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Management of the aesthetic medicine services in the Republic of Moldova

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Abstract

Background: In recent years, there has been an increasing interest in aesthetic medicine. Minor-invasive or injectable procedures, as well as laser therapy have become extremely successful. In case of any inherited or acquired, real or imaginary deformities, the invasive interventions viz. plastics and / or reconstruction are the most commonly addressed to. The aesthetic medicine in our country does not have a certain status yet. This is due to the presence of some ambiguities in the existing legal framework, as well as myths of popular perceptions. In order to assess the cosmetic and aesthetic medicine services within the instances of the Republic of Moldova, the Ministry of Health approved the establishment of a Working Group. Furthermore, based on its expertise, an Action Plan has been approved, particularly for this sector of activity, followed by the Algorithm for differentiating professional competency within the above mentioned areas. Subsequently, there have been approved steps on the organization of compliance assessment regarding the professional skills of medical staff, who work in the fields of cosmetology and dermatology. As referring to the medical staff engaged in the field of aesthetic surgery, an effective mechanism for assessing the compliance of professional skills is still going to be developed in future.

Conclusions: Based on the above-mentioned, we consider it appropriate to carry out a research for assessing the aesthetic medicine in the Republic of Moldova. The improvement and strengthening of management capabilities will further enhance the quality of medical services within these two related areas: mini-invasive aesthetic medicine (dermatology and cosmetology) and invasive aesthetic medicine (aesthetic surgery).

Key words: dermatology, cosmetology, surgery, aesthetic medicine, management.

Introduction

In the last half century, our culture has been extremely preoccupied with the image and the way we look among those who surround us. No wonder, when two candidates submit two similar CVs for a job application, the external aspect is often a decisive factor [1; 2]. What makes people believe however that the image matters that much? Is this an explanation of the role played by the artistic dimension in the development of Homo Aestheticus [3]? And what is beauty? What are its limits? Is there a standard for it? These are just a few questions that have troubled the human mind from ancient times until today [4].

Beauty is the essential virtue of the spirit and an important desire of both civilization and progress. We are the way we express ourselves: through speech, writing, appearance, attitude, and behaviour [5]. Unfortunately (or perhaps fortunately), there was not an existing universal standard in this regard and probably there is not any today or will never exist in future. Why? Because beauty is perceived within the limits of our knowledge, our education and, last but not least, within the limits of the anatomical and physiological particularities [4]. No wonder, it is said that beauty is the result of a sensory act. What one likes, another may dislike, whereas the relationship between beauty and ugliness can be reversed. This depends on the viewer [6].

An important attribute of beauty is the skin, especially the visible parts (face, neck, hands), as well as a range of ornaments, accessories (tattoos, earrings, bracelets, rings) that our ancestors used to wear, and therefore we respectively wear nowadays. Over time, millions of people have tried to change appearances and to be seen differently than they really are. This phenomenon has been recognized today as a form of hierarchical positioning in the societies of those times. Later on, various other reasons have emerged like religious, cultural, sexual etc. [4].

At a certain time, the man's preoccupation with beauty intersected (in some areas, even merged) with the medical act. As a result, towards the end of the 20th century, a new trend in medicine arose: there emerged specializations from already existing specialties [7]. Dermatology was among them. Therefore, areas such as cosmetology (science of beauty, which is a branch of dermatology studying biological aesthetics), tricology (the science on the structure, functions and diseases of the hair) and onychology (science dealing with the structure, functions and diseases of the nails) came to life.

In addition, certain interdisciplinary specializations have appeared, directly or indirectly associated with the two spheres of interest: health and beauty. These are some of them: surgical dermatology (science of invasive interventions in dermatology), oncological dermatology (science of skin tumors), photodermatology (science of dermatoses induced by photosensitization and / or photoagression), pediatric dermatology (science of infantile dermatoses), geriatric dermatology (science of senile dermatoses) etc.

Over the past 15-20 years, there has been a growing interest in aesthetic medicine. Even though, at a certain point, there were controversies regarding its ethics [1; 8; 9], the legitima-

cy of an aesthetic approach to medicine is no longer being questioned about [10]. Minor-invasive or injectable procedures (hyaluronic acid, botulinum toxin etc.) and laser therapy are being among the most successful ones [11; 12; 13].

