

Review

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# Cutting Edge - an innovative psychosocial training program for healthcare professionals who provide appearance-altering procedures

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**How to cite this article:** Persson M. Cutting Edge - an innovative psychosocial training program for healthcare professionals who provide appearance-altering procedures. *Plast Aesthet Res* 2023;10:17. <https://dx.doi.org/10.20517/2347-9264.2022.90>

**Received:** 9 Aug 2022 **First Decision:** 17 Mar 2023 **Revised:** 10 Apr 2023 **Accepted:** 15 Apr 2023 **Published:** 25 Apr 2023

**Academic Editor:** Marten Basta **Copy Editor:** Ying Han **Production Editor:** Ying Han

## Abstract

Access to psychosocial care is considered a fundamental part of the care for conditions that result in a visible difference, such as cleft lip and palate. At the same time, there is a shortage of trained mental health professionals and structural resources, making it challenging to implement the psychosocial component of care for many healthcare providers worldwide. Therefore, there is a need to find innovative ways to facilitate psychosocial support. This article aims to describe the Cutting Edge Training program that was developed to increase the psychosocial understanding of healthcare professionals who provide care for patients undergoing appearance-altering procedures. The program consists of five modules, with a particular emphasis on social determinants and the impact of living in an appearance-focused society. The developed training program does increase knowledge and awareness of the negative impacts of appearance-related distress and how to improve patient care for those undergoing appearance-altering procedures. Furthermore, it promotes a broader social dialogue about the need to encourage positive attitudes towards diversity in appearance, thus enhancing the future social integration of those who are affected by visible differences.

**Keywords:** Psychosocial, appearance-altering procedures, visible differences, body image, education, cleft lip and palate



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## INTRODUCTION

Mental health is a significant problem worldwide, affecting nearly one billion people; globally, one in seven 10-19 years old experience a mental disorder<sup>[1]</sup>. Our society faces a substantial challenge as healthcare professionals who provide appearance-altering procedures will likely encounter patients who are experiencing mental health problems and psychosocial issues. At the same time, the gap between the demand for mental health services and the supply is considerable<sup>[1]</sup>. The median government expenditure on mental health per capita (US\$) in the world is approximately in low-income countries \$0.08, lower-middle-income countries \$0.37, upper-middle-income countries \$3.29, high-income countries \$52.73<sup>[2]</sup>. According to another study, after 12 months of receiving a diagnosis, only 13.7% of individuals from lower-middle-income countries, 22.0% from upper-middle-income countries, and 36.8% from high-income countries underwent treatment<sup>[3]</sup>. The data demonstrate, together with other studies, that there is a devastating shortage of trained mental health professionals in the world<sup>[4,5]</sup>. For conditions that result in a visible difference, such as cleft lip and palate, access to a psychologist is viewed as a fundamental part of the provision of care<sup>[6]</sup>. Unfortunately, this recommendation can be challenging for many healthcare providers due to the lack of mental health professionals or structural resources<sup>[2]</sup>; therefore, it is essential to find innovative ways to enable psychosocial support. There is positive evidence that healthcare professionals can be trained to provide psychosocial care<sup>[1]</sup>, and concurrently, there is a willingness among healthcare professionals to undergo this type of training. A study that examined the training needs for supporting patients with body dissatisfaction by surveying 718 healthcare professionals from five European countries revealed that 87% were interested in learning how to facilitate psychosocial support. If an accredited training course were provided, 70% stated they would attend<sup>[7]</sup>. This is further supported by the fact that it is also established that short courses for healthcare professionals can significantly increase knowledge<sup>[8-11]</sup>. It is essential for healthcare professionals who provide care for individuals with a cleft to understand both the psychological constructs and risk factors for those undergoing appearance-altering procedures together with an evidence-based approach to mitigating the potential negative psychosocial impacts, which is precisely what the Cutting Edge Training program does.

In order to gain a better understanding of the Cutting Edge Training program, it is essential to acknowledge various factors that can affect the psychosocial health of individuals with visible differences, including cleft. Such factors include living in an appearance-focused society, as well as the potential effects of social determinants and health literacy.

