

The Vital Few or the Trivial Many?

There are a number of principles that govern our lives and the world we live in. Many of these principles or rules operate whether we are aware of them or not. You don't have to know the equation for gravitational forces to know that when you release an object, it will fall to the ground. One of the more interesting principles that effects us in our professional as well as in our personal lives is Pareto's principle (also known as the 80/20 rule or the 'vital few and trivial many'). This principle is named for an Italian economist, Vilfredo Pareto, who in 1906 noticed that 20% of the Italians owned 80% of the country's wealth. It can be applied to many situations and is frequently used in business and management settings to increase profits or maximize personal productivity.¹

When we think about this principle in relation to our personal and professional lives, we see that it is surprisingly true. For example, 80% of our phone calls are to 20% of the people in our address book; 80% of our successes come from 20% of our efforts; 80% of our employee problems come from 20% of the staff; and 80% of the dental disease is found in 20% of the children.¹

As dentists who care about the oral health of children, this last statistic is very concerning. The problem is that knowing this information does not help us identify those specific individuals who are most at risk for dental disease. A number of epidemiologic studies have helped to identify the characteristics of groups of children who are at risk but often within those groups, the 80/20 rule also applies. Risk indicators for Early Childhood Caries include low socioeconomic status, minimal fluoride exposure, high counts of mutans streptococci and a diet high in refined carbohydrates. However, among those children living in non-fluoridated areas, 80% have minimal dental disease while 20% have extreme disease. Similarly, only a portion of the children of low socioeconomic status or with high counts of mutans streptococcus actually manifest caries.

If our goal is to prevent caries in children, then it will take more effort to identify the individuals who are at increased risk. Using Pareto's principle, if 80% of the disease is seen in 20% of the children, and in general, 80% of our success in solving a problem comes from 20% of our efforts, this suggests that by targeting our energy appropriately, we could start to make a difference in this at-risk group of children.

There are a number of 'tools' available to help us identify children at risk for dental caries. The goal of all of these instruments is to determine which indicators are most predictive of future caries. I think we can all agree that if you see a child with cavitated lesions, you can be fairly confident that


there will be additional holes in the future if nothing is done to change the environment that created those holes. How do we know when we see a healthy 1-year-old if they are at risk or not? First of all, we certainly cannot assess risk if we do not see 1-year-old children in our offices. Second, we need a validated caries risk assessment tool that is easy to use. Finally, we should be reimbursed for the time we spend making such an assessment and educating parents about disease prevention.

These are not trivial problems to solve and I am not suggesting that they can be fixed with the wave of a magic wand. Any change takes time, determination, and commitment. Again, Pareto's principle can be applied. When change is needed, it is frequently the 'vital few' who must lead the 'trivial many' into a new way of thinking. In this case, the vital few are the leaders in our profession who see the need for change and have a passion for improving the oral health of their patients. Fortunately, each person can choose to be one of the vital few. There is a constant need for new leaders to come forward, as our esteemed, graying leaders step down or move on to other interests.

How can *you* be one of the vital few? Use a caries risk assessment tool in your practice to document the risk indicators that are most relevant to predicting future caries in your patients. Serve on a committee within the American Academy of Pediatric Dentistry (AAPD) that works at changing policies which affect how we are reimbursed for our services and expertise. Develop an infant oral health program in your practice. Volunteer to be on the Health Advisory Board of a local Head Start center. Work with pediatricians and family physicians in your area to develop a referral system for at-risk infants and children. Be a presenter at the annual AAPD meeting and share your expertise with colleagues. Finally, submit case studies, clinical tips and/or scientific papers to the *Journal of Dentistry for Children*. There is a great need for new and continued energy to be directed in all of these areas. You too can be one of the vital few.

REFERENCES

1. Vaccaro, PJ. The 80/20 Rule of Time Management, *Family Practice Management*. 2000;7(8):76. Available at: <http://www.aafp.org/fpm/20000900/76the8.html>. Accessed January 2005.


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