The laser or the intelligent light was one of the most revolutionary breakthroughs of the 20th century. Due to its biological effects (analgesic, anti-inflammatory, healing, muscle relaxing, antiphlogistic, anti-edematous, antibacterial, antiviral, biostimulatory etc.), the lasers, particularly the therapeutic ones with semiconductors have been widely applied in treatment of many dermatological and cosmetic problems as acne, rosacea, herpes simplex, alopecia, hemangiomas etc. [14]. Recently, a laser related technology intense pulsed light or IPL - has been increasingly used [13]. Unlike the laser, which uses a single wavelength (single color), the IPL technique uses a series of special filters that select different wavelengths out of the light spectrum. Targets that capture the light are called chromophores. They absorb the light, which generates heat, thus favouring the destruction of structures containing pigments, a process called selective photo-termolysis. IPL technique has many applications: hair removal, treatment of pigmented and vascular lesions, skin rejuvenation (Photo rejuvenation) etc.

Until recently, the beauty industry was largely used by women, now there is a steady increase in the number of men, as well [15]. There is also a growing number of thirdage solicitors [2]. Life expectancy has increased considerably, and people have become more concerned about their appearance [16]. The phenomenon of skin aging (wrinkles, cutaneous xerosis, senile keratoses, etc.) has become a reason for more frequent visits to the dermatologist [17].

In case of inherited or acquired, real or imaginary deformities, invasive interventions are more commonly used as plasty and/or reconstruction of the nose, ears, breasts, buttocks, thighs etc. [18; 19; 20; 21].

Over the years, aesthetic surgery has passed through many syncopes and identity crises [8]. Some questions still remain unanswered today: is aesthetic surgery a medical field or a business aimed at profitable gain? There is no unanimous opinion on this. One thing is certain, however, that the field of aesthetic surgery is very dynamic, whereas new technologies and market trends dictate the relationship between supply and demand [22].

Fortunately, aesthetic medicine means not only the satisfaction of some beauty whims. Advances in plastic and reconstructive surgery have revolutionized the management of patients suffering from various congenital anomalies, burn scars, cutaneous cancers [1].

Unfortunately, the lack of competence and experience sometimes results in adverse effects and regrettable complications [23; 24; 25]. There is no considerable expertise data available on this phenomenon, since this particular sector is being marginally regulated, even in the developed countries. Therefore, a state intervention is absolutely required in order to maintain safety standards [26].

Quality management, both of medical institutions (service providers) and of educational institutions (specialist

training), is another major concern [2; 27]. Thus the key to success in aesthetic medicine, as well as in many other areas, lies in an effective management of developmental programs: strategic planning, financial analysis, promotion policy, public relations, human resources, informational technology [28; 29].

The use of digital data (for clinical, educational and administrative purposes) is no longer a novelty. As a result, healthcare assistance tends to become more accessible and effective. At the same time, the huge advance of technical and scientific progress has created premises for the emergence of new approaches regarding the doctor-doctor, particularly the patient-doctor (dermatology) or client-doctor (cosmetology) relationships [30].

For a long time, aesthetic medicine was learned through apprenticeship, by attending various workshops, conferences, congresses, etc. In 1997, the European Society of Cosmetic & Aesthetic Dermatology or ESCAD was founded. Being a sister society with the European Academy of Dermatology and Venereology or EADV, ESCAD brings together the most skilful experts in the field, and offers a wide range of opportunities to the general public [16]. Under the aegis of ESCAD, the Cosmetic Medicine Journal has appeared on a quarterly basis, the English version of the Kosmetische Medizin journal, founded in 1951 and originally intended for German readers only, but which has gradually become the undisputed leader in the field of cosmetology.

On a global level, the International Academy of Cosmetic Dermatology or IACD, under the auspices of the Journal of Cosmetic Dermatology has appeared [16]. Regarding the community of aesthetic surgeons, there is the International Society of Aesthetic Plastic Surgery (ISAPS) and the International Confederation of Plastic, Reconstructive and Aesthetic Surgery (IPRAS).

Regarding our country, the Society of Dermatology in the Republic of Moldova (the legal successor of the Dermato-Cosmed Association, founded in 1994) and the Association of Plastic, Reconstructive and Aesthetic Surgery of the Republic of Moldova were established. Additionally, in 2015 a new medical project was launched - the Health & Beauty Online Journal [31]. The journal presents a modern, interactive and friendly design and is aimed at the general public, patients of all ages, and those who are already learning or working in the field among them students, residents, doctors. Our readers have access to the most cutting-edge data on skin diseases - summaries, articles and clinical cases. Moreover, it includes topics related to aesthetic, sexual and reproductive medicine issues such as interviews, comments, practical advice etc. Thus, in a relatively short period of time, the Health & Beauty Online Journal has become the most popular profile site in the republic. According to Google Analytics data, there have been over 35,000 unique visitors and over 93,000 views since it was launched. We believe that it is a good result for a country with only about 2.5 million inhabitants. This proves that online or distant communication is an undeniable reality and an effective means of documentation and learning within an ever-changing world [30].

