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Surgery without Sufficient Indications: an Update from Russia

Keywords: Peptic ulcers; Gastrectomy; Portosystemic Shunting; Asthma; Lung resection; Bronchoscopy; Medical ethics

Abstract

This review is an update and continuation of preceding papers on invasive procedures applied in Russia with questionable clinical indications. Certain methods have been applied according to instructions by healthcare authorities and publication of leading specialists, facilitated by lacking professional autonomy. Examples are discussed here and in preceding papers: the overuse of Halsted and Patey mastectomy, preventive electrocoagulation of cervical ectropions without cytotological examination, gastrectomy for peptic ulcers, thoracic and abdominal surgery for bronchial asthma and diabetes mellitus, overuse of surgery in tuberculosis and other pulmonary conditions, overuse of bronchoscopy e.g. in conscripts with supposed pneumonia. Among mechanisms contributing to the persistence of suboptimal methods has been the autocratic or military managerial style discouraging criticism and polemics. Other attributes of this style are the paternalistic approach to patients and insufficient adherence to the principle of informed consent. Some invasive procedures with questionable indications were advocated by first generation military surgeons. Personnel training could have been one of the motives. Note that military and medical ethics are not the same. The comparatively short life expectancy in Russia is a strategic advantage as it necessitates less healthcare investments and pensions. Actually, Russia needs foreign help in the matter of healthcare. In view of the current international tensions, the cooperation has been partly interrupted. Obstacles to the import of medical products have adverse consequences. Under these circumstances, the purpose of this article was to remind that, performing a surgical or another invasive procedure, the risk-to-benefit ratio must be kept as low as possible. Insufficient coordination of medical studies and partial isolation from the international scientific community can result in parallelism in research, unnecessary experimentation, and application of invasive methods without sufficient indications.

Introduction

This review is an update and continuation of preceding papers on invasive procedures applied in Russia with questionable clinical indications [1,2]. According to the author's estimates after his practice abroad, an average size of malignant tumors in surgical specimens was larger in Moscow clinical centers than in hospitals of Western Europe and Southern Africa. Obviously, this reflects the efficiency of cancer diagnostics. Another difference: almost all mastectomy specimens abroad were without muscle. The worldwide tendency towards a more conservative breast cancer management remained unnoticed in the former Soviet Union (fSU) for decades. In the 1980s and decreasingly during the 1990s, Halsted procedure was the predominant method of breast cancer management; it was presented as the main or singular treatment modality of breast cancer in some textbooks and monographs edited in the 21st century [3-5]. The Halsted procedure is known to be associated with complications; millions of women of different ages underwent it during the Soviet and early post-Soviet times. Even more radical modalities were recommended and applied [6]. When the overtreatment started to

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be realized, the Chief surgeon of the Health Ministry, retired colonel Mikhail Kuzin recommended the modified radical mastectomy of Patey with the removal of pectoralis minor muscle [7]. This latter procedure is also associated with adverse effects; it has been broadly used in Russian Federation in the last decades. During the author's practice (1995-1998) at the pathology department of the Ostroumov hospital in Moscow, incorporating the Center for Breast Diseases, almost all mastectomy specimens independently of tumor size included the pectoralis minor muscle; but Halsted procedure with the removal of both pectoral muscles was applied as well. Newly developed mastectomy modalities with the muscle removal were patented [8,9]. Today, textbooks and guidelines are being adjusted to international prototypes. However, questionable recommendations have remained without due commentaries, so that a reversion to suboptimal practices is not excluded.

Diabetes mellitus

The "pancreatic blood shunting into the systemic blood flow" was introduced by Eduard Galperin and applied as a surgical treatment of moderate to severe insulin-dependent diabetes mellitus [10-20]. At the same time Galperin wrote: "Patients with diabetes tolerate surgery generally very poorly" [20]. The same operation was applied also in type 2 diabetes [11,12]. The physiological rationale appears unconvincing: "Creating a more optimal interaction of subcutaneously administered insulin and pancreas-secreted glucagon" [13]. Among 415 patients, early post-operative complications were observed in 28 patients including 2 cases of sepsis, ileus (1), pyelonephritis (5), pneumonia (5 cases); 2 patients died during the first week post-surgery. Ketonuria was observed in 18 cases agreeing with the known fact that the surgical stress can provoke ketosis in diabetics [10]. Comparable percentages of complications were reported in [13]. The patients were subdivided into groups with a good, satisfactory and no effect [14]. There was no group with complications or worsening, so that the evaluation was probably biased. Apart from several publications from Russia and Ukraine [10-20], no reports on this kind of diabetes treatment were found. Thrombosis of the splenorenal anastomosis was found by angiography in 27% of the patients during eight months postsurgery [15]. Severe acidosis was designated as typical occurrence [15,16]. The anti-diabetic effect of the shunting was reported to be

moderate both in humans and in the preceded experiment with dogs. In the experiment, the majority of dogs did not survive the diabetes induction by streptozotocin or pancreatic resection with a subsequent shunting surgery [18].

By 2010, the porto-systemic shunting in diabetes was still in use while a "high thrombus-related hazard" was pointed out [16]. The procedure was presented as an important achievement [19]. In the course of the operation, biopsies from pancreas (5x5 mm) and kidney were collected. Histological descriptions included glomerulitis with mesangial interposition, displacement of mesangial cells to the periphery of capillary loops, double-contoured glomerular basement membranes and mesangiolysis, presented as typical features and consecutive phases of diabetic glomerulosclerosis [21]. These features are in fact characteristic of membranoproliferative glomerulonephritis, which, if found in a diabetic patient, should be regarded as a superimposed condition requiring special therapy. Kidney biopsy is generally indicated for diabetics only if a renal condition other than diabetic nephropathy is suspected. The presentation of morphological features of glomerulonephritis as markers of diabetic nephropathy is misleading. Moreover, renal and pancreatic biopsies are associated with risks. The same can be said about renal and splenic venography, celiac arteriography and other procedures performed in the context of the surgical treatment of diabetes by the same experts [10,13].

