus interruptus* and used abortion, as a backup method. This can be demonstrated by two examples. First, in 1989, the year

with the last accurate data on abortion, most of these procedures were performed on women 20 to 39 years old (90.0%) who were married (92.1%), had one or two children (75.8%), and nearly a quarter (22.4%) had previously had four or more induced abortions.

The second example concerns an investigation on the attitude of the relatives of sexually active girls in Belgrade with respect to sexuality and reproductive health issues. Between a quarter and a third of interviewed adolescent females were taught by their parents about pregnancy and childbearing (32.7%), sex (21.7%), contraception (27.3%), induced abortion (24.3%) and sexually transmitted infections (19.3%). At the same time, nearly half (46.3%) of the study group knew that their mothers had resorted to induced abortion as a birth control method (Sedlecki K, Marković A, Rajin G, 2001).

Health care professionals, especially gynecologists, contribute to maintaining the abortion culture and the slow transition from traditional to modern birth control. Serbian gynecologists still lag behind with modern family planning, both on a personal and professional level. Thus, almost two thirds of the participating gynecologists or their partners (61.8%) have had one or more induced abortion. One quarter of the respondents (24.5%) had direct or indirect experience with two abortions, one in ten (9.8%) with three abortions, and a few (7.5%) with four or more induced abortions. At the same time, three out of four gynecologists (75.5%) thought that intrauterine devices were unsafe for women, even those with benign, non infectious cervical lesions and half of the respondents (51.0%) were not in favor of prescribing combined oral contraception to adolescent girls (Sedlecki, Rašević, 2008).

Although both abortion and some modern methods were equally accessible in Serbia, contraception was often not the women's first choice. They considered abortion to be an equally valid option and, in fact, one which was psychologically less burdensome. This was confirmed in an interview of women resorting to abortion aimed at evaluating the relative psychological impact of contraception and abortion, by asking them to rank on a three point scale the five negative factors of both birth control choices (an unpleasant experience, negative effect on health, source of conflict with partner, complicated to use, moral burden). It appeared that the women thought abortion was less harmful to health than contraception and was less complicated to use, despite the unpleasantness of the experience (Rašević, 1993).

The irrational fear of negative health consequences of modern contraception use, among both nonusers and users of contraception, was also found in a recent investigation conducted in Serbia (Gfk, 2006). Among current users of contraception the three main reasons for never having taken a combined oral contraception were that it was considered to be unhealthy (19.0%), harmful (18.0%), and caused a lot of side effects (14.0%). Non-users of contraception had a similar, but stronger negative view of the combined oral contraception as they also felt that it was harmful (31.0%), unhealthy (21.0%), associated with many side effects (11.0%), and unnecessary (9.0%). The same investigation revealed that resistance to modern and efficient contraception is not only a characteristic of women. The latter claimed that their partners would oppose contraception because it is harmful for health, and only 11.0% thought that their partner’s preference would be combined oral contraception or intrauterine devices as contraceptive options.

Another obstacle to the use of contraception is that the women dislike the way gynecologists dealt with them. In one study 45.0% of the women reported a negative experience within a contraception consultation (Rašević, 1993). They insisted on the need for an open discussion of contraception in relation to their individual problems, fears, attitudes and values.

Actions in place

At the same time, only one action has been carried out in Serbia since the 1990s relevant for the sphere of birth control. It concerns the development of a network of youth reproductive health counseling services. According to the model developed by the Republic Family Planning Center of the Institute for Mother and Child Health Care of Serbia (Banićević and associates, 2002), health-education group work, individual counseling, as well as diagnosis and treatment of reproductive health disorders in both sexes, all form an integral part of the youth reproductive health counseling services which are part of the school children department in Primary Health Centers. Health-educational group work with adolescents is very important in the context of observed questions. The target of this activity is that young people adopt basic knowledge, form proper standpoints and develop relevant skills in order to maintain and uphold their reproductive health. In that sense, it is continually and organizationally carried out in short time intervals, but through various phases, namely levels. Apart from pragmatic themes regarding health life styles, risky behavior, puberty, reproduction physiology, methods of birth control, sexually transmitted infections, it is important to work on those related to bringing important life decisions, communication skills, relations between same-age friends, partner relations, all through active learning. Peer educators are also included in health-educational group work with the young people apart from gynecologists, pediatricians and psychologists. Adolescents are provided with adequate campaign material and brochures.

About 30 counseling services have been opened in Serbia so far according to this model. Before the opening of every counseling service, education of the health workers had been carried out, accompanied by the distribution of adequate handbook manuals on uniform methodology of work with adolescents, as well as advertising material, peer educator training, and the making high school teachers aware, along with the local government and media for the support of youth reproductive health promotion.

