ISSN: 3065-5102
Research Article

Journal of Sexual Health and AIDS Research

Surgical Sterilization: Selected Demographic and Sexual Health-Related Aspects

Sergei V Jargin

Peoples' Friendship University of Russia (RUDN), Moscow, Russian Federation

***Corresponding author:** Jargin SV, RUDN University, 117198 Moscow, Russia.

Submitted: 14 November 2025 **Accepted:** 20 November 2025 **Published:** 26 November 2025

https://doi.org/10.63620/MKJSHAR.2025.1027

Citation: *Jargin S. V. (2025). Surgical Sterilization: Selected Demographic and Sexual Health-Related Aspects. Jour of Sexu Heal and AIDS Res, 2(6), 01-05.*

Abstract

Birth control has been obfuscated in some countries by presumed national interests. The military needs young people. In Russia, some professional and popular publications are biased, exaggerating or inventing adverse effects of contraception and abortions. The mass misinformation can be seen as a reproductive coercion sanctioned by the state. Sexual and reproductive coercion can lead to unfavorable pregnancy outcomes, sexually transmitted and hereditary diseases, psychiatric and other derangements. The tubal sterilization and vasectomy are reliable methods of permanent contraception. Being a less invasive procedure, vasectomy is generally preferable to the surgical procedures in women, apart from cesarean tubal sterilization. Cesarean section is an opportunity to provide permanent contraception without additional trauma. Bilateral salpingectomy at the time of cesarean delivery is safe; reportedly, it reduces the risk of ovarian cancer and may have a positive impact upon sexuality. According to surveys, a majority of women are pleased with their decision to be sterilized. A systematic performance of tubal sterilization could be an efficient birth control method, counteracting both the overpopulation and gender imbalance in some regions. However, mass vasectomy is preferable for ethical and technical reasons. Availability of good quality service is important.

Keywords: Permanent Contraception, Vasectomy, Birth Control, Sterilization, Bilateral Fallopian Tube Occlusion, Cesarean Section.

Introduction

Birth control has been obfuscated in some countries by presumed national interests. Demographic growth is used to strengthen defenses and economy [1]. In Russia, popular TV series depict unexpected pregnancies both in and out of wedlock as natural and unavoidable. The risks associated with abortions and contraception are exaggerated or invented by some authors, including medical professionals and media [2]. The mass misinformation can be seen as a reproductive coercion sanctioned by the state. Sexual and reproductive coercion can lead not only to abortions and unwanted pregnancies but also to unfavorable pregnancy outcomes, sexually transmitted and hereditary diseases, psychiatric and other derangements [3-6]. Control of reproduction may have consequences for mothering and relationships with children [7]. Growing up as an unwanted child is associated with abuse and neglect, which is a source of emotional suffering and potential damage [8-10]. Among others, religious argumentation is used for opposition to birth control. In fact, religion-related objections to contraception, abortions and sterilization are speculations as no mention of these methods is made in canonic sources. It seems to be inevitable that the global population will become reduced during the present century. How this happens may be to some extent within our control. It will not remain so indefinitely [11].

Inter-ethnic differences in the birth rate are mentioned rarely these days. Smoldering international conflicts contribute to the birth rate increase in certain regions. The military needs young people. In the past, overpopulation was counteracted by homicide, pestilence and famine. Today, scientifically based humane methods can be used to regulate the population size, taking into account ecological and economical realities. The tubal steril-

ization and vasectomy are reliable methods of permanent contraception. Male sterilization (vasectomy) is a minor outpatient procedure taking 5-20 min to perform under local anesthesia [12]. Traditions of male dominance sometimes work against men choosing vasectomy, which is in fact sexism and should be counteracted. Public information should be used to create awareness about vasectomy and availability of the service.

Sterilization methods in women such as tubal ligation, laparoscopic tubal disruption or hysteroscopic occlusion are generally perceived to be safe [13, 14]. Cesarean section (CS) is an opportunity to provide permanent contraception without additional trauma [15, 16]. Salpingectomy at the time of cesarean delivery is safe [17]. Some experts have found no significant differences in operative time; others reported that salpingectomy extended the time by 12-15 minutes relative to tubal occlusion [18]. It was associated neither with an increased rate of surgical complications nor with perioperative morbidity [18-20]. Moreover, bilateral salpingectomy can reduce ovarian cancer risk compared to other methods of tubal occlusion [17, 21, 22].