Peptic ulcers

Certain surgical treatments of gastroduodenal ulcers in fSU have been different from the international practice [22]. According to the author's observations, gastric resections were rarely performed abroad for peptic ulcers; the volume was smaller, usually corresponding to antrectomy. For perforated ulcers, a local excision was usually performed, while a specimen resembling a wide wedding ring with staples was sent for the histological examination. Another approach is the laparoscopic repair [23]. In Russia, the primary gastrectomy (2/3-3/4 of the stomach), antrectomy with vagotomy, or a simple suture (depending on the patient's condition) has usually been performed [24-26]. In 2014, a simple closure (suturing) was carried out in 80% of ulcer perforations in Russia [27]. Admittedly, recent guidelines include ulcer excision along with a suturing and gastric resection among recommended procedures for perforated ulcer. The limited availability of modern medical therapy was called a "social indication" for gastrectomy in patients with peptic ulcers [25]. During the 1960-1970s, when gastrectomy was practically the only available surgical treatment of peptic ulcers, complications were noticed [22,28]. The hyper-radicalism in the gastric surgery originates from the wellknown surgeon Sergei Yudin (the spelling Iudin is currently used in the international bibliography [29]). He was an "enthusiastic advocate of gastric resection in cases of acute perforation" [30]. According to his doctrine, the pylorus and lesser curvature must be completely removed at an ulcer surgery [29]. During the Second World War, Yudin was one of the chief surgeons of the army. He was known for the advocacy of hyper-radicalism: "Really wide and complete excision of all devitalized tissues... excision rather than drainage and removal of bone fragments in joint wounds (including knee and even hip)" [30]; "Decisively sacrifice healthy muscles to access the fracture" [31]. According to the ex-Soviet health minister Boris Petrovsky, Yudin's hyper-radicalism in the military surgery, followed by colleagues, "led to hemorrhages, large defects of soft tissues and bones" [32]. Yudin's articles recommending gastric resections for ulcers were reprinted with approving comments [29]; his works continue to be cited [33-35]. Gastric resections have been advocated for perforated ulcers by many Russian surgeons [22,25,36-40]. The broad acceptance of this procedure has been attributed to the limited availability of modern drug therapy [22,25]. In some papers advocating gastric resection for ulcers, it was suggested that the "modern medical treatment does not completely solve the problem" [40] and "…does not lead to a complete recovery", so that the surgery must be implemented early enough to prevent complications [37]. This approach is generally at variance with the international practice [41].

Respiratory diseases

Another procedure with no analogy in the contemporary international practice is the thoracotomy with lung denervation in bronchial asthma designated as "the most recognized method" in the guidelines issued by the Ministry of Health [42-46]. The method was propagated by the former military surgeons Stepan Babichev and Evgeniy Meshalkin [42,46], who applied "autotransplantation" of lungs in asthmatics [47]. The denervation was applied because it supposedly "interrupts pathological impulses from the nervous system" [42]. Such argumentation was usual in the Soviet-time literature, when the so-called ideas of nervism, based on the concept of trophic function of the nervous system by Ivan Pavlov, were propagated. In particular, exaggerated histological descriptions of "dystrophy" or degeneration of neural structures such as ganglia of the autonomic nervous system were presented in support of the denervation [42]. The procedure was recommended by the Health Ministry while thoracotomy with the pulmonary root skeletonization was called "the most recognized surgical procedure to treat severe asthma" [43]. The skeletonization method was patented and recommended for both steroid-dependent and "infectious-allergic" asthma [43,48]. After the surgery, repeated bronchoscopies were recommended because of the bronchial drainage impairment [46]. Lung denervation, segment- and lobectomies were advocated also when the medical treatment of asthma "was temporarily effective." It was suggested that medical therapy prior to the surgery should be of limited duration [43]. A group of experts performed surgical denervations in 457 asthmatics. Among them, the following complications were noticed: inflammation in general (27 patients), pneumonia, empyema, pneumothorax (11), dysphagia, vocal fold palsy, Horner syndrome (12), paraplegia, hemiparesis (2); post-operative complications in general (58 cases); 6 patients died within 32 days post-surgery [45]. By 2002, the method was still in use [44]. The denervation surgery was sometimes combined with a resection of pulmonary segments or lobes deemed pathologically altered [43].

Lung resections were applied as a standalone method of asthma treatment, even in the cases when medical therapy was effective. Indications for surgery included local pulmonary and bronchial lesions: chronic pneumonia, bronchiectasis, pneumocirrhosis and bronchitis deformans (both latter terms have been used in fSU) [49]. It was reported by some experts that "no more than 10%" of their asthma patients had been treated by lung resections [50]. Operations were carried out when the lesions were extensive and bilateral, thus being

not completely removable, also during remissions, regarded to be indicated for a radical healing of asthma. This concept was advocated by the well-known surgeon Fedor Uglov [49,51], who declared a "removal of the infectious focus" to be the main purpose of asthma treatment. The surgical treatment of asthma was based on the Uglov's belief that "in 98% of cases, the basis of bronchial asthma is chronic pneumonia" [49]. Chronic pneumonia was declared to be "the basis of bronchial asthma". The main purpose of the asthma surgery was "elimination of the infectious focus". Localized chronic pneumonia with bronchial lesions was by itself regarded to be an indication for lung resection. Asthmatics were transferred from therapeutic departments for the surgical and bronchoscopic treatment. "After a course of therapeutic bronchoscopies" [49], Uglov and co-workers performed segment- and lobectomies, removing pulmonary tissues regarded abnormal by them [49,51]. The same treatment was applied to children with persistent cough and recurrent pneumonias. This doctrine was supported by certain pathologists, who described in surgical specimens inflammatory infiltrations, fibrosis, dystrophy and malformations without specifying their extent and hence functional significance [52-56]. The surgery was claimed to be favorable also in children in view of supposedly "almost inevitable inflammatory complications" of congenital malformations [54], which might be true for some cases. However, lengthy histological descriptions of supposed malformations partly at variance with the standard editions of pulmonary pathology might have contributed to surgeries beyond clinical indications.

Pulmonary tuberculosis

After the introduction of efficient drug therapy in the 1950-1960s, the surgical treatment of tuberculosis (Tb) has been partly abandoned in many parts of the world. The role of surgery remains controversial. The priority of Russia in this field was pointed out [57-59]. The Tb surgery has been applied not only in large centers but also in peripheral hospitals [59,60]. This development was associated with the names of Lev Bogush (1905-1994) and Mikhail Perelman (1924-2013) [59-63]. According to Bogush, "surgery must occupy the leading position in the integral Tb treatment instead of being a last resort for cases of ineffective drug therapy" [60]. He claimed that even severe respiratory insufficiency is not a contraindication for lung resection [62]. Perelman became director of the Institute for Phthisiopulmonology at the Sechenov Moscow Medical Academy in 1998. It was time when the World Health Organization (WHO) promoted the directly observed treatment, short course (DOTS) program in Russia. Perelman called this WHO program absurd, insisting that surgery must be applied in the Tb treatment more often [63].

From 1973 through 1987, 285,000 patients with pulmonary Tb were operated on in fSU, in 1987 - 26,000, whereas 85% of the operations were lung resections [64]. In the period 1986-1988, 17,000-18,000 operations for pulmonary Tb were performed yearly in the Russian Soviet Republic (part of fSU) only in specialized phthisiological hospitals [57]. The incidence of Tb in 1986 and 1988 was, respectively, 43.8 and 40.8 per 100,000 [65]. Taking into account the population of Russia, \geq 29 surgeries per 100 newly diagnosed Tb cases (\geq 29%) were performed in those years. In 2003, 10,479 surgeries (9% of new cases) were carried out, considered "extremely

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insufficient" [66]. In the international literature, corresponding figures are generally $\leq 5\%$ [67-69]. At the same time, the incidence of Tb in Russia increased from 34.0 in 1991 up to 90.4 per 100,000 in 2000 [65]. By analogy with other diseases [70], an artefact can be behind the "huge variation" of Russian statistics [71]. The incidence of Tb could be understated during the Soviet time.

