



## Atraumatic Restorative Treatment

### Case Study

#### **Case Study: Successful Atraumatic Restorative Treatment (ART) in Mexico**

In 2001 Mexico's Ministry of Health adopted the Atraumatic Restorative Treatment (ART) approach as part of their 2001-2006 National Oral health program (Programa de Acción: Salud Bucal 2001-2006).<sup>1</sup> This program was adopted to expand coverage to the most remote areas with limited access to care. The program was first implemented in 19 states which were chosen based on their limited access to care. The program is funded by the Mexican Ministry of Health and supported by all levels of government. Furthermore, the program receives support from dental schools which have implemented ART courses into the pre-doctoral curriculum. In addition, the program has worked with and is collaborating with the Mexican dental associations.

When the program was instituted, dentists were encouraged to provide ART by obtaining necessary training through training sessions and utilizing a Spanish language training guide published for national use in 2001. An international training course was later developed in 2002. Through collaborations with dental schools, dental students are trained during their pre-doctoral training. Mexican dental students are required to provide 6 months to 1 year of community service in an underserved area. Training in ART equips the dental student with tools adapted to working in low resource areas while simultaneously providing a workforce of dental providers to the populations in greatest



# Alliance for a Cavity-Free Future

*Stop Caries NOW for a Cavity-Free Future*

An Oral Health Resource

need of ART services. In addition, surveys were administered to dentists to collect information regarding barriers to using ART in their practice and joining ART courses.

The Specific Action Program for Oral Health 2007-2012 was established to outline specific areas in which to improve the oral health of Mexico.<sup>2</sup> One area of focus was to extend services of ART into municipalities that had the lowest human development index. Funding for the Action Program allowed for additional training courses to expand the program in 2008-2009, reaching an additional 570 dentists.

Program evaluation is underway to systematically provide surveillance of the oral health program. The goals of the program evaluation are to monitor the number of procedures provided per year and evaluate the efficacy of ART restorations in primary and permanent dentition of 6-13 yrs. A prospective cohort study of 304 children age 6-13 yrs from primary schools within 13 of the municipalities considered to have the lowest Human Development Index.<sup>3</sup> One year evaluations were conducted to assess ART survival. 80% of ART restorations placed in primary teeth were successful at 1-yr, 87.5% of those placed in permanent teeth, with an overall success of 81.9%. Approximately 68.7% sealants placed in primary teeth were fully or partially retained, 71.2% in permanent teeth and 70% overall.

The goal of increasing access to ART has been successful in Mexico and continues to show promise. In 2008 over 2,750,000 procedures were provided and nearly 1400 dentists have been formally trained. The continued success of the program is dependent upon



# Alliance for a Cavity-Free Future

*Stop Caries NOW for a Cavity-Free Future*

An Oral Health Resource

dentist trained through the program provided ART training and particularly upon newly graduated dentists who ART instruction as part of their dental school training.

This study highlights the success of a national program aimed at educating dental providers and promoting their implementation of ART increase access to oral health treatments to individuals living in areas with limited resources. Furthermore, it shows the cooperation between levels of government, dental schools and dental associations toward providing improved oral health for all.

More information regarding this program can be obtained from:

Heriberto Vera Hermosillo  
Programa de Salud Bucal  
DGAPP, CENA VECE  
Benjamín Franklin 132  
Col. Escandón 2<sup>a</sup> Sección  
C.P. 11800 México D.F.  
Phone: +52 26 146442  
Fax: +52 26 146451  
e-mail: [heriberto.vera@salud.gob.mx](mailto:heriberto.vera@salud.gob.mx)

## References:

1. Mexico. *Secretaría de Salud. Programa de Acción: Salud Bucal 2001-2006*. Ciudad de México: Secretaría de Salud; 2001. 1.
2. Mexico. *Programa de Accion Especifico Salud Bucal 2007-2012*. . Ciudad de México: Secretaría de Salud; 2007.
3. Hermosillo VH, Quintero LE, Guerrero ND, Suarez DD, Hernandez MJ, Holmgren CJ. The implementation and preliminary evaluation of an ART strategy in Mexico: a country example. *J Appl Oral Sci*. 2009;17 Suppl:114-121.