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Developing Competencies in Facial Harmonization: The Essence of Interdisciplinary Education

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Abstract

Introduction: The field of facial aesthetics continues to evolve rapidly, propelled by innovations in techniques and products. The need for continual updating is crucial for professionals who apply procedures such as botulinum toxin and facial fillers.

Objective: This review aims to identify and analyze studies discussing the practices of continuous education in facial aesthetics, as well as their ethical and practical implications. The selection of studies aims to highlight the most recent and effective approaches in training professionals capable of integrating technical and ethical knowledge into their daily practice, reflecting the complexity and multidimensionality of this continuously evolving field.

Methodology: This study adopts an interdisciplinary methodology, involving enriching dialogue between health professionals and educators. It employs an integrative review of the literature performed on the main academic databases, with a particular focus on PubMed.

Conclusion: Continuous education is crucial for the development of the competencies of injector professionals, enhancing their ability to meet patient expectations and improving the quality of care in the sector with the aid of technical and ethical enhancement.

Keywords: Continuing Education, Skills Development, Botulinum Toxin, Fillers, Professional Ethics.

Introduction

The practice of facial aesthetics has evolved remarkably, driven by technological advancements and an increasingly deep understanding of human anatomy. In a world where physical appearance can significantly influence quality of life, facial harmonization procedures have grown in popularity and sophistication. This article discusses the importance of the detailed knowledge presented in workshops and trainings for aesthetic professionals, emphasizing how this knowledge is crucial both for enhancing aesthetic outcomes and for preventing potentially serious complications.

Facial aesthetics training goes beyond teaching application techniques; it extends to in-depth studies of the skin's layers, muscles, subcutaneous adipose tissue, and bone structures. This detailed study is essential for professionals to perform interventions that respect the physical integrity of patients, minimizing the risks of vascular injuries that can lead to serious complications. Moreover, understanding the anatomical variability among individuals is crucial for adapting techniques and choosing the most suitable products for each case, ensuring results that are not only safe but also naturally harmonious.

The implementation of technology enhances the safety of procedures by allowing professionals to avoid high-risk areas during injections. This level of precision is indispensable for raising the standard of care in the field of facial aesthetics, aligning practices with the increasingly high expectations of patients.

In addition to technical aspects, this article also focuses on the importance of ethics in facial aesthetics. In an environment heavily influenced by social media and the growing demand for aesthetic procedures, it is vital that professionals maintain strict ethical conduct. Continuous learning plays an important role in this respect, ensuring that professionals not

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only update their technical knowledge but also reinforce their commitment to practices that respect the health and well-being of patients.

Therefore, continuous training and deepening the study of facial anatomy are essential to ensure that aesthetic professionals can provide services that meet the needs of patients safely and effectively, reinforcing the importance of ethics and responsibility in the practice of aesthetic medicine.

Methodology

For the development of this study, a meticulous data collection was conducted through academic databases such as PubMed, Scopus, and Web of Science. The selection of articles focused on those relevant to the practice and education in facial aesthetics, with a special emphasis on articles discussing the safety of procedures and the importance of detailed anatomical knowledge. The search was limited to articles published in recent years, ensuring that the information is up-to-date with the latest practices and technological advancements. Studies in English and Spanish were included due to their wide availability and relevance in the mentioned databases.

This study adopts an interdisciplinary approach, fostering enriching dialogue between healthcare professionals and educators. The data collected was qualitatively analyzed, aiming to synthesize the information to present a clear perspective on the evolution of teaching methods in facial aesthetics and the impact of these practices on the safety and effectiveness of procedures performed. This methodology was grounded in the desire to integrate multiple perspectives to better understand how continuing education can enhance both technical competencies and ethical skills of the professionals involved.

Discussion

Facial harmonization, a field rapidly evolving due to constant innovations in techniques and products, positions injectors at the center of an aesthetic revolution. Heavily influenced by social expectations and social media, this area not only redefines beauty standards but also underscores the importance of an ethical approach in clinical practice. Facing these challenges, it's crucial for professionals to stay technically updated and develop a deep understanding of the ethical principles guiding their treatments.