In 2006, 12,286 surgeries were performed in Russia for pulmonary Tb including 9300 (75.7%) lobectomies and other resections as well as 399 (3.2%) pneumonectomies [58]. According to another report, the forms of Tb most frequently treated by resections and pneumonectomies were cavitary Tb (52.2%) and tuberculoma (43.9%) [72]. Above-named operations were performed and recommended also for patients with inactive post-tuberculous fibrosis including cases with sparse symptoms [73]. At the same time, surgeries were performed in disseminated Tb [74]. In some provinces (Kemerovo, Chelyabinsk, Mordovia), 25-40% of patients with destructive Tb were operated on [75]. At the time of initial Tb diagnosis, surgery was considered to be indicated in 15-20% of patients [57]. According to another paper by the same authors, indications for surgery were found in 20-30% of patients at the time of initial diagnosis and/or among cases of active Tb [76]. In Yekaterinburg and surrounding province (2006-2008), indications for surgery were found in 1784 from 4402 (40.5%) patients with pulmonary Tb, whereas 1079 (24.5%) were operated on. Among reasons of the relatively "low" surgery rate were the patients' non-compliance and unavailability [77]. According to the last (2020) edition of the Phthisiology textbook, 6,1-6,7% of Tb patients are currently operated on in Russia; however, "in some regions that have actively cooperated with the M.I. Perelman Institute for Phthisiopulmonology... the percentage has been several times higher" [78]. As mentioned above, in the international literature corresponding figures are generally ≤5% [67-69]. Tb surgery may become more topical due to the multidrug resistance. According to a current estimate from Russia, the need for surgery has increased up to 15% over the last twenty years [79]. Despite the lack of clinical trial data on efficacy of adjunctive surgical therapy, some countries of fSU have continued to perform many surgical interventions, mainly resections [80,81].

Tuberculoma (>2 cm, also in children) has been generally regarded in Russia as an indication for surgery [78,82]. The same experts designated fibrocavitary Tb as an absolute indication [78]. Tuberculomas >1 cm were routinely operated on [83-85], which is generally at variance with the international practice. There is an opinion that potential instability of tuberculoma does not justify thoracic surgery and that asymptomatic patients with an unchanging solid focus do not require treatment. Tuberculoma as an indication for pulmonary resection was seen differently from other forms of Tb where surgical risks could be justified by a poorer prognosis. Nevertheless, tuberculoma was the most frequent indication for lung surgery in Tb patients at the Sechenov Medical Academy (44.2%) [58], while at some other institutions this percentage has been 50-80% [86]. In particular, tuberculoma was the most frequent indication for surgery in adolescent Tb patients [82]. Children were routinely operated on for tuberculomas, non-specific inflammatory, fibrotic lesions and bronchiectasis [87,88]. The surgical treatment of tuberculoma was officially recommended also for cases with extensive lesions in remaining pulmonary tissue [89]. Bilateral resections were

performed for various forms of Tb including solitary tuberculomas on both sides [90-92]. A study from the Sechenov Academy reported 771 lung surgeries, including 168 pneumonectomies, 181 lobectomies and bilobectomies, 180 smaller resections, performed in 700 Tb patients with drug resistance, up to 4 operations pro patient. Postoperative complications were observed in 100 cases (12.9%), fatal outcomes - in 12 (1.5%) [93]. Another example from the same institution: among 60 operated Tb patients (16 pneumonectomies, 24 lobectomies and smaller resections) the complication rate was 37%, mortality - 5%; 18.3% of the patients were discharged from the hospital with persisting complications [94].

Resections were performed by some experts for tuberculoma, infiltrative and cavitary Tb without preceding medical treatment or within one month after the diagnosis i.e. when medical therapy could have been efficient [84,95]. One of the arguments in favor of early surgery was the non-compliance increasing with time [84], apparently, as the patients collected more knowledge about their disease and advice from other patients. In diabetes mellitus, a surgery was recommended for tuberculoma after 2-5 months of medical therapy. The authors operated also asymptomatic patients and recorded an overall 15.73% rate of complications [96]. Apparently, complication rates have been underestimated due to limited followups. Lung surgeries for Tb were performed and recommended also for aged patients with comorbidities [97-100]. Sokolov found indications for surgery in 210 from 289 (72.6%) Tb patients 50-73 years old and operated 180 (62.2%) of them, 144 operations being lung resections. Among the latter 144 patients, 93 (66.4%) had cavitary disease and 43 (30.8%) - tuberculoma. A post-surgery reactivation of Tb was recorded in 8.6%, fistula - 27.2 %, atelectasis - 20%, pneumonia - 5.7%, pleural empyema - 3.6%, other complications - 12.9% of cases; 8 (5.7%) patients died after operations [97]. In the monograph based on 233 lung resections in Tb patients older than 50 years (mortality 5.4%), Sokolov reasonably concluded that "it is important that a surgery would not accelerate an unfavorable outcome" [98]. According to another report, tuberculoma was the most common indication, and lobectomy - the most frequent modality in elderly Tb patients, whereas potential contagiosity was among arguments in favor of the surgical treatment [100]. Statements of this kind can be found also in recent papers e.g.: "Surgery in patients with tuberculomas is recommended to reduce their infectiousness" [79]. Note that tuberculoma is infrequently contagious. In the author's opinion, (potential) contagiosity does not justify a thoracic surgery. In any case, patients must be comprehensively informed about possible risks and benefits to be able to make an independent decision according to the principle of informed consent.

Bilateral resections were performed in various forms of Tb including tuberculomas on both sides or tuberculoma plus cancer [90-92,101,102]. Indications for a second lung surgery were found in 20-37% of previously operated cases [103]. Out of 1311 Tb patients operated at the Sechenov Medical Academy during 1989-2001, 241 developed relapses. After excluding 8 patients with contraindications, a second surgery was performed in 84 out of 241 (35%) previously operated patients [103]. Postoperative relapses of Tb were regarded as indications for repeated surgeries up to a "concluding pneumonectomy" and resections of the single lung [91,101]. For example, repeated resections on both sides with a concluding

pneumonectomy along with 52 bronchoscopies were reported in one Tb patient [104]. As mentioned above, the lung resection or pneumonectomy was deemed applicable even in cases with severe respiratory insufficiency [60,62,101,105]. Bilateral resections or pneumonectomy plus contralateral "economic" (sparing) resection were deemed indicated for patients with a Tb lesion on one side and non-specific inflammatory or fibrotic lesion on the other side [106].

The role of surgery in Tb remains controversial. Clinical recommendations are beyond the scope of this review. The message is that patients should not undergo surgeries, bronchoscopies and other invasive procedures to comply with instructions and doctrines without sufficient evidence-based indications, possibly fed by motives such as personnel training, of military surgeons, endoscopists etc. The approach should be individual based on a consensus expressed in the international literature. The principle of informed consent must be observed - patients received all information on potential benefits and risks to be able to make an independent decision with proper understanding. The informed consent began only recently to be mentioned in papers from fSU reporting research using invasive methods, for example in a bronchoscopic study of childhood asthma, where the consent of parents was regarded to be sufficient [107]. Of note, the principle of informed consent or assent is applicable also to adolescents and children.