Premises and opportunities

The importance of this topic has been largely discussed and repeatedly written within our works [32; 33; 34; 35]. In order to assess the cosmetic and aesthetic medicine services within the instances of the Republic of Moldova, the Ministry of Health approved the establishment of a Working Group. [36]. Furthermore, based on the Expertise of the Working Group and for the purpose of regulating the activity of dermato-cosmetology, the Ministry of Health approved the Action Plan particularly for this sector of activity [37]. Also, due to the suggestion of the Working Group and in order to regulate the activity of cosmetics, dermatology, plastic surgery, aesthetics and reconstructive microsurgery, the Ministry of Health adopted the Algorithm for the differentiation of professional skills in the above mentioned domains [38]. Subsequently, the Ministry of Health approved the steps on the organization of compliance assessment regarding the professional skills of medical staff, who work in the fields of cosmetology and dermatology. Regarding the healthcare engaged in the field of aesthetic surgery, an effective mechanism for assessing the compliance of professional skills is still going to be developed in future [39].

The subject matter is still a complex and delicate one, as cosmetics and cosmetology are closely related but different activities. Regretfully, many people confuse them, hence the erroneous interpretations of the staff who work in these sectors [33; 34; 38]. A retrospective view upon them will help us to better understand the similarities and differences between them:

A. Cosmetics

Cosmetics, in the classic sense, is a branch of the pharmaceutical industry that manufactures cosmetic products: skin care, hair and nail products [33; 40]. Furthermore, cosmetics is a non-medical field of activity, which aims at maintaining the human body by means of care and beauty methods/procedures. Medical studies are not mandatory. In the Republic of Moldova, necessary professional skills can be obtained within the vocational-technical institutions while the occupation is termed as beautician or cosmetic technician. The providing institutions are as follows: hair-dressers, beauty cabinets, beauty salons, tattoo salons, SPA salons [38].

This activity field is regulated by the following legal acts and documents [38]: 1) Nomenclature of vocational training areas, specialties and qualifications for secondary and non-tertiary post-secondary of the Republic of Moldova and approved by the Government Decision in 2015: general domains 10 (services), educational domain 101 (personal services), vocational training domain 1012 (hairdressing and beauty services), code 101210 (hairdressing and cosmetics), cosmetic and hairdressing technician qualification [41]; 2) Classification of Occupations of the Republic of Moldova, approved by the order of the Ministry of Labor, Social Protection and Family Welfare in 2014: Major group 5 (services and trade workers), Major subgroup 51 (personal service workers), minor group 514 (hairdressers, cosmetic

technicians and assimilated) [42]; 3) Regulation on Adult Continuing Education of the Republic of Moldova, adopted by the Government Decision in 2017 [43]; 4) Education Code of the RM, approved by the Parliament in 2014 [44].

The major professional skills obtained by a cosmetician are as following: a) hair care and hair-styling; b) nail care and beauty (manicure, pedicure); c) artistic makeup (day, evening, corrective makeup); d) extensions (eyelashes, hair, nails); e) sun tanning cabin (solar); f) procedures with water (SPA, thermal baths, plant wrapping, applications with algae and sludge etc.); g) non-medical massage (relaxation, refreshing); h) various non-medical masks (moisturizing, emollient, nutritive, soothing, tonic, clay); i) ear-piercing with the gun (for earrings); j) other forms of piercing (body, oral, genital); k) hair removal (with depilatory creams, wax, sugar); l) temporary or permanent tattoos (ornamental, sexual, religious, cultural etc.); m) other non-medical care and beauty interventions (33; 34; 38; 40; 45].

B. Cosmetology

Cosmetology is a branch of dermatology that aims at maintaining the human body by means of mini-invasive methods of beauty and treatment. Higher medical education is required. In the Republic of Moldova, Nicolae Testemitanu SUMPh provides professional training in this field, namely at Faculty of Medicine, the initial professional training at General Medicine, later on students pass to Postgraduate Training by means of Internship (up to 1995) or Residency (since 1996) at Specialty of Dermatovenereology. Medical graduates who lack internship or residency in dermatovenereology, but have a postgraduate training in other specialties may join: a) clinical Fellowship (until 2016), in Dermatology and Cosmetology specialization, or b) complementary studies in Dermatology and Cosmetology (since 2018). Licensed occupations are: aesthetic dermatologist or dermatologist-cosmetologist. Facility providing institutions are the following: medical cabinets, medical centers, hospitals, clinics [33; 34; 38].

