Using MEDLINE to Identify Randomized Control Trials in Pediatric Dentistry. J PARK*, R. NIEDERMAN. Harvard School of Dental Medicine.

The randomized control trials in pediatric dentistry were quantified with validated search strategies for high quality clinical trials. Randomized controlled trials were sought because they are regarded as the highest level of clinical evidence. High quality clinical decision-making depends on the availability of high quality clinical evidence. Five validated sensitive and specific MEDLINE search methodologies were used to identify randomized control trials of children (<12 years old) from 1990-2000 in seven dental disciplines (Implants, Endodontics, Oral Surgery, Periodontics, Restorative, Oral Medicine, Orthodontics). Capture-recapture and sampling methods were used to estimate the total number of articles. The estimated total number of randomized controlled trials ranged from 1022 to 5231 articles for specific and sensitive searches, respectively. Hand searching refined these estimates indicating that between 602 and 1737 trials were published. For all disciplines, the number of randomized controlled trials essentially doubled from 1990 to 2000. These results indicate that there is a substantial pediatric dentistry randomized controlled trial literature. The breadth and the increase in numbers of randomized controlled trials suggest that the creation of a clinical trial register and a database would be helpful to stay current. Such a database would be an important resource for completing systemic reviews for clinical decision making by students, teachers, practitioners and researchers.