Restoring one’s smile - Anterior restorations: Three cases attended at Muhimbili National Hospital

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Introduction
One of the services requested by many patients to their attending dentists to have their smile made better, freer, attractive, and beautiful. But also one of the most rewarding and appreciated results Dentistry can provide is to make people able to smile better and freer.

Many patients come to our clinics with that desire and demand with women being more likely to demand such a service than men.

Below are 3 chosen cases (out of many) which I attended to my satisfaction, as far as restoration or improvement of the SMILE is concerned.

The main complaint of ALL the three patients attended were the feeling UNHAPPY or SHY to smile.

To these and most of the patients, smiling with visible attractive teeth means a lot to them. They all want nice looking teeth while smiling.

What is a SMILE?
Smile is a facial expression formed by flexing the muscles near both ends of the mouth (some muscles of facial expression include orbicularis oris, levator labii superioris & inferioris, levator anguli oris and zygomaticus major & minor).

A smile is an expression denoting pleasure, happiness or amusement, although it can also be an involuntary expression of anxiety.

A smile is an outward sign of perceived self confidence and internal satisfaction. Smile helps to build confidence, relieves stress, changes the mood, and makes one look younger.

In customer care, when a service provider smiles at a stressed customer and exhibits excellent listening skills, most of the time, there is a report of total customer satisfaction. Likewise, when a health care provider smiles at a stressed, desperate patient in agony, and exhibit excellent listening skills and shows empathy, most of the time, there is a report of total patient satisfaction and feeling of relief and very positive healthy changes.

Case number 1: An old lady with rampant caries

An old female patient presented with rampant caries, mostly affecting the upper teeth.

Examination and Diagnosis
On examination, teeth number 11 & 21 had dentinal caries mostly cervical, with spared coronal parts. Teeth 12, 13 & 22 were grossly carious leaving only root stumps.

Tooth 14 had a deep occluso-distal dentinal caries involving the pulp.

Teeth 24, 33, 34, 43 &44 had deep dentinal cervical caries (Class V).

Periapical x-rays of 12, 13, 14 & 22 were taken and revealed strong, stable and reasonable root length to withstand post-crown restorations.
**Treatment done**

Root canal treatment was done to the above four teeth (12, 13, 14 & 22). Thereafter screw posts were inserted, and Glass Ionomer Cement (GIC) cores were built upon.

Fig 1b: Case No 1 during treatment

Composite crowns were then built up and all other carious teeth were restored.

Fig 1c: Case No 1 during treatment

The patient was then instructed on proper care for the restored teeth, and the natural ones.

Following the treatment, the patient was discharged and scheduled for fabrication of partial removable dentures for the missing upper and lower teeth.

**Case number 2: - A 13 years old boy with a fractured upper central incisor**

Fig 2a: Case No 2 before treatment

The mother of the boy reported that her son had made a special request during the Eid celebrations to have his tooth fixed rather than any other gift for Eid “Mom…you better not buy me an Eid Holiday’s gift, but get my tooth fixed …I can’t smile…I am ashamed…” This was after he had his second tooth, upper left central incisor (21) broken accidentally while playing, just within a week after treatment and restoration of his upper right central incisor (11).

Clinical examination and a periapical x-ray were taken, which revealed a stable root of 21 an ill-restored acrylic post-crown of 11 with a leaky gingival-crown interface with crown fringes overlying the gingival tissue causing localized gingivitis.

Fig 2b: Picture of an x-ray of teeth No 11 and 21.

**Treatment Done**

Root canal treatment of tooth 21 was re-done and completed in a single visit. Post pin was inserted and a composite crown incrementally built-up.
Fig 2c: Case No 2 after treatment

But the patient was uncomfortable with his tooth 11 that was done before by someone else. He therefore wanted it redone with composite as the other tooth 21.

An attempt to remove the tooth 11 crown turned to be difficult, hence he was advised to wait until it gets loose. The crown was ill-bonded to the abutment, leaving leaky margins on the crown-gingival margins.

Several months later, the patient came with a dislodged crown 11, leaving a loose bent post.

Fig 2d: Case No 2 Treatment of tooth No. 11

Periapical x-ray that was taken earlier showed a severe hypo-obturated canal of #11, with the post hanging less than a ¼ of the root length.

Root canal treatment was therefore repeated.

Fig 2e: Case No 2 during a second course of treatment

A longer, thinner, gold plated screw post (1-long) was inserted to reach approximately 1/3 of the root length.

Fig 2f: Case No. 2 during a second course of treatment

The tooth was cored with GIC, then a composite crown was incrementally built up to match the opposite and adjacent teeth.

Fig 2g: Case No 2 after 2nd course of treatment
Post restoration instructions were given to the patient on how to properly care for the restored teeth.

**Case number 3 - Veneering of fluorosed teeth of a 26 years old lady**

**Main complaints**
Discolored teeth and badly arranged front upper teeth. Patient feels very shy to smile openly due to an awkward appearance of teeth. She desperately requested to have her teeth cleaned.

The patient had never had any dental treatment before. She was advised by a friend; a former patient who received veneer treatment to see a dentist. She was born and still lives in Arusha. She had a tooth injured when she was young, while playing. The tooth was pushed inward.

On dental examination, she was found to have dental fluorosis with intrinsic stains of all the teeth at varying degrees. She also had a malocclusion due to labially displaced and slightly intruded tooth 21 due to trauma at her early age. Tooth 22 was slightly displaced palatally due to an accident. The upper teeth were more discolored than the lower teeth.

**Diagnosis reached was:**
1. Mild / Moderate fluorosis
2. Malocclusion upper jaw (quadrant #2)
3. Psychological trauma (due to unpleasantly looking teeth)

**Differential Diagnosis**
1. Tetracycline discoloration (see #11, 12, 21, 22 and lower teeth’s cervical areas)

**Treatment Plan**
The following treatment plan was recommended:
1. Assurance and information to the patient. Discussions of the complaints, treatment possibilities, treatment results expectations, advantages and disadvantages of the treatment
2. Correction / Restoration of the shape and positions of 21 and 22 with composite
3. Veneering of teeth 14 thru 24, then 33, 34, 43, 44. Teeth 31, 32, 41, & 42 appeared to be not badly affected, hence bleaching was preferred.

**Treatment Done**
Under Local Anaesthesia, veneering and restoration / correction of upper anterior teeth (14 – 24) were done on several visits.

**Fig 3a:** Case No 3 before treatment

**Fig 3b:** Case No 3 during the course of treatment

**Fig 3c:** Case No 3 during the course of treatment

**Fig 3d:** Case No 3 at the end of treatment
Conclusion
Smiles are back..!!

Wooow.. Incredible….marvelous…..wonderful..

These are MIRACLES that Dentistry can DO...!!!
The older and beautiful lady got her motherly sweet smile back....!!

The young and handsome boy has his smile back again.....!!

The young beautiful lady is more than just happy....!!

Fig 4: Case No 1 showing appreciation for the treatment by a smile

Fig 6: Case No 3 showing a smile of appreciation. Consent for full face obtained

Fig 5: Case No 2 showing a smile of appreciation. Consent for full face obtained

Post Treatment Instructions given to all the three patients were:

i. Try to avoid artificially colored and spiced foods to prevent discoloration.
ii. Practice proper brushing and flossing
iii. Make proper use of teeth i.e not to use them as bottle openers, not to bite bones etc.
iv. Plan and attend regular dental check-ups.