However, the beginnings of work imply the existence of certain difficulties and obstacles which have to be eliminated. Thus it is imposed that, along with the elimination of determined difficulties and obstacles, the work of existing and opening of new counseling services for youth reproductive health in other larger places should be enforced.

At the same time, it is important to activate the school system and media for a comprehensive promotion of reproductive health among adolescents. Enabling young people to make right, responsible and healthy choices regarding sexual life is very important. But, the problem of the domination of conservative birth control in Serbia is serious and demands numerous program actions. The principal solutions are: to propagate relevant knowledge, develop a network of services for contraception organized to respect the principles of efficiency in work, including specially educated doctors and various health workers in counseling for promotion of preventive behavior, complete availability of efficient contraception, getting men out of the defensive and development of their responsibility in this sphere, as well as legal regulations of voluntary sterilization. Hence, it is difficult to expect that only one specific action, the support of the health system for sustaining reproductive health of young people, could have brought radical changes in reproductive behavior and minimization of the abortion problem in Serbia.

Reproductive model

Has the registered trend of the constant decrease in the number of induced abortions in Serbia since the 1990s been brought about due to the change of the reproductive model? Namely, have the low fertility regions recorded an increase in births in this time period and/or an acceleration in the transition of birth control from the use of traditional and non-efficient contraception towards the use of modern and efficient methods and means of contraception? An analysis of population fertility and contraception usage structures do not prove the existence of positive changes in reproductive behavior. On the contrary.

Namely, low fertility regions in Serbia in the nineties of the 20th century, after two decades of stabilization of the level of births at the level of 20% under the requirement for population replacement, mark a clear birth decrease. The total fertility rate between 1991 and 1999 decreased from 1.73 in Central Serbia to 1.40 and in Vojvodina from 1.73 to 1.42 children per woman. In 2000 and 2001 the birth level in Central Serbia and Vojvodina marked a slight increase, and in the period 2001-2004 it stabilized. From 2005, both regions registered a decrease in birth levels again. According to the latest data, which refer to 2008, the total fertility rate in Serbia observed as an entirety (not including Kosovo and Metohia), amounts to 1.41 children per woman. In other words, the birth levels in low fertility regions in Serbia is even 30% below the population replacement requirement and is below the European average (Pison, 2007).

The population fertility decrease since the 1990s could be explained by the strengthening of the significance of structural obstacles in a complex deterministic basis of the insufficient birth phenomenon. This phenomenon is legal, because some of the important factors which are part of our civilization, whether they are positive achievements or outstanding weaknesses, are found in the basis of contemporary reproductive behavior. Thus, among other things, on one side we have emancipation and individualism, the nuclear family and changed women and children's positions in it, insisting on the quality of one's personal life and children's quality of life, liberal abortion law and availability of efficient contraception, and on the other side materialistic conscience with consumer mentality and personal life, and these two side are distinct more than ever before. The new system of values kept parenthood at a high level, but its essence changed. The lack of resources for a child has become a guideline for reproductive behavior, so parenthood is realized with one or two children.

At the same time, structural obstacles, such as unemployment, unresolved living accommodation, child care matters, unsatisfactory economic standards and other aspects were an important factor for the insufficient births in all socialist countries, including Serbia. Nevertheless, they were especially noticeable in the last decade of the last century and new elements of possible individual passivization were added to the stated barriers of giving birth to a larger number of children in transition of a socio-economic system, such as, for example, a feeling of insecurity, social maladaptation syndrome to the changed values and norms and social anomie.

The end of the 20th and beginning of the 21st century do not show any changes in the use of modern and efficient contraception. Since there is no institutionalized system of data collection on the use of contraception in Serbia, the basic sources are surveyed researches. Unfortunately the more representative types are rarely carried out. Two have been carried out in the time period which concerns this topic, in 2000 and 2006. The results of a representative research on the health state of Serbia's population (not including Kosovo and Metohia) conducted in 2000 indicate that 33.0% of married women, or those in a stable partner relation aged between 15 and 49 uses modern contraception, namely the condom, combined oral contraception or intrauterine device (UNICEF, 2000). The determined percentage is low but considerably higher than the relevant percentage determined by the same methodology in the year 2006 when 18.6% of women which are at risk for pregnancy registered that they were using modern contraception (Ministry of Health, 2007). The results also show that the largest number of women who are at risk for pregnancy relies on traditional contraception methods both at the beginning and the end of their reproductive period. Namely, modern contraception methods are used by every tenth woman (11.6%) aged between 20 and 24, in comparison with every eighth woman (13.1%) in the age group between 45 and 49 years old (Ministry of Health, 2007).