The ongoing evolution of facial aesthetics through new techniques and products compels health professionals to keep abreast of the latest developments. Influenced heavily by social media, this field shapes patient expectations and redefines beauty standards, imposing a significant ethical responsibility. Therefore, it's essential for injector professionals to not only refresh their technical knowledge but also deeply understand the ethical aspects of their treatments.

Interdisciplinary courses teach the value of integrating various fields of knowledge to enhance understanding and practical application of skills. Valuing both theoretical and practical education, and adapting to the unique needs of students from different backgrounds, is crucial for preparing well-rounded professionals aware of their social roles. Moreover, aesthetic treatments should always be practiced with a strong ethical commitment. These procedures are not just medical interventions but deeply affect individuals' identity and self-esteem, profoundly impacting their quality

of life¹. Therefore, it is vital for professionals to make ethical choices that consider not just appearance but the overall well-being of their patients.

Workshops and continuous training seminars offer spaces where professionals can learn and practice new techniques while reflecting on the ethical implications of their work. These sessions not only convey knowledge but also foster an environment of dialogue, collaboration, and experience exchange, essential for practicing facial harmonization². Thus, continuous education in aesthetics using injectable products is not merely about technical competence but also a commitment to conscientious and respectful practices. This approach not only prepares professionals to tackle technical challenges but also ensures that patient care is conducted with the utmost respect for each individual's dignity and well-being, genuinely reflecting humanity at the heart of aesthetic treatments.

Legal competencies of specialists in Facial Harmonization should highlight the need for greater integration of practical and theoretical content in the academic curriculum. Dedicated modules in this specialty could significantly improve the preparation of future professionals, equipping them with up-to-date and crucial knowledge for safe and responsible practice.

According to Edgar Morin in 'The Seven Complex Lessons in Education for the Future'³, the complexity of modern education should encompass training that goes beyond technique, incorporating a deep understanding of human and environmental interconnections, as well as preparation to handle uncertainties. He also emphasizes the importance of understanding the human condition and global interdependence, critical elements in education in facial aesthetics, where professionals must be trained not only to apply advanced treatments but also to act with ethical responsibility and social sensitivity. By integrating these insights, training in facial harmonization can be profoundly enriched, aligning with contemporary demands and promoting practices that ensure the well-being and satisfaction of patients.

In 'The Adult Learner'⁴, the authors dive into the significant differences between adult and child learning processes, emphasizing the need for tailored educational approaches. Adults bring a wealth of life experiences to their learning, which should be leveraged as valuable resources in educational settings. The book underscores the effectiveness of integrating theoretical teaching with practical application, particularly how adults benefit when learning material is directly relevant to their professional and personal lives. Furthermore, intrinsic motivation and the practical relevance of the learned material are highlighted as crucial for adult education. Educators are encouraged to facilitate learning by promoting self-reflection and linking educational content to the learners' personal goals and interests, enhancing both the relevance and impact of the education. This approach not only helps adults incorporate new knowledge and skills more meaningfully but also supports their ongoing personal and professional development.

Exploring the impact of interdisciplinary education on medical and communication science students, a focus group study highlights the challenges and benefits of integrating knowledge from distinct fields. Students from these areas show varied perceptions of curricular content, educational preferences, and self-assessment of skills, revealing a divide between the theoretical approach favored by communication

students and the practical orientation preferred by future medical professionals. The study suggests that enhancing dialogue and collaboration between disciplines can enrich the educational experience, fostering a broader understanding and respect for different academic methodologies⁵.

In the field of aesthetic treatments, ethical dilemmas emphasize the complexity of maintaining ethical conduct in an industry shaped by social expectations, particularly those influenced by social media. Establishing robust ethical guidelines is crucial to ensure that facial harmonization is recognized as a legitimate component of the healthcare system, not just a profit-driven venture. Building an authentic and patient-centered doctor-patient relationship is vital, requiring careful patient selection, especially in cases like body dysmorphic disorder. Social media pressures can often lead professionals to choose procedures that may not align with the best interests of the patients, underscoring the need for rigorous and conscious ethical practices⁶.