The surgical sterilization can be seen as a violation of the bodily integrity. The same, however, can be said about sexual and reproductive coercion committed for migration/accommodation purposes, to spread a certain genotype or to boost national birthrate. The fact that some victims married their rapists was erroneously seen as indication that women enjoy it; in fact, existing accounts demonstrate various degrees of trauma. In this connection, battered woman syndrome and learned helplessness must be timely recognized. High fertility is sometimes used for geopolitical advance and should be counteracted as such [11]. It can be argued that sterilization does not prevent sexually transmitted diseases; however, these diseases may be regarded as self-inflicted in consequence of negligent behavior, thus being in a sense a private matter. When children appear, it ceases to be a private matter, because the number of children in a family is of public concern today, as it is the size and density of the population. Bringing a new individual into the world leaves fewer resources for those who already need them [23].

Cesarean Tubal Sterilization

The aim of this mini-review was to analyze CS and cesarean tubal sterilization (CTS) from the clinical and demographical viewpoints. Tubal sterilization is a reliable method of birth control. The majority of women are pleased with their decision to be sterilized [24, 25]. Patients are more likely to regret declining a tubal ligation during unplanned CS than regret accepting one [25]. As mentioned above, salpingectomy has been associated with a decreased risk of ovarian cancer [17,21,22] and possibly has a positive impact upon sexuality [26]. CTS has an advantage of avoiding additional incisions and anesthesia [27]. A systematic performance of CTS could be an efficient birth control method, counteracting both the overpopulation and gender imbalance in some regions. For example, in China, the male-to-female ratio at birth is elevated. The ratio increased with the age and number of parities, being higher in non-primipara [28]. The gender imbalance at birth was reported from India and other countries; more references are in [11].

The worldwide increasing CS rates are believed to have resulted in the lowering of neonatal morbidity and mortality rates [29]. Significant negative association between elective CS (i.e., no labor) with neonatal mortality and morbidity has been reported. This association becomes stronger after adjustment for maternal risks factors [30]. According to the same researchers, pre-labor CS is protective against low Apgar score in term [31]. In a recent meta-analysis, planned CS was associated with significantly lower rates of neonatal complications such as the birth trauma, tube feeding, and hypotonia, when compared to planned vaginal delivery. Birth is a time of stress, manifested among others in tooth enamel by marked stria known as the neonatal line, which is on average thicker after vaginal delivery than after CS [32, 33]. This is an additional argument in favor of CS that is less stressful for the newborn.

Associations of CS with increased risk of hemorrhage, hysterectomy, complications of anesthesia, venous thromboembolism and post-partum infections have been reported [29,34,35], although the data have been partly inconsistent [36]. A correlation was found between an increase in maternal morbimortality and the rise in cesarean birth rates [31,34,36,37]. However, surgical procedures generally tend to improve with time. In more developed countries, CS is widely regarded as a safe intervention owing to mastered surgical techniques, improved anesthesia, prophylaxis of infection and thrombosis [38]. Some reports on elevated maternal mortality are probably biased as they confound CS with conditions related to maternal death unrelated to the mode of delivery [39, 40].

Accordingly, CS may be partly associated with morbidities and older age rather than a risk factor by itself [41]. In a large study (264,755 births), CS was associated with greater risk of maternal morbimortality; while determinants of CS included maternal age, previous CS, chronic hypertension, diabetes, urinary tract infection, pyelonephritis, gestational hypertension, vaginal bleeding, labor induction, pre-term gestational age, low birth weight, and malpresentation [37]. On the contrary, some studies have shown a positive correlation between CS rates and decreased maternal and neonatal mortality [29,42,43]. With regard to certain maternal complications such as the pelvic floor injury and urinary incontinence, elective CS is protective compared to vaginal delivery [44-46]. Planned CS led to a significant decrease in chorioamnionitis and urinary incontinence at 1 to 2 years [47]. Last but not least important, granted requests for elective CS were associated with less frequent postpartum depression [48].