The outpatient treatment of Tb, usual in other countries, was supposed to be hardly applicable in Russia [108]. According to the governmental Ordinance No. 378 of 16 June 2006, patients with contagious Tb are not allowed to live in one apartment with other people. As per the Federal Law No. 77 "Prevention of the spread of Tb in Russia" of 18 June 2001 (amended 2013), "patients with contagious forms of Tb, repeatedly violating the sanitary and antiepidemic regime, as well as those deliberately evading examinations for Tb or [emphasis added] the treatment of Tb, are hospitalized into phthisiological institutions for obligatory examination and treatment by court decisions." It is stipulated by the same Law that the principle of informed consent is not applicable in this connection and that Tb patients are obliged to undergo prescribed examination and treatment including drug therapy. The nonobservance of this law entails criminal liability. A survey conducted across Russian phthisiological institutions found >6000 legal proceedings in the period 2004-2008 whereas 3163 Tb patients were hospitalized after court decisions [109]. There are administrative and legal mechanisms to hospitalize Tb patients with the help of police and criminal prosecution in case of non-compliance. Among others, the latter pertains to non-contagious Tb patients released from jail [110]. Compulsory treatments are generally at variance with the international practice and regulations. According to the WMA International Code of Medical Ethics, "A physician shall respect a competent patient's right to accept or refuse treatment." It was noted in regard to Tb that neither the statutory exceptions to the principle of consent nor the conditions of "required care" allow legally binding measures against patients refusing a treatment or isolation [111]. The informed consent for invasive procedures and chemotherapy is of particular importance in conditions where an overtreatment is not excluded.

Alcoholism

According to official instructions, indications for surgery were

more frequent in alcoholics than in other Tb patients [112]. In case of alcoholism, the surgical treatment was recommended to be implemented earlier, after a shorter period of medical therapy [85]. Perelman et al. stressed the importance of early surgical treatment of Tb patients with alcohol dependence, and operated them also in the absence of demonstrable micobacteria (e.g. 41 cavernous, 49 tuberculoma cases; *M. tuberculosis* detected in 55 out of 90 patients). At the same time, they noticed that alcoholics have more postsurgery complications than other patients [113]. Bronchoscopy was applied in cases with bronchitis [113], which is quite frequent among alcoholics in Russia. Among others, vocal cord injuries were observed after repeated bronchoscopies sometimes performed in conditions of suboptimal procedural quality assurance. It was noticed that vigorous apomorphine-induced vomiting as emetic therapy of alcohol dependence provoked hemoptysis in patients with Tb [114].

Among others, the following treatments were applied to alcoholics: prolonged intravenous infusions, sorbent hemoperfusion, pyrotherapy with sulfozine (oil solution of sulphur for intramuscular injections), endoscopic and surgical biopsies of internal organs, sometimes without clear indications also for research [115-120]. Infusions for the purpose of detoxification were generally recommended for patients with alcoholism including moderately severe withdrawal syndrome: 7-10 infusions/day, sometimes combined with intramuscular or subcutaneous injections. [119-123]. The detoxification therapy was deemed "indicated to almost all alcoholic patients, especially to those with prolonged withdrawal syndrome" [114]. Similar instructions were found in recent monographs [124,125]. Some methods were patented, including infusion therapy and transcerebral electrophoresis of magnesiumcontaining solutions for the treatment of alcohol withdrawal syndrome [122,126-128]. According to a Cochrane review, there is no sufficient evidence to decide whether or not magnesium is useful for the therapy and prevention of alcohol withdrawal syndrome [129]. Besides, intramuscular injections were recommended: Mg sulfate, glucose, sodium thiosulfate solutions, subcutaneous infusions of saline, extracorporeal ultraviolet irradiation of blood, sorbent hemo- and lymphoperfusion, "cerebrospinal fluid perfusion" or "liquorosorption" [112,115,123,130,131].

The recommended duration of detoxifying treatment including intravenous infusions was 5-10 days, even 10-12 days according to some recommendations [114,115]. This is at variance with the international literature. Alcohol and its metabolites are eliminated spontaneously while rehydration can be usually achieved per os. It should be stressed that lengthy drip infusions are associated with discomfort. Some alcoholic patients considered such treatments as punishments; this motivation was apparently present in certain medics [132]. In conditions of suboptimal procedural quality assurance, repeated infusions, endovascular and endoscopic manipulations can lead to the transmission of viral hepatitis, which was known to occur in treated alcoholic patients. The combination of viral and alcoholic liver injury is unfavorable. The attitude to alcoholic patients is sometimes less responsible with potentially lower procedural quality assurance. Therefore, indications to intravenous and other invasive manipulations should be thoroughly evaluated.

Reportedly, in 1994 about 60% patients of one of the "phthisio-

narcological" institutions for compulsory treatment absconded while a half of them were brought back by the police (militia) [133]. The duration of compulsory treatment in such institutions was around one year or longer [114]. The compulsory treatment was endorsed by regulations [114,134]. In 1974, chronic alcoholism was officially declared to be a ground for compulsory treatment; the regulation was made stricter in 1985, making compulsory hospitalization and treatment of chronic alcoholics independent of anti-social behavior. This practice has been designated in 1990 as contradictory to human rights [134]. The system of compulsory treatment of alcoholics was largely dismantled during the 1990s; but some experts recommended its restoration and further development [109]; According to a survey, 62.6% of specialists engaged in addiction medicine (named narcology in Russia) supported compulsory treatment of alcoholism [135].

Discussion

Factors contributing to the persistence of suboptimal practices include a partial isolation from the international scientific community, insufficient use of the foreign literature and unavailability of many internationally used handbooks even in central medical libraries [136]. Thanks to the Internet, the Russian-language literature is increasingly aware of foreign publications, textbooks and guidelines being adjusted to international prototypes. However, some published recommendations have remained without due commentaries, so that a reversion to suboptimal practices is not excluded. The problem has also another aspect. During last decades, numerous former military and other functionaries, their relatives and protégés, have been introduced into educational, scientific and medical institutions. It has further contributed to the persistence of suboptimal and outdated methods in medicine due to lacking professional autonomy [137], autocratic or military managerial style discouraging criticism and impartial polemics. Attributes of this style include the paternalistic approach to patients, insufficient adherence to the principle of informed consent, bossy management, harassment of colleagues if they do not follow instructions in their professional work or not collaborate e.g. in dubious research [138,139]. In conditions of paternalism, misinformation of patients and compulsory treatments were seen as permitted [140]. Suboptimal practices have been used as per instructions by healthcare authorities and leading experts' publications; numerous examples have been discussed previously [1,2,88,132], to name but a few (apart from those discussed above): electrocoagulation of cervical ectropions without cyto- or histological check for precancerous changes, parabulbar injections of placebos, overuse of bronchoscopy e.g. in conscripts with supposed pneumonia: 1478 procedures in 977 patients [141-143]. Some invasive methods with questionable indications were introduced or advocated by first generation military surgeons [1]. The personnel training could have been one of the motives to overuse invasive procedures. Note that military and medical ethics are not the same. The comparatively short life expectancy in Russia is a strategic advantage as it necessitates less healthcare investments and pensions. Some experts understood obsoleteness of certain instructions, so that personal judgment was involved as well. Actually, Russia needs foreign help in the matters of healthcare. In view of the current international tensions, the cooperation in many areas has been interrupted. Obstacles to the import of medical products, coupled with increasing influence by the military, might have adverse consequences. Domestic products

