

**NELSON Y HOWARD**

DDS AAACD

Nelson graduated from the UCLA School of Dentistry in 1986 and completed a General Practice Residency at the VA Medical Center in West Los Angeles, California. He presently maintains two practices limited to cosmetic, functional, implant, restorative, and transgender enhancement dentistry at his Centers for Advanced Cosmetic & Smile Transformation Dentistry in San Marcos and Rancho Bernardo, California.

**CONTACT**
 [www.transgenderdentistry.com](http://www.transgenderdentistry.com)
 [www.nyhowarddds.com](http://www.nyhowarddds.com)
**ENHANCED CPD**

GDC anticipated outcome: C

CPD hours: one

Topic: Restorative dentistry

**Educational aims and objectives:**

To discuss considerations of treatment and care for transgender patients seeking cosmetic dental treatments. This article qualifies for one hour of enhanced CPD; answer the questions on page 96.



**D**ental care has been around for thousands of years. Scientific evidence of caries control in human teeth has been discovered in teeth between 6,500 and 13,000 years ago (Bernardini et al, 2012; Oxilia et al, 2017).

The ancient Egyptians are well-known for their advanced knowledge in the human body, and ways to treat a variety of conditions, both in health and dentistry (Thekkaniyil et al, 2000; Forshaw, 2009).

Since then, the art, science, evolution and advancements in dentistry have been profound in all disciplines – to the point where any dental condition can be addressed with expertise and the utilisation of the most current treatment methods to produce the most optimal end result.

Dentistry is not just a male or female restricted profession in who we treat. The techniques used today and advanced knowledge in all clinical areas within the profession are used equally between men and women.

Sexual preference in individuals in no way affects the most ideal treatment modalities used to care for that person and the manner in which that individual is treated. The desired outcome is always dependent upon five conditions:

1. The condition of the tooth at the time of treatment
2. The realistic treatment options for that particular dental condition
3. The clinical skills of the dentist to treat the dental problem
4. The expectations by the patient
5. The goals of the treating clinician.

It has been estimated that between 0.5 and 0.6% of the US and Canadian population are transgender (Bauer et al, 2015; Bauer et al, 2017).

These individuals continue to experience discrimination and often avoid both dental and

general healthcare due to these fears (Bauer et al, 2015; Scheim and Bauer, 2015; Bauer et al, 2009; Bauer et al, 2014; Grant et al, 2011; Socias et al, 2014).

**TRANS INDIVIDUALS**

Trans (transgender, transsexual, or transitioned) persons are those whose gender identity or lived gender varies from their sex assigned at birth (Bauer et al, 2015; Bauer et al, 2009).



**FIGURE 1:** Smile demonstrating more masculine features for this individual



**FIGURE 2:** Smile demonstrating more feminine features for this individual

Nelson Y Howard shares considerations in evaluation and the care and treatment of cosmetic dentistry transformations for transgender patients

# Considerations for treating transgender patients



Trans people have been identified as a medically underserved population that faces stigma within and outside of healthcare settings (Bauer et al, 2015; Shired and Jaffee, 2015).

Factors such as age, gender, medical transition status, race and socioeconomic status affect the varying degrees of healthcare discrimination or avoidance to trans individuals (Bauer et al, 2015; Bauer et al, 2015; Socias et al, 2014; Shired and Jaffee, 2015; Kattari and Hasche, 2015).

It is unknown whether trans individuals also feel the same with trying to obtain or in receiving dental care or dental transformations as part of their transition process.

It is this author's opinion, based on his experience treating trans people, that they do not feel reluctant to seek out dental care nor feel they are being discriminated against or viewed as different when they come in for a consultation and/or proceed with their treatment, either on a routine basis or when they are wanting changes to complement their transition. Rather, most are outgoing, enthusiastic, happy and self-confident individuals and proud to be who they are, regardless of what level or stage of trans they are presently in.

**DENTAL CONCERNS**

There are significant differences in the overall appearance of the anterior teeth between men

and women. Some of these differences are in the anatomical shape of the teeth, the design of the incisal embrasures between the teeth, the nature of the surface texture of the teeth, the facial gingival contours and design of the centrals to laterals to cuspids, the thickness of the incisal edges, and the general size of the teeth and arch form space (Figures 1 to 6).

These differences and more are significantly important factors that the clinician needs to be aware of when redesigning a smile for a trans patient considering making changes as part of their transition process.

Understanding what expectations are desired and wanted by the patient is another area of consideration when making dental cosmetic and aesthetic trans changes.

When trying to show a prospective patient – trans or otherwise – what the differences are that can be achieved with the modern cosmetic and aesthetic techniques, utilisation of photographic visualisation with other patients who have undergone similar procedures is paramount.

Dentistry that reflects the necessary changes to support the final outcome can help enhance and ultimately improve one's facial appearance, with the ultimate goal to exceed the patient's expectations.

Personality traits of the prospective trans patient are also essential to know in advance of restorative changes, as some people have a

**There are significant differences in the overall appearance of the anterior teeth between men and women**

stronger personality versus those that are more subdued.

Another important trait to equate into any changes is whether a person has a more masculine versus feminine side to them.

Masculine people tend to have straighter and more angled incisal edges to their teeth (Figure 7), whereas feminine people tend to have softer and rounder edges to their incisal edges (Figure 8).