There seems to be some bias in favor of vaginal delivery in the professional literature let alone popular editions. For example, discussing ostensible dangers of the “CS epidemic”, it was claimed without references that individuals born by CS are prone to obesity while girls have a doubled risk of unsuccessful spontaneous deliveries in their later life [49]. Furthermore, it was claimed that the “overuse of SC adversely affects the health of the mother and the child” with references [50-52]. However, there are no such or similar statements in the cited articles [51,52]. Analogously, it was stated that “morbidity and mortality [associated with CS is] more often than [that associated with] vaginal delivery” with references to the sources [53-55]. These articles are about the vaginal birth after SC [54, 55], which is a different topic. Indirect evidence in favor of a biased attitude to CS is the frequently mentioned association of CS with long-term offspring outcomes such as asthma, diabetes mellitus and gas-

trointestinal diseases, although the evidence is weak [38]. The proposed mechanisms through which CS could impact the immune system are obscure and largely hypothetical e.g. impaired bacterial colonization of the intestine [38]. If it is so indeed, the lacking exposure to certain microorganisms at CS could be compensated by probiotics [56].

Discussion

CTS should be generally considered for women not planning further pregnancies. Certainly, the latest delivery is not necessarily the last one, since circumstances may change, including socio-economic conditions or death of a child. The age, attitude of the male partner and other data may be taken into account formulating recommendations. It should be stressed, however, that the final word must be with the woman; the male partner's consent being required neither for sterilization nor for elective CS [57]. Advising patients, it is important to preserve objectivity, i.e. that all risks of vaginal delivery are explained as well as those of planned SC [30, 58]. In any case, CS and CTS on maternal request must be available also in the absence of contraindications for attempting vaginal delivery. This pertains to Russia, where CS is generally not performed on a maternal request [59]. Certain experts reported that they had performed CS on maternal request and that countrywide CS is used more frequently when the procedure is paid on by patients [60]. Others insist that SC must be done only in accordance with indications. The latter stance is prevailing today as the government stimulates fertility, which is unconstructive in view of the global overpopulation.

For ethical reasons, being a less invasive procedure, vasectomy is generally preferable to the female surgical sterilization (apart from CTS, which is performed without additional trauma). Even in a busy family planning clinic, vasectomy may suffer because of predominant orientation toward women. Female services, the sterilization in particular, tend to be more complex and require more personnel, time and other resources. Vasectomy can be learned and performed by general practitioners, gynecologists and surgeons, not necessarily specialist urologists. Paramedical personnel has been successfully trained to perform vasectomy in some countries with shortage of medical doctors. However, a physician must be available in case problems are encountered [13]. As for Russia, the surgical sterilization is not widespread in this country [61, 62]. The voluntary sterilization is allowed only to individuals older than 35 years or those having at least two children (Ordinance of the Health Ministry No. 303, dated December 28, 1993). Admittedly, some private clinics offer vasectomy to any adult.

Conclusion

A more frequent use of tubal sterilization would be especially favorable for overpopulated regions with gender imbalance. Apart from CTS, vasectomy is generally preferable to the surgical sterilization of women. Availability of good quality service is most important including mobile teams to offer sterilization to underserved rural communities [13]. Countries receiving immigrants decide whom they grant a residence permit and whom not. Permanent sterilization might be considered as a desired or obligatory condition. There is a variation in the CS rates between ~44.3% across Latin America and the Caribbean vs. 4.1% in central and West Africa [29]. In private institutions of Brazil, the cesarean rates are high, reaching ≥80% in the Southeastern region [31]. Around 84% of CS deliveries in Brazil are performed before the onset of labor, most likely for non-medical reasons [36]. This level should be strived for in overpopulated regions of Asia and Africa. Admittedly, CS is more costly than vaginal delivery, and implicates more risks in conditions of limited medical facilities. For that and other reasons, more international cooperation and guidance by most developed nations is needed instead of rivalries and warmongering.

Conflicts of Interest

The author declares no actual or potential conflicts of interest.