The activity field is regulated by the following legal acts and documents [38]: 1) Nomenclature for the vocational training areas and specializations for academic staff development at higher educational institutions, cycle I, approved by the Parliament in 2005 [46]; 2) Education Code of the Republic of Moldova, approved by the Parliament in 2014: art.121 [44]; 3) Classification of occupations of the Republic of Moldova, approved by the Order of the Ministry of Labor, Social Protection and Family Welfare in 2014: major groups 2 (specialists in various fields of activity), major subgroups 22 (health specialists), minor groups 221 (doctors), basic groups (specialists in dermato-venereology) [42]; 4) Nomenclature of specialties for postgraduate education by means of Residency (Specialty of Dermato-venereology), approved by the Order of the Ministry of Health of the Republic of Moldova in 2015 [47]; 5) Regulation on Adult Continuing Education of the Republic of Moldova,[43]; 6) Regulation on the organization and functioning of the Commission to assess the professional skill compliance for the medical staff employed in the field of dermatology and cosmetology, approved by the Order of the Ministry of Health [48], respectively by the Order of the Ministry of Health, Labor and Social Protection in 2017 [49]; 7) Complementary Curriculum for dermatology and cosmetology comprising 508 hours/credits per total (dermatology – 348 hours/credits and cosmetology – 160 hours/credits), approved at the Department of Dermato-venereology of Nicolae Testemitanu SUMPh in 2017 [50].

The most important professional skills of a dermatocosmetologist are as follows: a) various medical massage techniques (manual, vacuum etc.); b) mechanical facial cleansing (eliminating pimples/comedones in pre-inflammatory acne); c) other types of facial cleansing (galvanic, ultrasound); d) curative masks (exfoliating, antiseboreal, antiacne, anti-couperose etc.); e) epilation (electro-, laser, IPL); f) artificial ultraviolet treatment (PUVA-therapy); g) superficial (with lactic acid, with glycolic acid, with trichloroacetic acid etc.) and deep chemical peeling (with carbolic acid, with phenol etc.); h) superficial (microdermabrasion with aluminum oxide microcrystals) and deep mechanical peeling (electric brush, abrasive brush or diamond-peel microdermabrasion); i) cauterization (chemocauterization, diathermy cautery, electrocautery, radio cautery, laser cautery); j) cryodistruction (by means of liquid nitrogen and carbon snow); k) mesotherapy (micro-injections of homeopathic substances or vitamins in the middle layer of the skin); l) microneedling or dermaroller (collagen induction); m) fillers, injections of hyaluronic acid, injections of botulinum toxin; n) biorevitalization, skin plasmolifting; o) excision and removal of superficial skin formations (epidermis & dermis); p) skin biopsy (superficial-biopsy shave, by puncture-punch biopsy, by aspiration-fine needling, by curettage, incisional, excisional); q) non-surgical blepharoplasty (non-ablative, by plasma); r) non-surgical lipolysis (chemical, ultrasound, oscillating); s) non-surgical lifting (without incision - suspended or anchored); t) hair implant (STRIP method, FUE method); u) other mini-invasive medical and/ or beauty therapies. Depending on the circumstances, some non-injectable or respectively non-invasive procedures/maneuvers can be performed/carried out by Graduates of the Medical Colleges under the strict supervision and guidance of a doctor [33; 34; 38; 40; 45].

Therefore, the qualification of «cosmetologist» can only be attributed to a specialist in medicine, and the «cosmetology» activity is admitted only when the organigram of a public or private medical institution includes vacancies for specialists in dermatology and cosmetology, with internship, fellowship and residency or, even more recently, complementary training in dermatology and cosmetology [38].

By the way, the term «course in cosmetology» used by the administration of vocational-technical schools is an inappropriate or even abusive. Short-term trainings, based on vocational schools, may result in getting the qualification of a beautician (cosmetics technician). This profession, however, does not allow access to therapeutical maneuvers / procedures, since these are the duties of the dermatologist-cosmetologist, as it was mentioned above.

As we have noticed, cosmetics means care and beauty,

whereas cosmetology - beauty and treatment. The first is related to a non-medical field, and the second is a medical one, namely a branch of dermatology. Even though, recently, more and more people have been using the phrase «aesthetic dermatology», the term «cosmetology» has not been abandoned or got out of use. As a compromise, the term «dermato-cosmetology» is also used.