are promoted despite often lower quality and possible counterfeiting [144]. Military functionaries, their relatives and protégées, will become more dominant thanks to the conflict in the Ukraine. Those participating in the conflict, factually or on paper, will obtain the veteran status and hence privileges over fellow-citizens. War veterans enjoy advantages in the healthcare and everyday life; there are, however, misgivings that the status has been awarded gratuitously to some individuals from the privileged milieu. At the same time, many young relatives of superior officers evaded the mandatory military service under various pretexts. Being not accustomed to hard and meticulous work, some of the functionaries' relatives have been involved in professional misconduct of different kind [138]. Moreover, sons of superior officers have enjoyed far-reaching impunity in the Soviet and post-Soviet society, becoming inveigled in immoral and illegal activities. High social positions held by perpetrators or their relatives prevented reporting. Admittedly, some problems discussed above are overshadowed these days by migration-related societal transformations [145].

Conclusion

Current ethical provisions in Russia are based on the National Standard for Good Clinical Practice [146]. This document is analogous to the Consolidated Guidance for Good Clinical Practice issued by the International Conference on Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use [146,147]. The Standard has been approved by the Federal Agency on Technical Regulation and Metrology (Rosstandart) on 27 September 2005. This is a positive development. However, it is known that the ethical and legal basis of medical practice and research has not been sufficiently known and observed in Russia. The term "deontology" is often used for medical ethics in this country. Textbooks and monographs on deontology explained the matter somewhat vaguely, with truisms and generalities but not much practical guidance. As mentioned above, the professional autonomy and informed consent have not been given sufficient attention. Admittedly, in the field of medical ethics, like in other areas, the Russian literature is being adjusted to foreign prototypes. The relatively new ethical problem is the conflict of interest, vendor relationships, manipulation of patients into paid services etc.; but this is beyond the scope of this review. Today, the growing economy enables acquisition of modern equipment; and medical research is on the increase. Under these circumstances, the purpose of this article was to remind that, performing surgical or other invasive procedures; the risk-to-benefit ratio must be kept as low as possible. Insufficient coordination of medical studies and partial isolation from the international community can result in parallelism in research, unnecessary experimentation, and application of invasive procedures without sufficient indications.

References

- Jargin SV (2016) Surgical procedures with questionable indications: A letter from Russia. J Surgery 4: 6.
- Jargin SV (2015) Some Aspects of renal biopsy for research. Int J Nephrol Kidney Failure 1: 1-5.
- Kazachenok VM, Baryash VV (2005) Breast diseases. Belarusian Medical University, Minsk.
- Kovanov VV, Perelman MI (2001) Operations on the chest and thoracic cavity organs. In: Kovanov VV (ed) Operative surgery and topographic anatomy. Meditsina, Moscow 297-321.

- Semiglazov VV, Topuzov EE (2009) Breast cancer. Medpress-inform, Moscow.
- Kholdin SA, Dymarskii Llu (1975) Extended radical operations in breast cancer. Meditsina, Leningrad.
- Kuzin MI, Shkorob OS, Kulakova AM, Bukhteeva NF (1977) Indications for Patey's operation in breast cancer. Khirurgiia (Mosk) 2: 19-23.
- Druzhkov BK, Druzhkov OB (1995) The method of extended mastectomy. Patent RU95106525A1.
- Tsejlikman EG, Patsyrova LA, Vaganov NV (2008) Method of mastectomy with preservation of greater pectoral muscle. Patent RU2335249C2.
- 10. Diuzheva TG (1992) Surgical treatment of patients with insulin-dependent diabetes mellitus. Dissertation. Sechenov Medical Academy, Moscow.
- Putintsev AM, Shraer TI, Sergeev VN, Maslov MG, Strukova OA (2010) Variants of surgical management for severe arterial hypertension combined with type 2 diabetes mellitus. Angiol Sosud Khir 16: 120-125.
- Kirnus LM, Che V, Makarov NA, Burovkin BA, Shvartsshtejn VJa, et al. (1995) Method for surgically treating the cases of second type diabetes mellitus. Patent RU2036610C1.
- Galperin EI, Diuzheva TG, Petrovsky PF, ChevokinAYu, Dokuchayev KV, et al. (1996) Results of pancreatic blood shunting into the systemic blood flow in insulin-dependent diabetics. HPB Surg 9: 191-197.
- Galperin EI, Diuzheva TG, Rabinovich SE, Platonova LV, Severgina ES, et al. (1996) Distal spleno-renal shunt. A surgical approach to the management of diabetes mellitus patients. Ann Surg Hepatolog (1): 77-90.
- Nikonenko AS, Kovalev AA, Zavgorodnii SN, Volkova NA (1996) Surgical treatment of insulin-dependent diabetes mellitus and its complications. Khirurgiia (Mosk) (2): 81-83.
- Torgunakov SA, Torgunakov AP (2010) Possible causes of thrombus-related hazard of a distal splenorenal venous anastomosis. Angiol Sosud Khir 16: 184-188.
- Torgunakov AP, Torgunakov SA, Magerramova EF (2011) Method for surgical treatment of diabetes mellitus. Patent RU2421163C1.
- Gal'perin EI, Kuzovlev NF, Diuzheva TG, Aleksandrovskaia TN (1983) Approaches to surgical treatment of diabetes mellitus (experimental study). Khirurgiia (Mosk) (1): 13-20.
- Editorial (2011) Galperin E.I. 80th anniversary. Khirurgiia (Mosk) (8): 103-104.
- 20. Galperin EI (2017) Aloud about myself. Vidar-M, Moscow.
- Severgina ES, Ponomarev AB, Diuzheva TG, Shestakova MV, Maiorova EM (1994) Diabetic glomerulonephritis - the first stage of diabetic glomerulopathy. Arkh Patol 56: 44-50.
- Balalykin DA (2004) Introduction of pathogenic principles of surgical treatment of ulcer disease in Russian surgery. Khirurgiia (Mosk) 10: 73-78.
- 23. Agrawal SN (2021) Peptic ulcer perforation: an enigma since antiquity. AJMAH 198: 67-71.
- Potashov LV, Semenov Dlu, Ushveridze DG, Osmanov ZKh, Chekmasov luS, et al. (2005) Long-term results of closure of perforated pyloro-duodenal ulcers. Vestn Khir Im I I Grek 164: 40-42.
- Gostishchev VK, Evseev MA, Golovin RA (2009) Radical operative treatment of perforative gastroduodenal ulcer disease. Khirurgiia (Mosk) 3: 10-16.
- Afendulov SA, Zhuravlev Glu, Smirnov AD, Krasnolutskii NA (2006) Preventive surgical treatment of ulcer disease. Vestn Khir Im I I Grek 165: 18-23.
- Sazhin IV, Sazhin VP, Bronshtein PG, Savel'ev VM, Nuzhdikhin AV, et al. (2014) Laparoscopic treatment of perforated ulcers. Khirurgiia (Mosk) 7: 12-16.
- Pantsyrev IuM, Mikhalev AI, Fedorov ED, Cherniakevich SA (2008) Surgical treatment of complicated ulcer disease. In: Saveliev VS (ed) Eighty lectures in surgery. Litterra, Moscow.