References

1. Russell, C., & Russell, W. M. (2000). Population crises and population cycles. Medicine, Conflict and Survival, 16, 383–410.
2. Mozgunova, S. F. (2017). Chto neobhodimo znat o konctracepcii [What is necessary to know about contraception]. In E. Fokina & L. Chutkova (Eds.), Vybor roditelei: detorozhdenie ili kontracepcia? O sovremennyh reproduktivnyh tehnologiah [Parents' choice: childbearing or contraception? On modern reproductive technologies] (pp. 163–192). Sibirskaia Blagozvonnitsa.
3. Sheeran, N., Jenkins, A., Humphreys, T., Ter Horst, S., & Higgins, M. (2025). Investigating the impact of reproductive coercion and intimate partner violence on psychological and sexual wellbeing. Journal of Interpersonal Violence, 40, 726–755.
4. Grace, K. T., Perrin, N. A., Clough, A., Miller, E., & Glass, N. E. (2022). Correlates of reproductive coercion among college women in abusive relationships: Baseline data from the college safety study. Journal of American College Health, 70, 1204–1211.
5. McGirr, S. A., Bomsta, H. D., Vandegrift, C., Gregory, K., Hamilton, B. A., & Sullivan, C. M. (2020). An examination of domestic violence advocates' responses to reproductive coercion. Journal of Interpersonal Violence, 35, 2082–2106.
6. Park, J., Nordstrom, S. K., Weber, K. M., & Irwin, T. (2016). Reproductive coercion: Uncloaking an imbalance of social power. American Journal of Obstetrics and Gynecology, 214, 74–78.
7. McKenzie, M., Humphreys, C., & Tarzia, L. (2024). Mothering in the aftermath of reproductive coercion and abuse. Violence Against Women, Advance online publication. https://doi.org/10.1177/10778012241263102
8. Nemeroff, C. B. (2016). Paradise lost: The neurobiological and clinical consequences of child abuse and neglect. Neuron, 89, 892–909.
9. Hartley, G., Sirois, F., Purrington, J., & Rabey, Y. (2024). Adverse childhood experiences and autism: A meta-analysis. Trauma, Violence, & Abuse, 25, 2297–2315.
10. Janssen, I., Krabbendam, L., Bak, M., Hanssen, M., Vollebergh, W., de Graaf, R., & van Os, J. (2004). Childhood abuse as a risk factor for psychotic experiences. Acta Psychiatrica Scandinavica, 109, 38–45.
11. Jargin, S., & Robertson, S. (2025). Medical, social, and environmental aspects of overpopulation. Journal of Environmental Studies, 11, 7.
12. Antell, K., Deshmukh, P., & Brown, E. J. (2017). Contraception update: Sterilization. FP Essentials, 462, 30–34.
13. World Health Organization. (1988). Technical and manage-