## LIVING IN AN APPEARANCE-FOCUSED SOCIETY

During a significant portion of their teenage years, young individuals frequently engage in comparing themselves to others based on physical appearance and other attributes. It is also the time when romantic interests are starting to be explored. Simultaneously, body image awareness becomes even more prominent, and early adolescence is a particularly vulnerable period<sup>[12]</sup>. Body dissatisfaction is relatively common, and it is estimated that about two-thirds of children and adults are not satisfied with their body image<sup>[13,14]</sup>. Body image can be described as how an individual thinks, feels, and treats their body based on their subjective view of appearance and body functionality, which can be either poor or good.

Groups that might be more prone to poor appearance satisfaction are those with a visible difference, such as cleft lip and palate. Research has shown that in individuals with a cleft, as they progress from a young age to adolescence and young adulthood, their appearance satisfaction decreases<sup>[15-17]</sup>. This decrease in appearance satisfaction can result in emotional and social difficulties<sup>[17,18]</sup>. For example, one risk factor that contributes to poorer psychosocial outcomes for individuals with a cleft is if they are being teased or bullied<sup>[15,19-21]</sup> based on their condition. It is, though, important to understand that many adolescents and young adults with a

cleft are doing well overall. The critical aspect is to be able to identify those that are not. Therefore, it becomes imperative that healthcare professionals are aware of other factors that can influence psychosocial well-being besides the potential psychosocial impact of having a cleft. Other contributable factors that can result in poor body image are those individuals engaging in upward appearance comparison and/or striving to meet the societal appearance ideal<sup>[22,23]</sup> in combination with being influenced negatively by social media<sup>[24-26]</sup>. There is also an uptake of marketing and advertising of cosmetic procedures<sup>[27]</sup> promoting unrealistic body ideals and suggesting that if you have the perfect body and appearance, you will be happy. Individuals who spend a significant amount of time on social media and, at the same time, are not satisfied with their appearance are more likely to request or undergo appearance-altering procedures<sup>[28-30]</sup>. Adolescents and young adults with a cleft are also exposed to these unrealistic ideals, which can influence how they view themselves and how satisfied they are with their treatment. It is essential to understand that poor body image is a risk factor for low self-esteem<sup>[31]</sup>, depression and depressive symptoms<sup>[32]</sup>, anxiety disorders and anxiety symptoms<sup>[33]</sup>, risky health behaviours<sup>[34]</sup> and impairment of quality of life<sup>[35]</sup>.

These unrealistic beauty ideals in our society and their consequences might also influence those undergoing appearance-altering procedures as part of their treatment, such as individuals with a cleft. Research shows that patients with unrealistic expectations are more likely to have poor postoperative outcomes<sup>[36,37]</sup>. Therefore, healthcare professionals must have the knowledge to address the expectations of the patient<sup>[38]</sup> and the possibility of implementing other interventions, such as counselling and liaising with the school<sup>[39]</sup>, if those resources are available.

When managing a patient's expectations and psychosocial well-being, it is fundamental to understand if any other risk factors are associated explicitly with the condition. For individuals with a cleft, research has shown that they are at significantly higher risk of being diagnosed with a psychiatric disorder<sup>[40]</sup> or neurodevelopmental disorder<sup>[41,42]</sup> compared to the general population. This is further recognised by a Danish<sup>[43]</sup> and a Swedish<sup>[44]</sup> study that established that psychotropic medication prescription in individuals with an orofacial cleft significantly increased compared with the general population.

The above factors can considerably impact the overall provision of care and treatment outcomes related to the patient's expectations and psychosocial status. However, it is not only these factors a healthcare professional needs to understand. Other fundamental factors that need to be understood by healthcare professionals to facilitate the equitable provision of care to their patients are social determinants and health literacy.

## **SOCIAL DETERMINANTS AND HEALTH LITERACY**

From an individual perspective, accessibility to health care is often determined by social group, socioeconomic status, place of residence, ethnic group, educational attainment and/or gender<sup>[45]</sup>. It is imperative that healthcare professionals consider how these inequalities impact their patients and families. For example, when looking at geographical health inequalities within countries, there is a nine-year difference in life expectancy between English neighbourhoods<sup>[46]</sup> or up to eight years between districts in Oslo, Norway<sup>[47]</sup>.

Individuals who belong to vulnerable groups are at significant risk of having low health literacy. Factors that influence the health literacy level include but are not limited to education, disability, socioeconomic status, ethnicity, gender, and age. Currently, in Europe, between one in every three to nearly one in every two individuals may not be able to understand essential health-related information<sup>[48]</sup>. Low health literacy results in individuals having difficulty accessing healthcare services, understanding the information, and making

informed treatment decisions<sup>[49]</sup>.