- 29. ludin SS (1991) Sketches of gastric surgery. Khirurgiia (Mosk) (9): 152-161.
- Alexi-Meskishvili V, Konstantinov IE (2006) Sergei S. Yudin: an untold story. Surgery 139: 115-122.
- Yudin SS (1943) Surgical methods for gunshot hip fractures in modern warfare. Medgiz, Moscow.
- 32. Petrovsky BV (1989) The surgeon and life. Meditsina, Moscow.
- Abakumov MM, Kuzibayeva MP (2012) The letters from the exile of the academician S.S. Yudin. Khirurgiia (Mosk) 4: 81-85.
- Nishanov FN, Batirov AK, Abdiraiimov BA, Abdullazhanov BR, Nishanov MF (2011) Current state of the problem of surgical treatment of perforating duodenal ulcers. Vestn Khir Im I I Grek 170: 97-100.
- 35. Ponurova VN (2009) Sergei Sergeevich Yudin. Novosibirsk book publishing.
- Kuzin MI, Chistova MA (1995) The stomach and duodenum. In: Kuzin MA (ed) Surgical diseases. Meditsina, Moscow: 337-407.
- 37. Babalich AK (1999) Surgical treatment of patients with duodenal ulcer. Khirurgiia (Mosk) (7): 19-22.
- Vachev AN, Korytsev VK, Antropov IV (2013) The choice of resection volume by the combination of perforative duodenal ulcer with other complications of the ulcer disease. Khirurgiia (Mosk) 11: 29-31.
- Repin VN, Kostylev LM, Poliakov SN, Matveeva NA (2011) Choice of the operation for perforated ulcers of the stomach and duodenum. Vestn Khir Im I I Grek 170: 48-51.
- Komarov NV, Maslagin AS, Komarov RN (2001) Surgical treatment of patients with complications of peptic ulcer of the stomach and duodenum under conditions of a regional hospital. Vestn Khir Im I I Grek 160: 104-106.
- Chung KT, Shelat VG (2017) Perforated peptic ulcer an update. World J Gastrointest Surg 9: 1-12.
- Babichev SI, Kharlampovich SI, Tarasova LB, Smakov GM, Savchenko ZI (1985) Partial denervation of the lungs in bronchial asthma. Khirurgiia (Mosk) 4: b31-35.
- Health Ministry of RSFSR (1988) Indications and contraindications for the surgical treatment of bronchial asthma. Moscow.
- Gudovskii LM, Karashurov SE, Karashurov ES, Volkov AA, Parshin VD (2002) Surgical treatment of bronchial asthma. Khirurgiia (Mosk) 7: 14-18.
- 45. Smakov GM (1990) Complications of surgical treatment of patients with bronchial asthma. Khirurgiia (Mosk) 2: 124-127.
- 46. Meshalkin EN (1978) Various methods of lung denervation in bronchial asthma surgery. Meditsina, Tashkent.
- Meshalkin EN (1968) 1st attempts of surgical treatment of bronchial asthma by the pulmonary autotransplantation method. G Ital Mal Torace 22:15-22.
- Giller BM, Giller DB, Giller GV (1997) Method for surgical treatment of bronchial asthma. Patent RU2074645C1.
- Uglov FG (1976) Pathogenesis, clinic and therapy of chronic pneumonia. Meditsina, Moscow.
- Sokolov SN, Gerasin VA, Moiseev NV, Leont'ev AI (1975) Results of lung resections in bronchial asthma. Grudn Khir 1: 105-108.
- 51. Uglov FG (1984) Under the white mantle. Sovietskaia Rossia, Moscow.
- 52. Esipova IK, Vladimirtseva AL (1996) Congenital malformations of the lungs. Arkh Patol 58: 49-54.
- Esipova IK, Vladimirtseva AL, Biriukov VV (1990) Branching defects and mucosal diverticulosis of the bronchi in children as factors predisposing to the development of chronic inflammatory processes in the lungs. Arkh Patol 52: 6-10.
- 54. Esipova IK (1975) The lung in pathology. Nauka, Novosibirsk.
- Strukov AI, Kodolova IM (1970) Chronic non-specific pulmonary diseases. Meditsina, Moscow.
- J Surgery 10(1): 9 (2022)

- Esipova IK (1978) Interstitial reactions of the lungs in chronic bronchitis from the differential diagnostic aspect. Sov Med 4: 52-56.
- Perel'man MI (1998) Surgery of pulmonary tuberculosis. Probl Tuberk 3: 27-32.
- 58. Ots ON, Sinitsyn MV, Semenov GI, Latyshev AN, Agkatsev TV, et al. (2009) Surgery for respiratory tuberculosis at the Research Institute of Phthisiopulmonology, I. M. Sechenov Moscow Medical Academy: History and current trends. Tuberk Biolezni Legkih 12: 11-21.
- Kucherov AL (1975) Main developmental steps of the phthisiatric surgery in the RSFSR. In: Problems of the lung surgery (to the 70th anniversary of Prof. Lev Konstantinovich Bogush). Central Institute of Tuberculosis, Moscow 93-99.
- Bogush LK, Kalinichev GA (1979) Corrective operations at lung resections. Sabchota Sakartvelo, Tbilisi.
- 61. Perelman MI (2004) 60 Years in Medicine. Facts without Commentaries. Moscow.
- Bogush LK, Kariev TM, Eshankhanov M (1983) Surgery of Severe forms of Pulmonary Tuberculosis. Meditsina, Tashkent.
- 63. Lichterman B (2013) Mikhail Izrailevich Perelman. BMJ 346: f3042.
- Perelman MI, Streltsov VP, Naumov VN (1989) Clinical and social aspects of organ-preserving lung surgery in tuberculosis. In: Organ-Preserving Operations in Phthisio-pulmonology. Scientific Center for Phthisio-Pulmonology, Moscow: 4-6.
- 65. Nechaeva OB (2018) Tuberculosis situation in Russia. Tuberk Biolezni Legkih 8: 15-24.
- Shilova MV, Khruleva TS, Tsybikova EB (2005) Surgical aid to patients with respiratory tuberculosis. Probl Tuberk Bolezn Legk 5: 31-36.
- Olcmen A, Gunluoglu MZ, Demir A, Akin H, Kara HV, Dincer SI (2006) Role and outcome of surgery for pulmonary tuberculosis. Asian Cardiovasc Thorac Ann 14: 363-366.
- Dewan RK, Pezzella AT (2016) Surgical aspects of pulmonary tuberculosis: An update. Asian Cardiovasc Thorac Ann 24: 835-846.
- 69. Ahuja SD, Ashkin D, Avendano M, Banerjee R, Bauer M, et al. (2012) Multidrug resistant pulmonary tuberculosis treatment regimens and patient outcomes: An individual patient data metaanalysis of 9,153 patients. PLOS Med 9: e1001300.
- Jargin SV (2015) Cardiovascular mortality trends in Russia: Possible mechanisms. Nat Rev Cardiol 12: 740.
- Leon DA, Chenet L, Shkolnikov VM, Zakharov S, Shapiro J, et al. (1997) Huge variation in Russian mortality rates 1984-94: Artefact, alcohol, or what? Lancet 350: 383-388.
- Kibrik BS, Bukharin PA (1976) Rehabilitation of patients following pulmonary resections for tuberculosis. Probl Tuberk 12: 43-47.
- Kiseleva IA (1976) Clinical aspects and results of surgical treatment of metatuberculous changes of the lungs. Probl Tuberk 12: 31-35.
- 74. Meladze GD (1975) On the lung resection in extended tuberculosis. In: Problems of the lung surgery (to the 70th anniversary of Prof. Lev Konstantinovich Bogush). Central Institute of Tuberculosis, Moscow 406-410.
- Priimak AA (1989) Significance of surgical methods in the combined therapy of tuberculosis. In: Organ-preserving Operations in Phthisio-Pulmonology. Scientific Center for Phthisio-Pulmonology, Moscow 7-8.
- Perel'man MI, Naumov VN, Dobkin VG, Strel'tsov VP, Dubrovskii AV (2002) Indication for the surgery in patients with pulmonary tuberculosis. Probl Tuberk 2: 51-55.
- Motus IY, Skorniakov SN, Golubev DN, Karskanova SS, Malceva AS (2009) Surgical treatment of pulmonary tuberculosis. J Ural Med Acad Sci 3: 103-106.
- 78. Giller DB, Mishin VI (2020) Phthisiology. Geotar-Media, Moscow.