Kolb's learning styles emphasize the importance of actively adapting learning environments to enhance educational experiences, supporting individual learning preferences⁷. Different settings can significantly affect the effectiveness of experiential learning, and more flexible, adaptable spaces can be particularly beneficial in engaging students in ways that align with their unique learning styles. This approach calls for higher education institutions to deeply consider how physical and structural environments can be designed to support diverse and interactive pedagogical methods⁸.

In the context of continuing education in facial aesthetics, the article "Workshops: an important element in medical education" highlights the significance of workshops as dynamic tools for enhancing healthcare professionals' skills. These educational sessions are praised for their ability to actively engage participants in learning processes that integrate theory and practice interactively and immersively. Workshops not only facilitate the transfer of technical knowledge but also foster the development of practical skills and ethical reflection necessary in the field of facial aesthetics. The article emphasizes the importance of careful planning and adapting workshops to the specific needs of learners, ensuring that professional training not only achieves its pedagogical goals but also meets the evolving demands of a constantly changing market.

Dialogic learning practices are emerging as transformative forces in modern educational environments, highlighting how these methodologies foster inclusion and enhance academic performance and social cohesion among students. The dialogic approach engages students effectively, proving pivotal for cognitive and social development by positioning dialogue as a central tool in the educational process¹⁰. These methods have shown effectiveness across various educational contexts, transforming classroom interactions and promoting active student participation. Moreover, it underscores the necessity of developing assessment methodologies that genuinely capture the impact of these educational practices, challenging traditional assessment methods that often fail to recognize the complexity and benefits of this type of education. This analysis demonstrates how dialogue not only enriches the learning experience but also strengthens the social and intellectual skills of students, better preparing them for the demands of the contemporary world.

As facial aesthetic techniques evolve, becoming more

complex and targeting the comprehensive remodeling and rejuvenation of facial structure, the detailed understanding of skin layers, muscles, subcutaneous fat, and bone becomes increasingly critical. In this context, the careful selection of filling materials and the transformative use of ultrasonography for vascular mapping also stand out. Ultrasonography's ability to provide a detailed visualization of blood vessels allows professionals to apply fillers with greater precision, significantly reducing the risks of serious complications¹¹. This approach raises the safety standards and underscores the need for an evidence-based aesthetic practice that incorporates technological advancements, ensuring that all procedures are conducted with maximum safety and effectiveness.

In discussions on facial harmonization practices, it is essential to acknowledge the depth of anatomical knowledge required, which should be emphasized in workshops and aesthetic training sessions. Trainers have a crucial responsibility to highlight not only the potential for aesthetic enhancement but also the importance of preventing serious complications. Well-informed professionals are able to avoid high-risk zones during injections, protecting blood vessels and facial nerves, which is crucial to prevent severe issues like necrosis or blindness. This detailed knowledge also allows for more precise application of fillers and toxins, adapting to individual anatomical variations and respecting the natural structure of the face.

Recent studies and literature reviews have emphasized the dynamic role of botulinum toxin (BoNT-A) in clinical practice, extending beyond its initial cosmetic applications to cover a broad spectrum of therapeutic uses. Over the past decades, the use of BoNT-A has grown exponentially, driven by advances in research and clinical discoveries that confirm its efficacy and safety in treating various conditions associated with muscle contraction and autonomic dysfunctions. Initially celebrated for its aesthetic effects, BoNT-A is now recognized for its wide potential in treating autonomic disorders, highlighting its versatility in diverse clinical applications¹². The formulations of the toxin have been continually improved, enhancing its accessibility and adaptability for use in a variety of clinical contexts, both aesthetic and non-aesthetic, demonstrating its adaptability and effectiveness across various professional fields.

A crucial advancement in the use of BoNT-A has been the elucidation of its mechanism of action, a discovery that has significantly expanded its application horizons beyond conventional uses. Innovations in its formulations and dosages have also played a key role in increasing its therapeutic potential, establishing it as an indispensable tool in the practice of injectable procedures. Such progress underscores the critical importance of continuing education for all injectors: concepts and practices that remained stagnant since the 1980s would not only be obsolete but potentially harmful, considering the advancements in BoNT-A. Thus, constant updating not only drives the practice of injectable procedures but also ensures the safety and well-being of patients, reflecting the vital need to keep healthcare professionals up to date with therapeutic innovations.