C. Aesthetic Surgery

Nevertheless, dermatology presents no «monopoly» on aesthetics or beauty. There is a range of other specialties, mostly derived from surgery, associated with biological aesthetics [33; 34]. Aesthetic surgery is a medical activity compartment, which aims to provide beauty and treatment services by means of invasive methods. Higher medical education is required. In the Republic of Moldova, Nicolae Testemitanu SUMPh provides professional training, at the Faculty of Medicine (initial professional training at Faculty of General Medicine) and/or Dentistry, followed by postgraduate training via internship (until 1992) and residency (since 1993). Medical graduates who lack internship or residency in surgery and dentistry, but have a postgraduate training in other specialties may join: a) clinical fellowship (until 2016), in Surgery - General Surgery, Plastic and Reconstructive Surgery, Microsurgery, Maxillo-facial Surgery, Vascular Surgery, Otorhinolaryngology, Ophthalmology, Oncology, Orthopedics and Traumatology, Combustiology or b) complementary studies for gaining professional skills in invasive aesthetic medicine (the Regulation is still under process). Licensed occupations are: aesthetic surgeon or plastic surgeon. Facility providing institutions are the following: medical centers, hospitals, clinics [38].

The activity field is regulated by the following legal acts and documents [38]: 1) Nomenclature for vocational training areas and specializations for academic staff development within higher educational institutions, cycle I, approved by the Parliament in 2005 [46]; 2) Education Code of the Republic of Moldova, approved by the Parliament in 2014: art.121 [44]; 3) Classification of occupations of the Republic of Moldova, approved by the Order of the Ministry of Labor, Social Protection and Family Welfare in 2014: major groups 2 (specialists in various activity fields), major subgroups 22 (health specialists), minor groups 221 (doctors), basic groups (specialist physicians, surgical profile) [42]; 4) Nomenclature of specialties for postgraduate education by means of residency (surgical profile), approved by the Order of the Ministry of Health of the Republic of Moldova in 2015 [47]; 5) Regulation on Adult Continuing Education of the Republic of Moldova, approved by the Government Decision in 2017 [43].

The most important professional skills of the aesthetic surgeon are as following: a) surgical interventions performed on facial and scalp regions: facial lifting (Rhytidectomy, SMAS facelifting, subperiosteal lifting, temporal and frontal lifting, endoscopic lifting), blepharoplasty, rhinoplasty, otoplasty, mentoplasty, scalp reduction, flap technique, hair transplant (autografts, isografts, synthetic hair); b) mammary gland modeling operations: mammary

augmentation, breast reduction, mastopexy, mammary reconstruction, mastectomy for gynecomastia, prophylactic mastectomy (under the mamologist supervision); c) body modeling operations: abdomenoplasty, liposuction, thigh lifting, lower body lift, brahioplastia, torsoplasty, buttock augmentation, calf augmentation; d) primary varicose veins surgery: flebectomy, varicose sclerosis; e) surgical scar correction; f) skin transplantation (skin grafting, autografs, allografs etc.); g) intimate aesthetic surgery (hymenoplasty, faloplasty etc.); h) excision and removal of deep cutaneous formations (hypoderm, muscle tissue etc.); i) reconstruction of fingers (sindactilia, Dupuytren's disease); j) other plastic and / or beauty interventions [33; 34; 38].

Final Considerations

The above discussions demonstrate that aesthetic medicine is not a myth, but a reality, which is a vast, profitable and attractive interdisciplinary field for both dermatologists and other specialists. [2] Unfortunately, sometimes, cosmetologists with no higher medical education can be met or with higher medical degree, but without postgraduate medical studies and no evidence of activity in the very field. The Commission for assessing the professional skill compliance for healthcare professionals working in the field of dermatocosmetology proves that fact. According to it, 91 cases were submitted to the expertise in 2017 [51].

The certification of the applicants was carried out in accordance with the criteria approved by the Order no.129 P§5 of 02.11.2017 regarding the completion of Annex 1 to the Order no.608 dated from 20.07.2017 on the Regulation for the organization and functioning of the Commission for assessing the professional skill compliance for healthcare professionals working in the field of dermatology and cosmetology. Thus, according to article No 11.1 of this annex, it has been decided:

- a) implicit certificates 50 persons, out of which 44 dermato-venereologists and 6 postgraduate doctors in the field of professional training, 0912 Medicine, who hold 300 or more of continuous medical education (CME) credits in dermatology and cosmetology;
- b) complementary studies are recommended to gain skills in dermatology and cosmetology (508 hours per total) 26 postgraduate doctors in the field of vocational training, 0912 Medicine, who hold less than 300 CME credits in dermatology;
- c) studies at Residence is recommended, based on a contract or study fee, at Specialty of Dermatovenereology 4 doctors without postgraduate medical studies with evidence-based practice in the field;
- d) rejected cases 11 persons, out of which 2 persons with no higher medical education, 3 with higher medical education, but with no postgraduate medical studies and no evidence-based practice in the field, 6 with higher medical and postgraduate medical studies (other than Dermatovenereology), but with no evidence-based practice in the field.