- Yablonskii PK, Kudriashov GG, Avetisyan AO (2019) Surgical resection in the treatment of pulmonary tuberculosis. Thorac Surg Clin 29: 37-46.
- Kempker RR, Vashakidze S, Solomonia N, Dzidzikashvili N, Blumberg HM (2012) Surgical treatment of drug-resistant tuberculosis. Lancet Infect Dis 12: 157-166.
- Benito P, Vashakidze S, Gogishvili S, Nikolaishvili K, Despuig A, et al. (2020) Impact of adjuvant therapeutic surgery on the health-related quality of life of pulmonary tuberculosis patients. ERJ Open Res 6: 1-11.
- Giller DB, Martel II, Baryshnikova LA (2016) Surgery of Tuberculosis in Children. Aldi-Print, Moscow.
- Uspenskii LV, Romanychev IuA, Kodolova IM, Chistov LV, Ablitsov IuA (1986) Diagnosis and treatment of pulmonary tuberculomas. Khirurgiia (Mosk) 5: 11-15.
- 84. Gur'ianov VN, Strel'tsov VP, Al'ba MN (2000) Early surgical treatment of new restrictive forms of pulmonary tuberculosis. Probl Tuberk 6: 48-51.
- 85. Pilipchuk NS, Kharchenko EF, Ivaniuta OM (1974) Tuberculoma of the lungs, pleura and mediastinum. Kiev: Zdorov'ia.
- Valiev RS, Valiev NR, Iksanov IY, Filatova MS (2014) Epidemical importance of lung tuberculoma, the efficiency of their surgical and non-surgical treatment based on data from the Republic of Tatarstan. Probl Tuberk Bolezn Legk 4: 18-21.
- Slepukha IM (1975) The use of surgical treatment of pulmonary tuberculosis in the age aspect. In: Problems of the lung surgery (to the 70th anniversary of Prof. Lev Konstantinovich Bogush). Central Institute of Tuberculosis, Moscow 127-134.
- Jargin SV (2021) Some aspects of the surgical and endoscopic treatment of tuberculosis in Russia. J Surgery 91: 8.
- Methodical Recommendations (1983) Sparing and Combined Lung Resections in Extended Forms of Tuberculosis. Health Ministry of Uzbek SSR, Tashkent.
- Porkhanov VA, Mova VS, Poliakov IS, Grebennikov SV, Marchenko LG (1998) Surgical treatment of bilateral pulmonary tuberculosis. Probl Tuberk 1: 36-39.
- Repin IM (1990) Repeated pneumonectomy in recurrence of pulmonary tuberculosis. Probl Tuberk 1: 35-39.
- Andrenko AA, Krasnov VA, Grishchenko NG (2000) Surgical treatment of patients with advanced bilateral destructive pulmonary tuberculosis. Probl Tuberk 3: 32-35.
- Ots ON (2012) The surgical treatment of pulmonary tuberculosis with the resistance of mycobacteria to drugs. Sechenov Medical Journal 2: 15-23.
- 94. Kulbak VA, Lakomkin MM, Martirosjan NL (2004) Abstract 196. The peculiarities of the surgical treatment of drug resistant pulmonary tuberculosis. In: Abstract book. 3rd Congress of European Region, International Union against Tuberculosis and Lung diseases (IUATLD), 14th National Congress of Lung diseases, Moscow, 55.
- Zyskin LI, Kozello NA, Grishin MN, Bereza RA (1991) Early operations in pulmonary tuberculosis. Probl Tuberk 3: 36-38.
- Voloshyn IM (1999) The indications and contraindications for the use of lung resection for tuberculoma in a diabetic patient. Klin Khir 6: 13-15.
- Sokolov SB (1975) Surgical treatment of aged tuberculosis patients. In: Problems of the lung surgery (to the 70th anniversary of Prof. Lev Konstantinovich Bogush). Central Institute of Tuberculosis, Moscow 103-110.
- Govorenko GG, Sokolov SB, Slepukha IM (1975) Surgical Treatment of Lung Diseases in Elderly Patients. Zdorov'ia, Kiev.
- Polianskii VK (1999) The surgical treatment of pulmonary tuberculosis. Voen Med Zh 320: 42-45.
- 100. Sokolov EA. (1978) Surgical treatment of pulmonary tuberculosis patients over 60. Probl Tuberk 7: 23-27.
- 101.Korneevskii MD (1075) Bilateral lung resections in tuberculosis patients.

J Surgery 10(1): 9 (2022)

In: Problems of the lung surgery (to the 70th anniversary of Prof. Lev Konstantinovich Bogush). Central Institute of Tuberculosis, Moscow 376-384.

