Scientists patent new substances to fight oral bacteria

Titanium-based materials shown to be effective against endodontic, periodontic and cariogenic bacteria

Researchers at the University of Washington’s School of Dentistry have received a patent for a method of using titanium-based materials to control bacterial infections. They believe that the substances could be used in a patient’s mouth after dental procedures to reduce the risk of infection or in mouthwashes and toothpastes to limit bacterial growth prophylactically.

For several years, the researchers have studied titanates and peroxtitanates, inorganic compounds that can inhibit bacterial growth when bound to metal ions.

The researchers found these substances to be effective against endodontic, periodontic and cariogenic bacteria, indicating that the substances could be incorporated into gels or solutions that can be applied by dentists after treatments such as root canals or dental fillings.

Dr. Whasun Oh Chung, research associate professor at the school, explained that metals have been known to have antibacterial properties, but when used in concentrations high enough to be effective, they also carry the risk of toxic side effects. By using the new agent, however, therapeutic benefits can be achieved with less risk of toxicity.

The researchers are now conducting human trials. They expect to finish those in spring. If proven effective, the new agent could even be used in narrowly targeted treatments for internal organs, as well as in dental or medical materials and devices, Chung said.

(Source: University of Washington’s School of Dentistry)
Dental spending stays flat

Dental care spending remained flat through 2012 over the prior year, in part because working-age adults are visiting dentists less frequently, with fewer people covered by employer-sponsored dental benefits, according to a new analysis released by the American Dental Association.

The research, conducted by the ADA Health Policy Resources Center, shows that additional factors in the spending patterns include improvements in oral health, the erosion of benefits provided by state Medicaid programs and fee reductions among many private insurers.

National dental care expenditure reached $111 billion in 2012, roughly the same as the previous year when adjusted for inflation. When population growth is taken into account, dental spending has been flat since 2008. The analysis covers the lagged effects of the recent recession.

Research shows fewer people are covered by employer-sponsored dental benefits, and working-age adults are visiting dentists less frequently. Result: Year-over-year spending on dental care isn’t changing much. Photo:Betenbender Vladimir / iStock, www.dreamstime.com

Report: Opportunities for growth within dental insurance industry

Dental insurance accounts for 9.1 percent of the broader health and medical insurance industry, according to a recently completed IBISWorld Industry report.

But there is plenty of room for growth, according to IBISWorld Industry analyst Stephen Hoopes. “An estimated 16 percent of workers are covered by employer-sponsored dental benefits,” Hoopes said. “While estimates of the share of consumers lacking dental insurance range from 26 to 42 percent, there exists a dramatic difference between the two types of health care coverage.”

Traditionally, dental insurance has focused more on covering regular maintenance and preventative oral health treatments, while medical insurance emphasizes coverage of unpredictable and urgent health care needs. Consequently, according to the IBISWorld Industry report, dental care costs and industry revenue are typically more stable than medical costs.

During the past five years, a consistent increase in health care expenditure (i.e., medical cost inflation) boosted industry premiums and drove revenue growth. However, lower policy enrollment figures during the recession mitigated the dental insurance industry’s performance during the period.

Rising unemployment during the recession directly damaged industry revenue through declines in group coverage and indirectly through lower per-capita disposable income. Moreover, competition from direct reimbursement and discount dental plans have tempered profit margins in recent years. Yet, revenue growth is anticipated to have picked up a slightly 2 percent in 2013, primarily due to increases in workforce figures and disposable income levels,” Hoopes said.

During the five years to 2018, industry revenue is forecast to increase. While the industry will benefit from an improving economic environment and favorable demographic trends, the enactment of health care reform provisions is expected to be the primary driver of growth. While 8.7 million children are anticipated to gain dental benefits under the PPACA, the number of children without dental benefits by 55 percent, only 5.3 million adults are expected to gain coverage under the law.

The dental insurance industry operates with a medium level of market share concentration. The top companies in the industry are MetLife Inc, Delta Dental and Aetna. Industry concentration has increased during the five-year period, with industry firms merging or acquiring other firms to expand, cut costs and improve profitability. Moreover, following the PPACA, consolidation trends in the dental insurance market have mirrored these trends in the broader health and medical insurance industry, according to the IBISWorld report (No. 52411b).

For more information on this and other reports, you can visit www.ibisworld.com.

(Compiled by Adam O’Neill, publishing director, Patterson Dental)
Dentistry jobs take two top-10 slots on magazine’s list of 100 best jobs

**U.S. News releases annual ranking**

By Robert Selleck, Managing Editor

"Dentist" and "hygienist" are again in the top 10 jobs on the U.S. News & World Report annual ranking of the top 100 jobs in the country, with "dentist" at No. 4 (down from its top ranking last year) and "hygienist" at No. 10 (same as last year).

The median salaries the magazine listed for each of the two dental professions both slightly increased compared with last year, rising to $141,240 from $141,270 for dentists and to $70,210 from $69,280 for hygienists.

The top two jobs that knocked "dentist" down two pegs were both technology positions: No. 1, software developer, was No. 7 last year, and No. 2, computer systems analyst, was No. 4 last year. According to the magazine, this is the first time its top pick was a technology job.

The magazine ranks jobs based on criteria it considers to be most important to job seekers: 10-year growth volume, 10-year growth percentage, median salary, employment rate, future job prospects, stress level and work-life balance.

Various sub-lists rank jobs across a number of industry sectors. Among the "best health care jobs," dentist is No. 1 and dental hygienist is No. 7.

The magazine noted that according to the U.S. Bureau of Labor Statistics, the source for most of the criteria measured to create the list, existing health care workers need to be retained, but more also are needed — especially to fill growing numbers of health care support jobs.

Here's how the magazine summed up the dentistry profession: "The need for professionals to examine our teeth, fill and – gulp – refill our cavities isn't fading. Patients also have a particular interest in cosmetic treatments from dentists, such as teeth whitening, and this also drives demand. The complete U.S. News report can be seen at www.money.usnews.com/careers/best-jobs/rankings.

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