A low level of education is often correlated with low health literacy. In the European Union, between the ages of 25-54 years, 18.3% have low educational attainment<sup>[50]</sup>. Moreover, educational attainment is linked to income levels, and low-income people report higher unmet healthcare needs<sup>[51]</sup>. Research also shows that individuals who live below the poverty level have lower health literacy levels than those living above the poverty level<sup>[52-54]</sup>.

A factor influencing individuals' risk of poverty or social exclusion is their origin and countries of residence. Data indicate<sup>[55]</sup> that individuals born in a non-EU country have a 45% risk of poverty or social exclusion, whereas those born in an EU country but living in another country have a 26% risk. For those born and living in the same country, the risk is 20%. Some of the most significant inequalities in health literacy occur among groups from different cultural backgrounds<sup>[56]</sup> and those whose native language is different from that spoken in the country they reside in<sup>[57]</sup>, and currently, 23.7 million non-EU citizens are living in the EU<sup>[58]</sup>.

Research shows that low levels of health literacy contribute to increased hospitalisation<sup>[59]</sup>, more frequent use of emergency departments<sup>[60]</sup>, and increased mortality<sup>[61]</sup>. Evidence also indicates that low health literacy negatively impacts parent and caregiver behaviour<sup>[62]</sup> and influences health outcomes adversely for children, not only in the short term but also in the long term<sup>[63]</sup>.

The health impact is also evident for young people with low health literacy since they become more prone to engage in risky health behaviours (for example, substance abuse, unsafe sex), unhealthier diet, heavier weight, underuse of health prevention services and more likely to self-report lower general health<sup>[64,65]</sup>.

It is also essential to know if a patient group has additional risk factors that might negatively influence their risk of experiencing poor health literacy, such as educational achievement. Individuals with a cleft are already at possible risk for poor educational outcomes<sup>[66-78]</sup>. If the individual with a cleft is also a member of one or more of the following groups: lower socioeconomic status, social exclusion or risk for poverty, or being an immigrant, migrant, or refugee magnifies the complexity. It becomes paramount that healthcare professionals must be aware of these mentioned factors and understand how they need to adjust their interaction in accordance with the patient's background to deliver a non-discriminatory and inclusive care provision. Therefore, healthcare professionals need to allocate resources and interventions proportionate to the level of disadvantage, known as proportionate universalism<sup>[79]</sup>.

## CUTTING EDGE TRAINING

The following section will provide a broad overview of the European Union-funded project, "*Cutting Edge Training: Optimising medical outcomes for patients undergoing appearance altering procedures via innovative training of healthcare professionals*" (Erasmus+ 2017-1-SE01-KA202-034533). The project consisted of partners from Bulgaria, Italy, Netherlands, Norway, Romania, and Sweden that represented a combination of researchers, healthcare professionals, and pedagogical experts. They developed a practical continuing education and training package for healthcare professionals with limited or no access to psychological expertise about the psychiatric and psychosocial variables associated with disfigurement and appearance-altering procedures. The developed training material is based on research evidence on how to facilitate the best possible learning environment for healthcare professionals, which includes interactive seminars and small groups together with practical components that are conducive to implementing behavioural change and influencing care processes<sup>[80-84]</sup>. All the developed training material is currently available as an open resource on the website: <http://cuttingedgetraining.nu>.

The initial component of the project was to examine the healthcare professionals' views on the provision of psychosocial care based on their experience and reflection on how they would like to receive training that would enhance their knowledge and skills in this area. Of the sixty-six healthcare professionals who participated in the survey, all agreed that it is paramount to address the psychosocial issues when a patient undergoes appearance altering procedure<sup>[38]</sup>. The consortium then continued developing five modules focusing on theoretical knowledge, case studies, and practical exercises:

1. Living in an appearance-focused society
2. Risk and protective factors; promoting resilience
3. Improving patient care - communication
4. Improving patient care - assessment & selection
5. Improving patient care - support & intervention