- 102.Ots ON (1991) Bilateral lung resections. Grud Serdechnososudistaia Khir 11: 35-38.
- El'kin AV, Repin IM, Levashev IN (2004) Surgical treatment for postoperative recurrent pulmonary tuberculosis. Probl Tuberk Bolezn Legk 2: 28-32.
- 104.Kravchenko AF, Vinokurov II, Ivanov IuS, O-zhi-kho EA (2003) A case of multiple operations in pulmonary tuberculosis. Probl Tuberk Bolezn Legk 5: 48-49.
- 105. Naumov VN, Karaeva GB (1993) Surgical treatment of patients with disseminated and progressing pulmonary tuberculosis. Probl Tuberk 5: 23-26.
- 106. Niiazov IB (1976) Bilateral resection in patients with tuberculosis associated with nonspecific lung diseases. Probl Tuberk 12: 29-31.
- 107. Fedorov IA, Wilson SJ, Davies DE, Holgate ST (2005) Epithelial stress and structural remodelling in childhood asthma. Thorax 60: 389-394.
- 108.Bogadel'nikova IV, Sagalovich VIa, Perelman MI (2000) The efficacy of the ambulatory treatment of patients with newly detected pulmonary tuberculosis. Probl Tuberk 5: 23-28.
- 109.Bogorodskaia EM, Ol'khovatskii EM, Borisov SE (2009) Legal aspects of compulsory hospitalization of incompliant patients with tuberculosis. Probl Tuberk Bolezn Legk 4: 8-14.
- 110. Trifonova NI (2010) Medical and organizational approaches to the quality enhancement of dispensary monitoring of tuberculosis patients in present conditions. Moscow: IKAR.
- Bouvet R, Le Gueut M (2013) Tuberculose et refus de soins: recours à la législation sur les menaces sanitaires graves. Rev Mal Respir 30: 451-457.
- 112. Methodical Recommendations (1987) Special features of detection, diagnosis, clinical course, treatment and prevention of tuberculosis in patients with chronic alcoholism. Kiev: Health Ministry of Ukrainian SSR.
- 113. Perelman MI, Safarov RN, Epshtein TV, Gorelik ES, Palei ME (1983) Surgical treatment of patients with pulmonary tuberculosis and chronic alcoholism. In: Modern methods of surgical treatment of pulmonary tuberculosis. Collected works. Institute of Tuberculosis, Moscow 65-67.
- 114. Entin GM (1990) Treatment of alcoholism. Meditsina, Moscow.
- 115. Methodical Recommendations (1989) Combined treatment of patients with pulmonary tuberculosis suffering of alcoholism. Health Ministry of RSFSR, Moscow.
- 116. Makhov VM, Abdullin RG, Gitel' EL, Zavodnov VIa, Podzolkov VI, et al. (1996) Visceral lesions in alcoholism. Ter Arkh 68: 53-56.
- 117. Krut'ko VS (1990) Pneumonia in patients with pulmonary tuberculosis and alcoholism. Probl Tuberk (1): 64-66.
- 118. Jargin SV (2017) Popular Alcoholic Beverages in Russia with Special Reference to Quality and Toxicity. J Addiction Prevention 5: 6.
- 119. Ivanets NN, Vinnikova MA (2011) Alcoholism. MIA, Moscow.
- 120. Shabanov PD (2015) Narcology. 2nd edition. Geotar-Media, Moscow.
- 121. Annex to the Order of the Health Ministry of Russian Federation No. 140 of 28 April 1998.
- 122.Galankin LN, Livanov GA, Guzikov BM, Volkov NIu (2003) Method for determining treatment tactics in the cases of alcohol abstinence syndrome. Patent of Russian Federation RU2202946C2.
- 123. Nikitin IuP (1990) Prevention and treatment of alcoholism. Zdorov'ia, Kiev.
- 124. Gromova OA, Torshin IYu (2018) Magnesium and diseases of civilization: a practical guide. Geotar-Media, Moscow.
- 125. Professional association of narcologists (2018) Modern approaches to the treatment of severe alcohol withdrawal syndrome (guidelines). New Terra, Moscow.

- 126.Sosin IK, Sema VI, Gurevich YL, Mysko GN, Slabunov OS, et al. (1987) Method of stopping alcohol abstinence syndrome. Patent of Russian Federation SU1299590A1.
- 127.Panin LE (2000) Method of treatment of patients with chronic alcoholism. Patent of Russian Federation RU2145216C1.
- 128. Chitalov VG, Zhukova NE (2008) Method of alcoholic abstinence syndrome reduction. Patent of Russian Federation RU2327474C1.
- 129. Sarai M, Tejani AM, Chan AH, Kuo IF, Li J (2013) Magnesium for alcohol withdrawal. Cochrane Database Syst Rev 6: CD008358.
- 130.Syropiatov OG, Dzeruzhynskaia NA (2000) Pathogenesis and biological therapy of alcoholism. Military Medical Academy, Kiev.
- 131.Garbusenko ON, Babashev BB, Salahanov RA (2013) Ultraviolet irradiation of blood in therapy of acute alcohol abstinence syndrome, Efferentnaya terapia 19: 98-99.
- 132.Jargin SV (2012) About the treatment of gonorrhea in the former Soviet Union. Dermatol Pract Concept 2: 12.
- 133. Rudoi NM, Dzhokhadze VA, Chubakov TCh, Stadnikova AV (1994) Current status and perspectives in hospital treatment of patients with tuberculosis complicated with alcohol abuse. Probl Tuberk 4: 8-10.
- 134. Grishko Ala (1991) The institute of compulsory treatment and occupational re-education of chronic alcoholics and drug addicts, its social purpose. Academy of the Ministry of Internal Affairs, Moscow.
- 135. Mendelevich VD (2016) Ethics of modern narcology. Gorodets, Moscow.
- 136. Murphy J, Jargin S (2017) International trends in health science librarianship part 20: Russia. Health Info Libr J 34: 92-94.
- 137. Danishevski K, McKee M, Balabanova D (2009) Variations in obstetric

practice in Russia: a story of professional autonomy, isolation and limited evidence. Int J Health Plann Manage 24: 161-171.

- 138.Jargin SV (2020) Misconduct in medical research and practice. Nova Science Publishers, Hauppauge, NY.
- 139.Jargin SV (2017) A scientific misconduct and related topics: a letter from Russia. Am J Exp Clin Res 4(1): 197-201.
- 140.Kaurova TV, Pestereva EV (2022) Introduction to bioethics. St. Petersburg Pediatric Medical University.
- 141.Jargin SV (2016) On the endoscopic methods used with questionable indications. J Surgery 4: 6.
- 142. Ismagilov NM (2009) Complicated community-acquired pneumonia in young people from organized groups: clinical and morphological picture, diagnosis and treatment (dissertation). Military Medical Institute, Samara.
- 143.Kazantsev VA. Abstract 1358. The use of bronchological sanation for treatment of community-acquired pneumonia. In: Abstract book. 3rd Congress of European Region, International Union against Tuberculosis and Lung diseases (IUATLD), 14th National Congress of Lung diseases, Moscow, 361.
- 144. Jargin SV (2013) Barriers to the importation of medical products to Russia: in search of solutions. Healthcare in Low-resource Settings 1: e13.
- 145.Jargin SV (2022) Overpopulation and international conflicts: An update. J Environ Stud 8: 5.
- 146.Good Clinical Practice. National Standard of Russian Federation GOSTR 52379-2005, introduced on April 1, 2006.
- 147. Guideline for good clinical practice E6(R1). Current Step 4 version dated 10 June 1996. International Conference on Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH), 1996.