



## **Atraumatic Restorative Treatment**

### Case Study

#### **Case Study: Education of Providers in the use of Atraumatic Restorative Treatment - Tanzania**

Starting in 1994, ART training seminars were provided for dental providers. However, beginning in 2002 ART was officially implemented as part of the Tanzanian Policy Guidelines for Oral Health. Despite official political support, ART was not widely implemented. Therefore, this pilot project was launched to introduce ART into several government dental clinics in a 3.5 year study to evaluate the treatment profile clinics after ART implementation.<sup>1</sup>

The Health Authority provided financing for glass-ionomer and ART hand instruments. Furthermore, the Health Authority provided leave for dental practitioners to attend a week long training course provided by Cordaid (Netherlands). The team of dental providers included 32 dentists, dental officers and dental therapists. These practitioners were pivotal to study success.

Thirteen government clinics were selected based on institutional support. The training course included pre- and post testing of the dental providers. Program evaluation visits were scheduled bi-annually to aid with clinical difficulties, identify barriers to ART implementation, and document patient records for program efficacy. Data on ART restoration, tooth extractions and conventional restorations were obtained from patient



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records. Additionally, yearly meetings were conducted by region to discuss overall program experiences. Furthermore, patient perceptions on ART treatment were collected at the second follow-up using a structured standardized questionnaire.

The ultimate goal of this study was to assess factors associated with success of ART to facilitate implementation on a national scale. Responses from 262 patients showed that 99% were satisfied with the ART treatment and 60% reported feeling no pain during the procedure. Over the study period, the mean monthly number of conventional restorations fell from 65 at baseline to 33 at the 2<sup>nd</sup> follow-up. Moreover, the mean monthly number of ART restorations increased from 16 at baseline to 219 at the 2<sup>nd</sup> follow-up. Furthermore, the mean percentage of ART restorations to total restorations was significantly higher at the 2<sup>nd</sup> follow-up compared to baseline, irrespective of region or clinic location ( $p=0.001$ ).

This study highlights the success of a pilot program aimed at educating dental providers, in implementing a new and effective means of providing alternatives to costly restorations and tooth extractions, for individuals living in areas with limited resources. Furthermore, this study shows that ART can be acceptable to both patients and providers.

More information can be obtained from:

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## References:

1. Kikwilu EN, Frencken J, Mulder J. Impact of Atraumatic Restorative Treatment (ART) on the treatment profile in pilot government dental clinics in Tanzania. *BMC Oral Health*. 2009;9:14.