Measurement of the incidence of abortions

A review of relevant literature, including the latest report from the seminar organized by CICRED (2007), on the theme of measuring the incidence of abortions, morbidity and mortality caused by induced abortions, offers several methods of estimating the number of abortions in a population. They are: representative survey researches, hospital data

regarding hospitalization due to some acute complication from an induced abortion and various models based on the level of child births and the structure of contraception use in a population in a certain period. Apart from these methods, which are acceptable for estimating the number of abortions to a greater extent of various populations, there are also those which could be applied only in specific regions such as, for example, determining the difference between expected and current sex structure of live births in India and China, which are characterized by extensive abortions motivated by the favoring the birth of male children.

The problem with surveyed determination of the number of induced abortions is the necessity of carrying out representative researches and the sensitivity of this theme regarding the personal experience with abortions. The reliability of replies depends on many factors, such as the degree of frankness of the surveyed women, the knowledge, standpoint, skills and residence of the interviewer as well as the ability of the survey author to incorporate other questions of health and demographic type in the question on induced abortion in the reproductive history of the women as well as the legal, moral and social context regarding abortion in the local environment (Rašević, 2001). It is hard to believe that the data on hospital treatment due to abortion complications are a reliable source of information, based on which the number of abortions could be estimated, having in mind the already discussed problems regarding the compulsory legal registration of every fetal death.

Among the models based on determining the connection between births, contraception and abortions, we chose Westoff (Westoff, 2007). It is developed on the basis of determining a correlation connection between total abortion rate (TAR), total fertility rate (TFR) and the contraception usage structure, namely the modern contraception prevalence rate (MOD) and the traditional contraception prevalence rate (TRAD) in 67 observed populations. The model is given in a different equation for developed countries and for developing countries. Even though the society in Serbia, when birth control is considered, has characteristics of both developed populations (for example the fertility level, health protection level, as well as characteristics of less developed populations (domination of coitus interruptus as a means of contraception), the authors note has been respected that the low level of births and low level of traditional contraception usage are necessary conditions for applying the model equation regarding the estimation of abortion rates in developed countries. In that sense, the following Westoff model equation was used, which refers to developing countries.

$$\mathbf{TAR = 3.67 – 0.033(MOD) + 0.008(TRAD) – 0.334(TFR)}$$

The findings of the stated surveyed research, conducted by the Ministry of Health on the territory of Central Serbia and Vojvodina in 2006 on the contraception usage structure among women in their fertile age who are married or in a stable partner relationship, indicate that 18.6% women or their partners used modern contraception and 22.6% traditional contraception. According to vital statistics results the total fertility rate in the same year in Serbia (not including Kosovo and Metohia) amounted to 1.44. When applying the stated data in the model, the total abortion rate for the observed region in 2006 amounted to 2.76. In other words, according to this model the total abortion rate in Serbia is very high, twice higher than the total fertility rate and among the highest in Europe and the world (Sedgh at al, 2007).

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It seems that the basic reason for unrealistic official data on abortions is that, in most cases they do not include induced abortions carried out in private health institutions. From the 1990s a large number of private heath institutions have opened in which gynecologists perform abortions. Despite the legal obligation, the greatest number of these abortions is not recorded, mainly because the institutions do not fulfill the regulated conditions necessary for obtaining a license for carrying out abortions. Also, nurses i.e. physicians, find filling out of forms as unnecessary, imposed, an additional obligation, and do not feel the sense and do not understand the importance of the data themselves. The responsibility in such a method of thinking is formal. It is probably a consequence of inadequate statistical knowledge obtained during regular education.

A form, enacted in 1978, for the registration of every induced abortion carried out in a health institution contains 19 questions (Rašević, 1990). Most of them are of formal nature (for the requirements of administration) such as: date of admittance, health insurance holder, illness history number, and similar. The other questions, though, are intended for the woman who decided to have an abortion and concern her age, marital status, profession, number of live children and number of previous induced abortions in order to get a better insight into the abortion issue. The gynecologist fills out questions regarding the type of abortion, any complications that arose during abortion, including cause of death and gestational age.

The abortion problem in Serbia is complex, serious and requires solutions. This demands taking many measures in various directions including solving the matter of determining the number of abortions. Determination of the real number of abortions is essential since, in this way, it brings attention to this health and social problem and enables evaluation of actions for its alleviation. The best possible way to provide data on abortions, it seems, is to register each case in the health institutions that perform abortions. The form for registration of abortions should, apart from existing variables, include a few more, such as education of woman or use of contraception. Some of the existing ones should be rephrased in conformity with the requirements needed for comparative international analysis. It would also be desirable that the women undergoing abortion anonymously fill out questions of personal nature on the day of intervention appointment. It is up to the state to pay proper attention to the problem of abortion and to put private health institutions in which abortions are performed under control, and, in general, to promote the significance of statistics.

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