As there has been noticed, aesthetic medicine does not yet have a certain status in the health care system of the Republic of Moldova. This can be explained by some ambiguities within the existing legal framework. For these reasons and many others, including the public perception and myths of the people (cosmetician = cosmetologist), there still persists a number of problems as:

- 1. The existence of beauty cabinets/salons, which have the right to provide only non-medical services (care and beauty) but which however provide medical services as well (beauty and treatment) with no medical staff present;
- 2. The existence of aesthetic centers/clinics which employ medical staff who are: a) doctors with no Internship, Residence or Fellowship studies; b) doctors from other fields (emergency medicine, neurology, family medicine) with no skills in dermato-cosmetology; c) specialists with no higher medical education (biologists, chemists etc.);
- 3. The existence of aesthetic centers/clinics, where dermato-cosmetologists are not professionally assessed or those who do not present themselves to the Attestation Commission of the Ministry of Health.

Conclusions

In the context of the above-mentioned, we consider it appropriate to carry out a research in order to evaluate the aesthetic medicine services of the Republic of Moldova. Strengthening management capabilities will enhance the quality of medical services in these specific areas: mini-invasive aesthetic medicine (dermato-cosmetology) and invasive aesthetic medicine (aesthetic surgery).

References

- Mousavi SR. The ethics of aesthetic surgery. J Cutan Aesthet Surg. 2010;3(1):38-40.
- Beylot C. Place de la cosmétologie et de l'esthétique en dermatologie [Place of cosmetology and aesthetics in dermatology]. Les Nouvelles dermatologiques [Dermatology news]. 1998;17(4):244-248. French.
- 3. Dissanayake E. Homo aestheticus: where art comes from and why. Seattle: University of Washington Press; 1995. 320 p.
- 4. Nedelciuc B. Metamorfozele frumuseții între rafinament și vulgaritate. [The metamorphoses of beauty between refinement and vulgarity]. In: [Proceedings of the "Gh. Năstase Days" Dermatology Conference]; 2014; Iasi (Romania). p. 46-47. Romanian.
- Popovici C. Dialog cu frumusețea și sănătatea. [Dialogue with beauty and health]. Chisinau: Universitas; 1992. 187 p. Romanian.
- 6. Eco U. Istoria frumuseții. [History of beauty]. Bucharest: RAO; 2012, 440 p. Romanian.
- Muset Gh, Nedelciuc B, Valuta A. Dermatologia incotro? sau dermatologia incotro! [Where are we coming from and where are we going to?]
 In: [Proceedings of the "Gh. Năstase Days" Dermatology Conference];
 2010; Iaşi (România). p. 19-20. Romanian.
- 8. Atiyeh BS, Rubeiz MT, Hayek SN. Aesthetic/Cosmetic Surgery and ethical challenges. Aesthetic Plast Surg. 2008;32(6):829-39.
- Wiesing U. Ethical aspects of aesthetic medicine. In: Prendergast P, Shiffman M. Aesthetic medicine. Berlin: Springer Berlin Heidelberg; 2012. p. 7-11.
- Edmonds A. Can medicine be aesthetic? Med Anthropol Q. 2013;27(2):233-52.
- 11. Goisis M, editor. Injections in aesthetic medicine: atlas of full-face and full-body treatment. Milan: Springer; 2014. 297 p.
- 12. De Maio M, Rzany B. Injectable fillers in aesthetic medicine. 2nd ed. Berlin, Heidelberg: Springer; 2014. 174 p.
- 13. Raulin C, Karsai S, editors. Laser and IPL technology in dermatology and aesthetic medicine. Heidelberg: Springer; 2011. 419 p.