rial guidelines for vasectomy services. WHO.
14. Liu, J. H., Blumenthal, P. D., Castano, P. M., Chudnoff, S. C., Gawron, L. M., et al. (2025). FemBloc non-surgical permanent contraception for occlusion of the fallopian tubes. Journal of Gynecology and Reproductive Medicine, 9, 1–12.
15. Stuart, G. S., & Ramesh, S. S. (2018). Interval female sterilization. Obstetrics & Gynecology, 131, 117–124.
16. Verkuyl, D. A. A. (2016). Recent developments have made female permanent contraception an increasingly attractive option, and pregnant women in particular ought to be counseled about it. Contraception and Reproductive Medicine, 1, 23.
17. Jargin, S. V. (2018). Caesarean combined with tubal sterilization: Some medical and demographic aspects. Revista Brasileira de Saúde Materno Infantil, 18, 677–679.
18. Luke, S., Addae-Konadu, K., Davidson, B., Kuller, J., & Dotters-Katz, S. (2022). Benefits and risks of bilateral salpingectomy compared with standard tubal ligation during cesarean delivery for permanent postpartum contraception. Obstetrical & Gynecological Survey, 77, 167–173.
19. Levy, D., Casey, S., Zemtsov, G., & Whiteside, J. L. (2021). Salpingectomy versus tubal occlusion for permanent contraception during cesarean delivery: Outcomes and physician attitudes. Journal of Minimally Invasive Gynecology, 28, 860–864.
20. Roeckner, J. T., Sawangkum, P., Sanchez-Ramos, L., & Duncan, J. R. (2020). Salpingectomy at the time of cesarean delivery: A systematic review and meta-analysis. Obstetrics & Gynecology, 135, 550–557.
21. Yang, M., Du, Y., & Hu, Y. (2021). Complete salpingectomy versus tubal ligation during cesarean section: A systematic review and meta-analysis. Journal of Maternal–Fetal & Neonatal Medicine, 34, 3794–3802.
22. Walker, J. L., Powell, C. B., Chen, L. M., Carter, J., Bae Jump, V. L., Parker, L. P., et al. (2015). Society of Gynecologic Oncology recommendations for the prevention of ovarian cancer. Cancer, 121, 2108–2120.
23. Stanbury, C. (2024). Procreating in an overpopulated world: Role moralities and a climate crisis. Journal of Bioethical Inquiry, 21, 611–623.
24. Editorial. (1980). Contraception by female sterilisation. British Medical Journal, 280, 1154–1155.
25. Verkuyl, D. A. (2002). Sterilisation during unplanned cae¬sarean sections for women likely to have a completed fam¬ily—should they be offered? Experience in a country with limited health resources. BJOG: An International Journal of Obstetrics & Gynaecology, 109, 900–904.
26. Shah, M. B., & Hoffstetter, S. (2010). Contraception and sexuality. Minerva Ginecologica, 62, 331–347.
27. Mahadevappa, K., Prasanna, N., & Channabasappa, R. A. (2016). Trends of various techniques of tubectomy: A five year study in a tertiary institute. Journal of Clinical and Di-agnostic Research, 10, QC04–QC07.
28. Huang, Y., Tang, W., Mu, Y., Li, X., Liu, Z., Wang, Y., et al. (2016). The sex ratio at birth for 5,338,853 deliveries in China from 2012 to 2015: A facility-based study. PLoS ONE, 11, e0167575.
29. Ganeriwal, S. A., Ryan, G. A., Purandare, N. C., & Puran¬dare, C. N. (2021). Examining the role and relevance of the critical analysis and comparison of cesarean section rates in a changing world. Taiwanese Journal of Obstetrics & Gyne¬cology, 60, 20–23.
30. Machado Júnior, L. C., Sevrin, C. E., Oliveira, E., Araújo, J. C., Barbosa Carvalho, H., Washington Zamboni, J., et al. (2014). Association between mode of delivery and neonatal deaths and complications in term pregnancy: A cohort study in Brazil. Minerva Pediatrica, 66, 111–122.
31. Machado Júnior, L. C., Pinto, C. N., Gerencer, C. S., Pro, E. C. G., & de Carvalho, H. B. (2023). Association of ma¬ternal, fetal and labor variables with a low Apgar score in the fifth minute in term pregnancy: A case-control study. Archives of Gynecology and Obstetrics, 308, 1473–1483.
32. Canturk, N., Atsu, S. S., Aka, P. S., & Dagalp, R. (2014). Neonatal line on fetus and infant teeth: An indicator of live birth and mode of delivery. Early Human Development, 90, 393–397.
33. Ramirez Rozzi, F., Petrone, S., Plischuk, M., Desántolo, B., & Mancuso, R. G. (2025). Assessment of age at death in perinatal individuals from dental histology analysis: An ex-ploratory study. Journal of Oral Biology, 9, 1.
34. Burke, C., & Allen, R. (2020). Complications of cesarean birth: Clinical recommendations for prevention and man¬agement. MCN: The American Journal of Maternal/Child Nursing, 45, 92–99.
35. Moodley, J., Fawcus, S., & Pattinson, R. (2018). Improve¬ments in maternal mortality in South Africa. South African Medical Journal, 108(Suppl. 1), S4–S8.
36. Esteves-Pereira, A. P., Deneux-Tharaux, C., Nakamu¬ra-Pereira, M., Saucedo, M., Bouvier-Colle, M.-H., & do Carmo Leal, M. (2016). Caesarean delivery and postpartum maternal mortality: A population-based case-control study in Brazil. PLoS ONE, 11, e0153396.
37. Yang, J., Armson, B. A., Attenborough, R., Carson, G. D., da Silva, O., Heaman, M., et al. (2022). Survey of mode of delivery and maternal and perinatal outcomes in Canada. Journal of Obstetrics and Gynaecology Canada, 44, 960–971.
38. Stordeur, S., Jonckheer, P., Fairon, N., & De Laet, C. (2016). Elective caesarean section in low-risk women at term: Con¬sequences for mother and offspring (Health Technology As-sessment, KCE Report 275).
39. Kilsztajn, S., Carmo, M. S., Machado, L. C. Jr., Lopes, E. S., & Lima, L. Z. (2007). Caesarean sections and maternal mortality in São Paulo. European Journal of Obstetrics & Gynecology and Reproductive Biology, 132, 64–69.
40. Nomura, R. M., Alves, E. A., & Zugaib, M. (2004). Ma¬ternal complications associated with type of delivery in a university hospital. Revista de Saúde Pública, 38, 9–15.
41. Lydon-Rochelle, M., Holt, V. L., Easterling, T. R., & Mar¬tin, D. P. (2001). Cesarean delivery and postpartum mor¬tality among primiparas in Washington State, 1987–1996. Obstetrics & Gynecology, 97, 169–174.
42. McClure, E. M., Goldenberg, R. L., & Bann, C. M. (2007). Maternal mortality, stillbirth and measures of obstetric care in developing and developed countries. International Jour¬nal of Gynecology & Obstetrics, 96, 139–146.
43. Molina, G., Weiser, T. G., Lipsitz, S. R., Esquivel, M. M., Uribe-Leitz, T., Azad, T., et al. (2015). Relationship between cesarean delivery rate and maternal and neonatal mortality. JAMA, 314, 2263–2270.
44. Salim, R., & Shalev, E. (2010). Health implications re-

