Green Dentistry

Special Report: What you need to know about going green, part 1

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regarded as socially conscious behavior.

In a competitive economic environment, being 'green' may be a feature that distinguishes a dental practice from others, and may be a factor that leads patients to choose to visit that practice.

ENVIRONMENTAL AWARENESS

Dr. Anna Fong, a dentist in Richmond Hill, Ont., a suburb of Toronto, opted to go green when she opened her own practice in 2008. Driven by strong feelings about environmental issues and with the assistance of a dental representative who pointed the way to green options for a dental practice, Dr. Fong went solo in an eco-friendly fashion.

"When you start from scratch, you can build the office the way you want it," says Dr. Fong. "We try to do the best we can and have as small a carbon footprint as we can."

Dr. Fong's office has features such as digital radiography, which lessens radiation exposure to patients, as well as eliminates the need for not-so-environmentally friendly processing chemicals necessary for traditional radiography. Dr. Fong has also gone paperless by implementing digital charting. "We are doing as much as we can to recycle," says Dr. Fong.

Her predominantly female staff is unquestionably on board with the green philosophy that Dr. Fong practices. "They have heightened consciousness about the environment, and people apply [for jobs] because they like our office philosophy," says Dr. Fong.

One of Dr. Fong's suppliers is Micrylium Laboratories, a manufacturer that began in the infection control field in May 1994 with the intent of maintaining proper infection control by using products that do not have the negative environmental consequences associated with toxic, polluting disinfectants.

"It is the whole reason we started the company," says Dean Swift, research director at Micrylium Laboratories. Micrylium was able to supplant chemical disinfectants with eco-friendly substances that did not reduce the efficacy of products. They employ, for example, totally biodegrabable surfactants and do not manufacture products that contain endocrine disrupting chemicals such as alkyl or nonyl phenol ethoxlates.

"The majority of our customers buy the products because they work and because of the results," says Swift. "We work on physical chemistry rather than toxic chemistry, and that is why we get good results. Everything we produce is biodegradeable and pharma grade USB. Most people buy our products because of the quality and effectiveness. The fact that they are green is secondary."

Micrylium wants to set an example that proper hygiene and infection control does not need to translate to the use of harsh, toxic chemicals, according to Swift.

INCREASINGLY IMPORTANT FOR STAFF

The use of non-toxic chemicals to cleanse a dental practice may have more appeal to staff, who are typically female and may be contemplating motherhood.

"Many staff at dental offices are young women who are thinking of having children, and their personal health is a factor," says Swift. "They don't want to be spraying carcinogenic things around the office if they are of child-bearing age. We have many dental assistants who tell us they have quit their jobs because the dentists started using other products that may be toxic to clean and disinfect the offices."

Montreal-based Medicom is one of the firms that is capitalizing on the green movement in dentistry. It has developed a environmentally friendly non-woven sponge product called SafeGauze Green that has been manufactured in an environmentally-conscious manner and is as absorbent as a comparable synthetic product.

"We have tested it against our own synthetic product, and it was more absorbent," says Claudia Mink, brand manager at Medicom. "We wanted to make sure it performed on parity with our own product."

Mink notes that there is an increased consciousness in dentistry to minimize the impact that dental practices have on the health of the environment.

Dr. Barry Cooper, who operates du Portage Dental Clinic in the national capital region of Gatineau-Ottawa, says he uses the most biologically compatible materials that he can for his patients. "I have not inserted amalgam in patients' mouths for more than 25 years," says Dr. Cooper, noting he uses high-end and high noble alloys for procedures such as crowns. "You need to use biocompatible materials and take the time to do long-lasting work. With this approach, there is less need for retreatment and thus less total carbon footprint."

Apart from basics like recycling paper at the office, Dr. Cooper used 'green' paints, such as an ultra-low volatile organic compound, and a fire retardant on a wood ceiling in his office to comply with fire code regulations.

With the use of digital radiography and photography, there is no staff exposure to film-based toxic chemicals and a dramatic reduction in radiation exposure to his patients. Furthermore, no darkroom means less of a carbon footprint which is "overall more respectful and kinder to the planet.

"There is also the square footage of running a dark room," says Dr. Cooper. "[Digital radiography] is beneficial to the patient because we reduce the number of X-rays, so it means less radiation exposure cumulatively."