The developed training course was piloted in Bulgaria, Italy, and Rumania, and the feedback was overwhelmingly positive from 46 healthcare professionals who underwent the training. In addition to the feedback, the participant completed a purpose-designed knowledge, attitude and practice behaviour (KAPb) test<sup>[85]</sup>, administered before and after the Cutting Edge training. The healthcare professionals had to rate their confidence level from one to ten (1 = not at all confident and 10 = very confident) on 26 items. Examples of items are “*I feel comfortable explaining how psychological vulnerability may affect the outcome of surgery*” and “*I can describe the key aspects that are related to positive adjustment*”. The result indicated via a paired t-test ( $P$ -value < 0.05) that the training significantly increased the participants' knowledge. In addition, Dr Alex Clark, a former consultant clinical and health psychologist specialising in plastic and reconstructive surgery and current research interests focus on the development of training and resourcing of clinicians in recognising psychological vulnerability across different plastic surgery settings, conducted a detailed evaluation of the Cutting Edge Training program. Based on the feedback and evaluation<sup>[86]</sup>, a summary of the five modules is described in more detail to elucidate the content and pedagogical structure.

#### **Module one: living in an appearance-focussed society**

This module introduces the factors and processes that drive investment in appearance, stressing the social and cultural context and the impact of messages that reach us via various media. The module begins with introducing four case histories, which are to be used throughout the training so that the learning points are immediately identified with patient experience, and their relevance made clear. The module's second half examines the challenges associated with living with an unusual appearance, whether resulting from injury, congenital anomalies, disease, or illness. Participants are invited to consider how the social and cultural factors discussed earlier will impact this group. The case histories allow them to focus on the factors affecting requests for treatment and expectations of the outcome. The module, therefore, outlines the relevant theoretical basis for understanding patient challenges and then relates this directly to clinical practice.

The module is well illustrated with everyday examples so that each point is made both as academic evidence but also as a “real world” example. This helps to overcome any potential problems with language (particularly for those for whom English is a second language). The module is easily accessible as a self-directed learning task, with each point very clear. Using case histories allows participants to focus very

practically and think about the impact on their patients.

### **Module two: risk and protective factors: promoting resilience**

This is a detailed module examining risk and resilience and developing how these factors impact undergoing appearance-altering procedures and health care provision. At its heart is the counter-intuitive fact that perplexes many clinicians; this is the lack of relationship between the physical extent of a disfiguring condition and its impact on the individual. Many clinicians express concern that someone complains of distress that is “out of proportion to the extent of the anomaly”. Inversely, the patient who is perfectly happy with a surgical outcome with which the surgeon is privately rather disappointed becomes a conundrum. This module explains this relationship and what this means in terms of managing patient expectations.

A vital example of this “exaggerated distress” occurs in body dysmorphic disorder (BDD). BDD is a very disabling condition that is increasingly prevalent in clinical populations and, therefore, must be fully understood<sup>[87,88]</sup>. Some of the psychological concepts within this module are challenging; however, as with module one, they are illustrated with everyday examples.

The module again discusses the case histories, this time regarding resilience and risk. Participants are invited to reflect on the factors discussed in the module and how these impact the different scenarios. This interactive task is a “real world” task in which participants are asked to use the new knowledge they have acquired, think for themselves about how this impacts these individuals and start to design how their service might change to support patients.

### **Module three: improving patient care: communication**

This vital module is a real stand-out component of the training. It begins by examining health literacy in European populations, highlighting the disadvantage with which most people tackle the demands of life and generally work and manage health conditions. The following section looks at communication skills, which are often poor in clinical settings where people are busy or preoccupied with record keeping. A systematic review showed that surgeons should pay more attention to the emotional and psychosocial aspects of care<sup>[89]</sup>. Research has shown that healthcare professionals sometimes fail to address their patients’ worries and emotions<sup>[90]</sup>, which can lead to longer consultation times<sup>[89]</sup>. Conversely, directly addressing patients’ concerns and worries often leads to shorter consultation times<sup>[91]</sup>.

Both verbal and non-verbal communication are discussed, with several interactive exercises to embed the concepts. Having reflected on and practised their communication skills, the second part of the module considers how essential communication skills are for people undergoing appearance-altering procedures. In clinical practice, much time is spent on teaching and adapting communication skills since these are beneficial to patients. Indeed, good communication skills are a significant predictor of resilience and well-being and are a modifiable factor. The practical examples described here are those commonly used in specialist UK clinics and known to be effective. It is established that clinical staff can easily be taught how to utilise these strategies in their clinical setting once they know the importance of asking relevant questions and responding to them.

### **Module four: improving patient care: assessment and selection**

Module four considers the need for assessment for those undergoing appearance-altering procedures (reconstructive and cosmetic patients) and the application of this process to understanding the motivation for the procedure and patient support needs.