- 14. Nedelciuc B, Dermatovenerologie eponimică, toponimică și acronimică [Eponymic, toponymic and acronymic dermatovenerology]. Chisinau: [Central Printing House]; 2010. 210 p. Romanian.
- 15. De Maio M, Rzany B. The male patient in aesthetic medicine. Berlin, Heidelberg: Springer; 2009. 239 p.
- André P, Payne CR. The origins of European Society of Cosmetic & Aesthetic Dermatology and Journal of Cosmetic Dermatology. J Cos Derm. 2002;1(1):4-7.
- 17. Evenou P. Gestione globale dell'invecchiamento cutaneo: rispettive indicazioni della cosmetologia e delle diverse tecniche [Global management of skin aging: respective indications of the cosmetology and of the different techniques]. EMC-Cosmetologia Medica e Medicina degli Inestetismi Cutanei. 2007;4(1):1-7. Italian.
- Klassen A, Jenkinson C, Fitzpatrick R, Goodacre T. Patients' health related quality of life before and after aesthetic surgery. Br J Plast Surg. 1996;49(7):433-8.
- Ching S, Thoma A, McCabe RE, Antony MM. Measuring outcomes in aesthetic surgery: a comprehensive review of the literature. Plast Reconstr Surg. 2003;111(1):469-82.
- Moss TP, Harris DL. Psychological change after aesthetic plastic surgery: a prospective controlled outcome study. Psychol Health Med. 2009;14(5):567-72.
- 21. Hodgkinson DJ. Identifying the body-dysmorphic patient in aesthetic surgery. Aesthet Plast Surg. 2005;29(6):503-9.
- Smith SP Jr, Williams EF. The delivery of aesthetic medicine: illegal or not? Facial Plast Surg Clin North Am. 2007;15(2):265-71.
- Levy LL, Emer JJ. Complications of minimally invasive cosmetic procedures: prevention and management. J Cutan Aesthet Surg. 2012;5(2):121-32.
- Wollina U, Goldman A, Naoum C. [Side effects in aesthetic medicine. Spectrum, management and avoidance]. Hautarzt. 2013;64(3):155-62. German.
- Raulin C, Karsai S, Schmitt L. Complications in Laser surgery and IPL treatment. In: Raulin C, Karsai S, editors. Laser and IPL technology in dermatology and aesthetic medicine. Heidelberg: Springer; 2011. p. 333-344.
- 26. Boon Harold Tan K. Aesthetic medicine: a health regulator's perspective. Clin Gov. 2007;12(1):13-25.
- Metelmann HR, Waite PD, Hammes S. Quality standards in aesthetic medicine. In: Raulin C, Karsai S, editors. Laser and IPL technology in dermatology and aesthetic medicine. Heidelberg: Springer; 2011. p. 377-381
- Wagener DL. Dermatology practice management assures practice development and efficiency. Semin Cutan Med Surg. 2000;19(3):170-2.
- 29. Kuechel MC. Aesthetic medicine: practicing for success. Sudbury: Jones and Bartlett Publishers; 2004, 382 p.
- Nedelciuc B, Dumbraveanu I, Cardaniuc C. Tehnologiile informaționale în medicină [Information technologies in medicine]. Curierul Medical (Chisinau). 2016;59(3):27. Romanian.
- 31. Health & Beauty Online Journal [Internet]. Nedelciuc B, editor in chief. Chisinau: Health & Beauty Online Journal, c2018 [cited 2018 Feb 13]. Available from: www.e-dermatologie.md. Romanian.
- 32. Nedelciuc B. Sindromul seboreic [Seborrhoeic syndrome] [Internet]. In: [Eu TV channel (Chisinau): TV program fom 2009 Sep 28]. [cited 2018 Jan 28]. Available from: https://www.youtube.com/watch?v=KA9clEfJaFU. Romanian.
- 33. Nedelciuc B, Contu Gh. Medicina estetică și componentele ei: similitudini, diferențe, oportunități. [Aesthetic medicine and its components: similarities, differences, opportunities.]. In: [4th National Congress on Dermatovenerology and Cosmetology with international participation: Abstracts]; 2010 Sep 23-25; Chisinau; 2010. p. 55-57. Romanian.
- 34. Nedelciuc B, Betsiu M, Gogu V, Emets Iu. Kosmetika i kosmetologiia: grani soprikosnoveniia i otlichiia. Meditsinskie i iuridicheskie aspekty [Cosmetics and cosmetology: the boundaries of contacts and differences. Medical and legal aspects]. In: [1st Congress Euro-Asian Association of Dermatovenerologists: Abstracts]; 2011 March 25-26; Kiev (Ukraina); 2011. p. 58. Russian.
- Nedelciuc B. [Regulation for cosmetologists] [Internet]. In: [Reality TV channel (Chisinau): TV program from 2017 April 11]. [cited 2018