In the current context, continuing education plays a critical role, empowering professionals to apply advanced techniques ethically and responsibly, ensuring not only safety but also the well-being of patients. Deepening knowledge in facial anatomy and safe injection techniques is essential for mitigating risks and improving aesthetic

outcomes. In this regard, webinars and medical courses are crucial, as they not only update professionals on the latest practices but also reinforce the commitment to professional ethics, ensuring that aesthetic care extends beyond improving appearance to embrace a holistic approach that considers the overall health and satisfaction of patients¹³.

Initially, the understanding of facial aging focused on the loss of skin elasticity and the formation of superficial wrinkles, limiting interventions to treatments that almost exclusively aimed to smooth these lines. However, advances in research have significantly broadened this perspective, revealing that aging affects not only the surface but also the deep structures of the face, such as bone and fat. This deeper insight has transformed the approach to facial rejuvenation, highlighting that it is a three-dimensional and complex process.

The importance of continuing education in facial aesthetics practice underscores how constant innovations in products and techniques require continual updates by healthcare professionals. This ongoing knowledge is vital to understanding variables such as gender, ethnicity, and cultural ideals that influence the approaches and outcomes of treatments with botulinum toxin and dermal fillers¹⁴. This type of training enables professionals not only to keep up with technological innovations but also to adapt their practices to meet the individual needs of patients, ensuring that procedures enhance aesthetics and respect the uniqueness of each individual. This commitment to education and patient counseling is essential for optimizing results and reinforcing ethics in aesthetic medicine, highlighting the importance of continuous professional development in a rapidly evolving field.

With the advancement in understanding multidimensional changes, innovative techniques have emerged for applying hyaluronic acid fillers and biostimulators that restore volume in strategic areas such as the cheeks and jawline. These techniques not only address the superficial signs of aging but also restructure the subcutaneous support, yielding more natural and lasting results. This refined understanding emphasizes the importance of selecting products that align with the specific needs of each patient, considering both physiological characteristics and aesthetic expectations.

Consequently, selecting the ideal filler requires deep knowledge of the rheological and physicochemical properties of the available products. Such informed and precise choices can significantly enhance the quality of aesthetic results and patient satisfaction, while minimizing the risks associated with the procedures¹⁵. Therefore, continuing education and participation in workshops are essential, as they equip professionals with advanced skills and up-to-date knowledge, ensuring that treatments meet clinical needs and reflect the highest standards of care and safety in facial aesthetics.

Results

The analysis of the collected data revealed that continuing education in facial aesthetics is crucial for ongoing professional development, especially concerning the safety and efficacy of aesthetic procedures. The studies reviewed consistently emphasize the importance of a solid understanding of facial anatomy, highlighting that detailed knowledge of vascular and nervous structures is critical to avoiding serious complications such as vascular injuries and nerve damage.

Additionally, the use of ultrasonography during aesthetic procedures significantly enhances injection safety, allowing professionals to visualize and avoid critical structures. This technology, increasingly adopted in courses and training, is praised for its effectiveness in reducing risks associated with the injections of fillers and botulinum toxin.

The research also indicated a growing appreciation for teaching methodologies that integrate theory with practice, providing professionals with skills directly applicable to their clinical practices. This interdisciplinary and practical approach is essential for preparing professionals capable of performing complex procedures with confidence and competence, reflecting a trend towards more dynamic and interactive teaching in the field of facial aesthetics.

Finally, the results highlight the need for educational policies that support the implementation of updated and technically advanced training programs, ensuring that all facial aesthetics professionals are equipped to meet the contemporary demands of the profession, adhering to the highest standards of care and ethics.

Conclusion

The advancements in education and practices in facial aesthetics underscore the necessity for ongoing, specialized learning. The integration of new technologies, alongside a solid understanding of facial anatomy, has proven essential for conducting safer and more effective treatments. This study emphasizes the importance of detailed and targeted training, which not only covers advanced techniques but also prepares professionals to address the ethical and practical challenges of modern aesthetics. Therefore, it is concluded that continuous training is crucial for developing a responsible and patient-centered aesthetic practice, ensuring that treatments not only meet aesthetic needs but also enhance well-being, aiming to improve patient self-esteem and quality of life.

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