The module considers the clinician's behaviour, suggesting strategies for opening a conversation and pinpointing the specific questions that might help identify the patient's motivation for the procedure. It also introduces the concept of extrinsic versus intrinsic motivation, linking this with the research evidence to show that satisfaction with outcomes is linked to intrinsic motivation (e.g., seeking improvement in self-confidence) rather than extrinsic factors (e.g., getting a better job, getting new friends). The key objective of differentiating between surgical and psychosocial goals to help manage patient expectations of outcome is clearly explained.

Clinical staff often ask for assessment tools to help them screen for predictive factors systematically and provide a basis for routine pre-and post-assessment as part of an audit. This model introduces an example of an assessment aid and how its use is designed to support (and not replace) the clinical interview. A sample pathway for patients identified as needing further support is outlined, along with advice about how a referral can be delivered. The module stresses the roles of all clinic staff.

The vital subject of informed consent forms is the final information component of this training section, discussing the processing of risk information and ensuring that the patient has understood the realistic potential benefits and risks of the planned procedure as far as possible.

The module closes with an exercise where participants consider how the patients described in the case histories might benefit from the assessment and selection processes described. Detailed handouts are provided to help participants formulate how contextual factors combine to underpin motivation for the appearance altering procedure for each case example and suggest management strategies.

#### **Module five: improving patient care: support and intervention**

The final training module reviews the different interventions designed to manage the psychosocial aspects of appearance concerns and the evidence for their effectiveness. The module introduces the Centre of Appearance Research triangle of graded interventions<sup>[92]</sup>, allowing participants to differentiate between lower-level interventions that can be provided for everyone (e.g., information) and specialist interventions such as CBT, delivered by those with specialist training. Finally, the case histories are re-visited with handouts to allow participants to use this information to develop a management and support pathway for each example.

## **CONCLUSION**

It is essential that professional development and training for healthcare professionals working with appearance-altering procedures and outcomes are available so they can understand the impact of the psychological variables<sup>[93]</sup>. This is especially relevant for healthcare professionals who provide care for adolescents and young adults with a cleft; as described in this article, several variables need to be considered to facilitate equitable care. One of the strengths of the Cutting Edge Training project was that by utilising a transnational project approach, the consortium could generate evidence-based training materials that functioned effectively in the context of European diversity in social and cultural aspects in various health settings. The developed training program does increase knowledge and awareness of the negative impacts of appearance-related distress and how to improve patient care for those undergoing appearance-altering procedures. Furthermore, it promotes a broader social dialogue about the need to encourage positive attitudes towards diversity in appearance, thus enhancing the future social integration of those who are affected by visible differences - particularly those with additional risk factors for discrimination, including migrants, refugees, and those from other socially disadvantaged groups.

## DECLARATIONS

### Acknowledgements

To the project partners involved in the European project:

Youri Anastassov, Plastic Surgeon and Professor, Asociatia Licevi Anomalii, Plovdiv, Bulgaria. Regina Khater, Plastic Surgeon, Asociatia Licevi Anomalii, Plovdiv, Bulgaria. Radu Spataru, Senior Paediatric Surgeon and Associate Professor, Spitalul Clinic de Urgenta Pentru Copii MS. Curie, Bucharest, Romania. Francesca Nobile, Psychotherapist and PhD, Ars Chirurgica SRL, Padova, Italy. Hildur Skuladottir, Medical Doctor, PhD, Department of Plastic Surgery and Burns, Helse Bergen Haukeland University Hospital, Bergen, Norway. Thomas Nilsen, Director, Triskelion- Forening for anvendt forskning og kunnskapsmobilisering, Hafersfjord, Norway. Nichola Rumsey, Professor Emerita, Triskelion- Forening for anvendt forskning og kunnskapsmobilisering, Hafersfjord, Norway. Gareth Davies, European Cleft Organisation, Rijswijk, The Netherlands.

### Authors' contributions

The author contributed solely to the article.

### Availability of data and materials

Not applicable.

### Financial support and sponsorship

This work was supported by the European Commission (Agreement number: 2017-1-SE01-KA202-034533). This article reflects the views only of the author, and the European Commission cannot be held responsible for any use which may be made of the information contained therein.

### Conflicts of interest

The author declared that there are no conflicts of interest.

### Ethical approval and consent to participate

Not applicable.

### Consent for publication

Not applicable.

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