GREEN DENTISTRY: A STEPPING STONE TOWARDS AN ECO-FRIENDLY PRACTICE

DEFINITION

Green dentistry, also known as eco-friendly dentistry, is defined as a high-tech approach that reduces the environmental impact of dental practices and encompasses a service model for dentistry that supports and maintains wellness.

WHY SHOULD WE CARE?

THE ALARMING NUMBERS: PER ANNUM DENTAL WASTE PRODUCTION FROM A CONVENTIONAL DENTAL CLINIC

- 4.8 million lead foils
- 28 million liters of toxic x-ray fixers
- 3.7 tons of mercury waste
- 1.7 billion sterilization pouches
- 680 million chair barriers, light handle covers and patient bibs.

www.ecodentistry.org

WHAT DOES GREEN DENTISTRY DO FOR YOU?

Reduces waste and pollution

Saves water, energy and money

Is high-tech and cost-effective

Supports a wellness lifestyle

Samek L. Disposing of hazardous waste. An update on waste management studies. Ont Dent 1994; 71(7):19, 20, 35

Pockrass I. The case for Green Dentistry. Pacific NW Pre-treatment Workshop September 2009.

Farahani A. Eco-friendly Dentistry: Not a matter of choice. J Can Dent Assoc.2007;73:581-84.

Hiltz Margot. The environmental impact of dentistry. J Can Dent Assoc. 2007;73:59-62.



RETHINK

- Proper sun illumination and use florescent lighting
- Ventilation and adequate air filtration
- Promote indoor plantation
- Inclined roof for water harvesting
- Solar water heaters
- Use low volatile paints (VOCs), office furniture from recycled or reclaimed wood
- Use eco-friendly office cleaning products

REDUCE

HOW TO GO GREEN?

ADOPT 4 R'S AGENDA

Paper/Plastic/Chemical/Water consumption/Energy consumption

- Virtual records
- Substitute autoclave wraps with sterilizable cassettes and plastic syringes with glass syringes
- Biodegradable disposable cups
- Steam sterilization over chemical sterilization
- Use biodegradable or enzymatic cleaners instead of chlorine bleach for paper ones cleaning water lines
- Proper disposal of amalgam
- Dry Dental vacuum
- LED lights with motion detectors

RE-USE

- Reusable glass syringes/face shields/ dishes & cutlery in the staff break room
- Switch to cloth sterilization bags & patient barriers
- Wear cloth apron instead of
- Switch to stainless steel impression trays and suction tips.
- Provide glass or ceramic "rinse & swish" cups.

RECYCLE

Always segregate your waste and recycle

- •Recycle the BIG 5: Aluminium, glass, plastic, paper and steel
- Use a sharps disposal service that recycles them into building materials
- Recycling bins for staff breakroom waste
- Instrument recycling program

<u>REFERENCES</u>

- Anderson K. Creating an environmentally friendly dental practice. CDS Rev 1999; p. 12–18.
- 150 ways to go green. Recommendations by American Dental association. 2009.
- Barron T. Mercury in our environment. J Calif Dent Assoc 2004;32(7):556–63.
- www.ecodentistry.org

Canadian Dental Association. CDA position on dental amalgam. February 2005. Available from URL: http://www.cda-adc.ca/_files/position_statements/amalgam.pdf (accessed December 2006). Das T, Chaturvedi R. Eco-friendly Dentistry: Healthcare for Patient, Community and Earth. Conference proceedings at Chandigarh Science Congress (CHASCON) 2011. Section: Pharmaceutical & Medical Sciences.