Masculine teeth tend to have straighter and longer mesial and distal contact zones (Figure 9), whereas feminine teeth tend to have more curved and shorter mesial and distal contact zones (Figure 10). Masculine teeth tend to have facial (mesial and distal) line angles wider set



**FIGURE 3:** Smile illustrating more texture in the patient's central incisors



**FIGURE 4:** Smile illustrating ideal facial gingival contours and design of the centrals to cuspids



**FIGURE 5:** Masculine smile with larger centrals to fit the given arch form space



**FIGURE 6:** Feminine smile with normal centrals to fit the given arch form space



**FIGURE 7:** Masculine smile demonstrating straighter incisal edge form with more angled distal incisal edges into the contact zone



**FIGURE 8:** Feminine smile demonstrating softer incisal edge form with more rounded mesial and distal incisal edges into the contact zone

(Figure 11) than feminine teeth, which tend to have facial line angles closer set (Figure 12).

Placing a disproportionately shaped tooth in an individual that does not reflect those qualities can lead to negative effects in the patient and further add emotional issues to what would already be a psychologically difficult time for the trans patient, or even the patient who expected one result but received something other than what they expected.

### EVALUATION FOR TREATMENT

As with any patient, a comprehensive examination – that includes dental radiographs, occlusion evaluation, temporomandibular joint (TMJ) screening, and a thorough periodontal documentation to include full-mouth probing, recession charting, and mobility detection – is key to formulate an accurate treatment plan.

This examination is non-discriminatory in nature and should never be biased towards any person – trans of any type – or based on their lifestyle preferences.

As a healthcare profession, we have an obligation to serve our patients to the highest standards possible and to the utmost of our abilities. The manner of care given to every patient should be the same.

The patient's gender preferences or degree of transition should never be a factor in how they are cared for or considered for treatment. Any level of personal bias by a dental professional of these issues would be considered unethical and discriminatory.

Treatment presented to any patient should always be what is in the patient's best interest to have to maximise optimal health.

Comprehensive treatment planning is essential for every patient so that each person knows the full extent of any dental conditions present and the most ideal ways to correct them.

To not fully disclose to a patient a known condition present and a way to treat it with the goal to eliminate the problem and improve the quality of the condition would further be considered unethical.

In the same manner, a trans patient looking to make a cosmetic change to complement their transition or maintain their preferential gender should also be given equal consideration in their desire to improve their appearance, improve their self-esteem, and improve the quality of their life by cosmetic dentistry.

Some of the challenges that can be present when making these changes can be related to making smaller teeth wider, making wider teeth narrower, making longer teeth shorter, making short teeth longer, and addressing tooth size-arch width issues as it pertains to creating a new smile and tooth design to fit within the dimensions the patient presently has.

This can be done utilising the following methods and techniques:

- Full diagnostic mounted models using facebow transfer articulation
- Full diagnostic photographs as described by the AACD Accreditation Protocol Guidelines
- Tooth size measurements present at the time of evaluation



- Computer enhanced digital smile design
- Diagnostic wax-up of desired, enhanced and improved changes to present to the patient.

### TOOTH SIZE FACTORS

One of the most challenging clinical dental situations is to make a wide tooth coronally narrower when the root base starting at the cemento-enamel junction is a greater diameter than the resulting restoration that is placed on it.

When modifying a smile where multiple teeth are going to be reduced in size mesial to distal, a diagnostic wax-up is absolutely needed prior to the initiation of treatment, along with a clear tooth preparation stint made from the wax-up design, in order to enable the clinician to properly prepare the tooth form to the final restorative design. This step is critical to help transform a smile to the more desired result.

Whether performing smile changes in a trans patient or a non-trans patient, proper pre-treatment planning and case preparation is



**FIGURE 9:** *Masculine teeth with longer mesial and distal contact zones*

necessary to assure the patient's final outcome complements their facial appearance and envisioned result.

When done in this fashion, the patient's aesthetic transformation will further improve their confidence and, in trans individuals, help to transition them to the degree they seek for their personal growth and development.



**FIGURE 10:** *Feminine teeth with shorter mesial and distal contact zones*

### DISCUSSION AND CONCLUSION

The transgender and transsexual communities that seek dental care are no different than any other group of people.

The same assessment, cancer screening, examination, radiographic, occlusal, periodontal, temporomandibular joint and treatment planning protocols are implemented regardless



**FIGURE 11:** Masculine teeth with wider set mesial and distal facial lines



**FIGURE 13:** Feminine teeth with closer set mesial and distal facial line angles



**FIGURE 12:** Retracted view of masculine teeth with wider set mesial and distal facial lines



**FIGURE 14:** Retracted view of feminine teeth with closer set mesial and distal facial line angles

of a person's gender, sexual preference, or transitional status.

Treatment procedures also are identical between trans and non-trans individuals. What differs, though, are certain treatment techniques and design planning steps when it comes to cosmetically and aesthetically modifying anterior teeth to fit into a transgender or transitioned person.

The final result ultimately is the same with any patient, to exceed all their expectations and deliver the finest quality of care for any treatment that the patients seek.

Unfortunately, this is not always the norm in the healthcare field; although the actual percentage of inequality between trans and non-trans people is unmeasured, one would like to think the percentage amount is so low that it is estimated in the hundredths of a percentage point. At least, that is the opinion of this author.

Reducing transgender health inequities globally necessitate focusing on gender affirmation in healthcare service delivery (Reisner et al, 2015).

Once this is achieved and recognised throughout the world, inequality amongst everyone will hopefully be eliminated in all manners of life and healthcare to all. [📄](#)

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