sult¬ing from the timing of elective cesarean delivery. Reproduc¬tive Biology and Endocrinology, 8, 68.
45. Di Stefano, M., Caserta, D., Marci, R., & Moscarini, M. (2000). Urinary incontinence in pregnancy and prevention of perineal complications of labour. Minerva Ginecologica, 52, 307–312.
46. Azam, S., Khanam, A., Tirlapur, S., & Khan, K. (2014). Planned caesarean section or trial of vaginal delivery? A meta-analysis. Current Opinion in Obstetrics & Gynecol¬-ogy, 26, 461–468.
47. Berghella, V., Adewale, V., Rana, T., Bonanni, G., Chau¬han, S. P., Bellussi, F., et al. (2024). What is the best mode of delivery in nulliparous, singleton, term, vertex pregnan¬cies? American Journal of Obstetrics & Gynecology MFM, 6, 101501.
48. Olieman, R. M., Siemonsma, F., Bartens, M. A., Gar¬thus-Niegel, S., Scheele, F., & Honig, A. (2017). The effect of an elective cesarean section on maternal request on peri¬partum anxiety and depression in women with childbirth fear: A systematic review. BMC Pregnancy and Childbirth, 17, 195.
49. Zharkin, N. A. (2024). Kesarevo secheniye v sovremennom akusherstve [Cesarean section in modern obstetrics]. Volgo¬grad Medical University.
50. Liang, J., Mu, Y., Li, X., Tang, W., Wang, Y., Liu, Z., et al. (2018). Relaxation of the one-child policy and trends in cae¬sarean section rates and birth outcomes in China between 2012 and 2016: Observational study of nearly seven million health facility births. BMJ, 360, k817.
51. Blustein, J., & Liu, J. (2015). Time to consider the risks of caesarean delivery for long-term child health. BMJ, 350, h2410.
52. Belizan, J. M., Althabe, F., & Cafferata, M. L. (2007). Health consequences of the increasing caesarean section rates. Epidemiology, 18, 485–486.
53. Dhai, A., Gardner, J., Guidozzi, Y., Howarth, G., & Vor¬ster, M. (2011). Vaginal deliveries—Is there a need for documented consent? South African Medical Journal, 101, 20–22.
54. Rageth, J. C., Juzi, C., & Grossenbacher, H. (1999). Deliv¬ery after previous cesarean: A risk evaluation. Obstetrics & Gynecology, 93, 332–337.
55. Hibbard, J. C., Ismail, M. A., Wang, Y., Te, C., Karrison, T., & Ismail, M. A. (2001). Failed vaginal birth after a cesare¬an section: How risky is it? Maternal morbidity. American Journal of Obstetrics & Gynecology, 184, 1365–1371.
56. Hashemi, A., Villa, C. R., & Comelli, E. M. (2016). Probi¬otics in early life: A preventative and treatment approach. Food & Function, 7, 1752–1768.
57. World Health Organization. (1994). Female sterilization: A guide to provision of services. Geneva: WHO. (Russian edi¬tion: Moscow: Meditsina.)
58. Morrison, J., & MacKenzie, I. Z. (2003). Cesarean section on demand. Seminars in Perinatology, 27, 20–33.
59. Likhachev, V. K. (2014). Operative obstetrics with a phan¬tom course. Moscow: MIA. (in Russian).
60. Cherhukha, E. A. (2002). Is cesarean section at a pregnant woman's will justified? Akusherstvo i Ginekologiya (Mosk¬va), (3), 3–7.
61. Health Ministry of Russian Federation. Ordinance No. 303, dated December 28, 1993.
62. Motorina, L. L. (1999). Dobrovolnaya khirurgicheskaya sterilizatsiya v poslerodovom periode kak metod profilak¬-tiki nezhelatelnoy beremennosti i sokhraneniya zdorovya zhenshchin [Voluntary surgical sterilization in the postpar¬-tum period as a prevention method of unwanted pregnancy and maintaining women's health] (Doctoral dissertation). Ivanovo Institute of Motherhood and Childhood V. N. Gorodkov.