- Jan 28]. Available from: https://www.youtube.com/watch?v=VLC3-dBoEf8. Romanian.
- 36. [Order of the Ministry of Health of the Republic of Moldova no. 48d of 31.01.2017 as regards to the establishment of the working group on the evaluation of the cosmetic and aesthetic medicine service]. Romanian.
- 37. [Order of the Ministry of Health of the Republic of Moldova no. 477 of 15.06.2017 concerning the approval of the Action Plan for the regulation of activity in the field of dermato-cosmetology]. Romanian.
- 38. [Order of the Ministry of Health of the Republic of Moldova no.478 of 15.06.2017 concerning the approval of the Algorithm for the differentiation of professional competences in cosmetics, dermato-cosmetology, plastic surgery, aesthetic and reconstructive microsurgery]. [Official Monitor of the Republic of Moldova]. 2015 Jul 14;(244-251):art. no.1258, Romanian.
- 39. [Order of the Ministry of Health of the Republic of Moldova no.608 of 20.07.2017 regarding the organization of compliance assessment regarding the professional skills of medical staff, who work in the fields of cosmetology and dermatology]. Romanian.
- 40. Popovici A. Dermatofarmacie și cosmetologie [Dermatopharmacy and cosmetology]. Bucharest: Editura medicala; 1982. 268 p. Romanian.
- 41. [Decision of the Government of the Republic of Moldova no. 853 of 14.12.2015. Nomenclature of vocational training areas, specialties and qualifications for secondary and non-tertiary post-secondary]. [Official Monitor of the Republic of Moldova]. 2015 Dec 18;(340-346):art. no. 957. Romanian.
- 42. [Order of the Ministry of Labor, Social Protection and Family Welfare of the Republic of Moldova no. 22 of 03.03.2014, Classification of Occupations of the Republic of Moldova (CORM 006-14)]. [Official Monitor of the Republic of Moldova]. 2014 May 23;(120-126):art. no. 670. Romanian.
- 43. [Decision of the Government of the Republic of Moldova No. 193 of 24.03.2017, Regulation on the Adult Continuous Education]. [Official Monitor of the Republic of Moldova]. 2017 March 31;(92-102):art. no. 266. Romanian.
- 44. [Education Code of the Republic of Moldova no.152 of 17.07.2014]. [Official Monitor of the Republic of Moldova]. 2014 Oct 24;(319-324):art. no. 634. Romanian.
- 45. Hirjau V, Lupuleasa D, Dumitrescu AM. Dermocosmetologie [Dermocosmetology]. Iasi: Polirom; 1998. 206 p. Romanian.
- 46. [The Law of the Government of the Republic of Moldova no.142 of 07.07.2005, Nomenclature for the vocational training areas and specializations for academic staff development at higher educational institutions, cycle I]. [Official Monitor of the Republic of Moldova]. 2005 Jul 29;(101-103):art. no. 476. Romanian.
- 47. [Order of the Ministry of Health of the Republic of Moldova no.175, P§2, dated from 23.12.2015, Nomenclature of specialties for post-graduate education through residency studies]. [Official Monitor of the Republic of Moldova]. 2017 Jan 6;(2-8):art. no.9. Romanian.
- 48. [Order of the Ministry of Health of the Republic of Moldova no. 608 of 20.07.2017, Organization for the assessment of the professional skill compliance of the medical staff working in the field of dermatocosmetology, Annex no.1 Regulation working in the field of dermatocosmetology]. [Official Monitor of the Republic of Moldova]. 2017 Aug 4;(277-288):art. no. 1449. Romanian.
- 49. [Order of the Ministry of Health, Labor and Social Protection of the Republic of Moldova no.129 P§5 of 02.11.2017 on the completion of Annex 1 to Order no. 608 of 20.07.2017 on the Regulation for the organization and functioning of the Commission for assessing the professional skill compliance of medical staff working in dermatocosmetology]. [Official Monitor of the Republic of Moldova]. 2017 Nov 24;(411-420):art. no. 2041. Romanian.
- 50. [Proceedings No. 10 of the Dermatovenereology Department of Nicolae Testemitanu SUMPh, Complementary Curriculum for obtaining professional competencies in dermato-cosmetology, Chisinau, 30.11.2017]. Romanian.
- 51. [Proceedings No. 2 of the meeting of the Commission for assessing the compliance of the professional competencies of the medical staff working in the field of Dermato-cosmetology: Commission Report. Chisinau, 28.11.2017]. Romanian.