Dental groups respond to PBS documentary

Program furthers discussion on access-to-care

By Fred Michmershuizen, Dental Tribune America

PBS recently aired "Dollars and Dentists," a documentary produced by Frontline and the Center for Public Integrity and billed as an investigation into America’s dental care crisis. The program exposed gaps in access to care and underscored the plight of those who cannot afford treatment. After the broadcast, several dental organizations issued responses.

According to the program, finding a dentist can seem next to impossible for about a third of the U.S. population, especially those in rural areas and whose income put them at or below the poverty line. More than 49 million people face difficulty finding care, according to the Department of Health and Human Services. A separate analysis by the Pew Center for the States found that more than 17 million low-income children go each year without receiving any dental care.

"The dental system that we have works pretty well for most people, particularly those who have money and transportation and don’t need very much," Shelly Gehshan, director of the Pew Children’s Dental Campaign, said. "But if you are anyone else — if you are in an institution, a nursing home, a prison, if you have special needs of any sort, if you are a young child, if you’re a low-income person, rural, if you’re in that one-third of the population, it’s not so much that the system is broken, I would say there isn’t one for them."

In a written statement issued after the program aired, the American Dental Association (ADA) responded: "The needless suffering caused by untreated dental disease that could have been prevented or easily treated in its early stages is unacceptable. Coverage by PBS’s ‘Frontline’ and other media can increase awareness of this ongoing tragedy and, we hope, the

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A June 26 PBS Frontline documentary on dental care continues to generate discussion on access-to-affordable-care issues among patients and providers. Photo/PBS.org

Crayfish found to have substance on teeth similar to human enamel

A team of Israeli and German scientists from Ben-Gurion University of the Negev (BGU) and the Max Planck Institute of Colloids and Interfaces in Potsdam, Germany, have found an enamel-like layer in the mandibles of freshwater crayfish, according to an article in Nature Communications, “Enamel-likeapatite crowns covering amorphous mineral in a crayfish mandible.”

Dr. Shmulil Bentov from BGU’s Avraham and Stella Goldstein-Goren department of biotechnology engineering discovered that this species of crayfish protect their teeth against wear in a very specific and surprising manner: They produce a highly mineralized protective coating based on calcium phosphate, which is strikingly similar to the enamel of vertebrates.

“Enamel is the best solution for coating moving surfaces and organs in the body,” Bentov explains. “We assume that in the course of evolution, both vertebrates and this crayfish independently developed enamel-like tissues to address similar needs. Crustaceans discard their old teeth during the molting events several times throughout their life, and grow new exoskeletons and teeth regularly and rapidly”.

Dr. Amir Berman, also from the department of biotechnology engineering, and Prof. Amir Sagi, from BGU’s department of life sciences and National Institute for Biotechnology in the Negev, investigated the mandibles of the Australian freshwater crayfish Cherax quinquedens and Cherax destructor in cooperation with Dr. Barbara Aichmayer and her colleagues from the Max Planck Institute in Potsdam, Germany. They are the team investigating the formation process of this material and its ramifications.

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With some 20,000 students on campuses in Beer-Sheva, Sede Boqer and Eilat in Israel’s southern desert, BGU is a university committed to the highest academic standards, community involvement and sustainable development of the Negev.

(Source: American Associates, Ben-Gurion University of the Negev)