Going Green in Dental Hygiene

Inspired by Ghandi's words, "Be the change you wish to see in the world," I have made a commitment in my dental hygiene practice to ensure the environment in which I practice and the materials and processes I choose are as people friendly and earth friendly as possible. Commitment was a large contributing factor in my decision to relocate Zanichelli Dental Hygiene, formally La Plaza Dental Hygiene, to Evergreen Terraces at 4611 Plettner Lane, Suite 120 in downtown Evergreen.

Developers Al and Judy Challenger built their "dream" green building, Evergreen Terraces, in September of 2008 to entice other conscienious renters who had a high level of awareness for issues impacting our environment. They were determined in making Evergreen Terraces a leadership in energy and environment design (LEED) silver building. Special features of Evergreen Terraces are structured parking versus surface parking. The structured underground parking significantly reduces the projects footprint, an important feature because the site hovers over Bear Creek, the main watershed for the area. Evergreen Terraces also incorporates a concrete retention pond built into the design of the building's driveway and a photovoltaic array off roof top solar panels that provide most of the energy that Evergreen Terraces needs.

There are many guidelines and recommendations that help direct and define the way we practice dentistry. The centers for Disease Control and Prevention set the standards and guidelines that deal with infection control issues and compliance with the Occupational Safety and Health Administration so that we have a safe work environment. It is not easy to reduce water energy and paper waste in a dental office. However, it is my intent to make a difference for my environment and my patients. I have chosen to be biocompatible in as many ways as possible, including being paperless and digital radiography.

When I first opened my dental hygiene practice in 2007 I chose to be a paperless practice. All patient information is stored in computers. This allows me to decrease the paper waste and subsequently our trees. It also allows easy transmission of information to patients' dentists.

I also chose to purchase digital radiography which can subsequently reduce contaminants into our environment. Traditional dental x rays create a great deal of unnecessary trash and chemical waste and disposal of these materials can be very costly. Conventional x rays have a lead foil insert and silver containing radiograph fixer. Digital radiography is not only "greener" but patients are exposed to up to 90% less radiation. The x ray image is of similar contrasts as the conventional x rays.

More and more dental manufacturers and distributors of infection control supplies are developing and offering eco friendly alternatives to replace previous products. They are making efforts to include green product choices for their environmentally conscious consumers. One are of concern in dentistry involves disposables that are marketed as

single use. There are ways to reduce the number of plastic barriers without compromising

Dental offices dispose approximately 700 million plastic barriers per year. The dental profession can reduce this number dramatically just by re evaluating how they function in their work place.

The use of disposable covers, pouches, and other items has helped infection

Control to be less time consuming but does create large amounts of clinical waste. Research is increasing into the manufacture of recyclable disposable items.

Advances are also being made in instrument reprocessing. I can send my dull or broken instruments into Environdent, an instrument recycling program and have them re-tipped or other dental supply companies will offer you one free dental instrument in exchange for 12 old instruments to be recycled. I am able to use medical grade hand sanitizers in my opportory to decrease water consumption. Opting for hand sanitizer can reduce some larger dental practices 360 paper towels and 90 gallons of water a day. I also installed low flow fixtures and sensor operated faucets.

To increase patient comfort I use a non- petroleum based lip balm during dental hygiene procedures and offer patients an all natural lip balm with an spf of 15 to take home with them. I have also recently found recyclable patient bags to take their dental products home with them.

One of the biggest rewards of a green dental program is not only saving the environment but it is also a much more cost effective way to do business. This allows me to keep my prices affordable to my patients. Please feel free to stop by and visit our "green" office at 4611 Plettner lane, Suite 120.

Ellen Zanichelli, RDH, BS is an independent dental hygienist who has practiced in Evergreen for 27 years. She has office hours Monday thru Friday and evenings and Saturdays by request. You may visit her website at www.zanichellidentalhygiene.com or call 303-674-1373.