Welcome to the Dental PBRN quarterly newsletter! We invite you to see other details at our website, http://www.DentalPBRN.org. You can also view the projects for which we are currently recruiting practitioners, as well as suggest and view new research ideas. When you visit our website you can complete your online training course that will provide the foundation for you to begin on a project if you have not already done so.

DPBRN continues to be extraordinarily active and productive, as this edition of the newsletter demonstrates - thanks to all of our practitioner-investigators!

**News Items**

**DPBRN posters and presentations at IADR meeting in Barcelona, Spain**

DPBRN was well-represented at the 88th General Session and Exhibition of the International Association for Dental Research (IADR), held this year in Barcelona, Spain July 14-17, 2010. DPBRN had multiple abstracts, given as oral presentations or posters, which garnered a lot of interest in our network.

Dr. Valeria Gordan (Principal Investigator for the FL/GA region) participated in a symposium organized by the Dental Materials Research Group and Network for Practice-based Research. She gave an oral presentation entitled "Investigating reasons for and outcomes of repair and replacement of restorations: a comparison of practice-based and institution-based studies". DPBRN posters at the meeting included the following topics: factors used to rate dentists’ technical skills; successfully engaging practitioners to present research from The Dental PBRN; value of in-office audits in DPBRN; caries risk assessment and treatment decisions; and adult caries risk factors. The posters were presented by The DPBRN investigators, research coordinators, and private-practitioners from the various regions.

In addition to these presentations, Ms. Deborah McEdward (Regional Coordinator for the FL/GA region) and Dr. Craig Ajmo (DPBRN practitioner-investigator for the FL/GA region) attended the Board meeting for the Network for Practice-based Research. They serve as Treasurer and Member-At-Large representatives, respectively. The DPBRN received positive remarks for its participation at the section meeting of the Network for Practice-based Research. The goal of "networks" in the IADR structure is to create opportunities for communication and collaboration among researchers and other interested groups under the umbrella of the IADR.

Congratulations to all the presenters for a job well done!
NIDCR receives approval to proceed with a Request for Applications for the next cycle of funding

Recall that the National Institute of Dental and Craniofacial Research (NIDCR) funded The Dental PBRN for 2005-2012. NIDCR recently received approval to provide a second cycle of funding for the PBRN initiative.

This entailed getting a "concept approval" by the National Advisory Dental and Craniofacial Research Council, which it received in May 20, 2010. In addition to assessing the progress made by the three dental PBRNs that NIDCR funded in 2005, the advisory council assessed the overall programmatic and scientific priority for dental practice-based research. As a result of this approval, NIDCR will release a Request For Applications to fund a second cycle to continue practice-based research networks. Because The Dental PBRN has been very successful and productive in its activities, we hope to be very competitive for this funding.

In Memoriam

Dr. Steven Paul Lynch, AL/MS DPBRN Practitioner-Investigator

We are sad to report the demise of a widely-respected DPBRN member, Dr. Steven Lynch. Dr. Lynch was an active DPBRN practitioner-investigator and his practice was actually in the midst of the data collection phase for a DPBRN study at the time of his death.

Dr. Lynch was born in Tuscaloosa, AL, and graduated from the University of Alabama School of Dentistry in 1985 and maintained a practice in Oxford, AL. He served as a Team Dentist for the 1992 and 1996 US Olympic teams, as well as a representative for Under Armor, 2010 Senior Bowl. He was current President of the Alabama Cosmetic Dental Association, Secretary of the Regional Medical Center Board of Directors, President of the Alabama Hospital Trustees Association, and member of the Policy Board of The National Hospital Association. He will be sorely missed.
Studies Update

- **Hygienists’ internet tobacco cessation study**
  This is a randomized clinical trial designed to allow dental hygienists to provide additional tobacco cessation counseling with little additional marginal effort. This would be done using an internet-based referral to external resources. Data collection is currently underway.

- **Persistent pain and root canal therapy**
  The purpose of this study is to identify pre-operative factors that put patients at greater risk for developing persistent tooth pain following root canal therapy, thereby providing evidence that will allow dentists to act preventively to mitigate this risk, improve pain control, and increase their patients’ quality of life. Data collection is currently underway.

- **Peri-operative pain and root canal therapy**
  The primary goal of this study is to assess the presence and magnitude of preoperative and intra-operative tooth pain, and to determine how these factors are associated with the outcome of intense post-endodontic flare-up pain. Data collection is currently underway.

- **Longitudinal study of questionable occlusal caries lesions**
  The purpose of this study is to perform a follow-up on the consecutive questionable occlusal carious lesions enrolled in “Prevalence of Occlusal Carious Lesions”. The study will record the status of these lesions, if treatment changed, and the condition of the restoration or sealant, if applicable. Data collection will begin in September 2010.

- **Longitudinal study of repaired or replaced dental restorations**
  The purpose of this study is to use data from the DPBRN study of replacement restorations to assess how defects that may lead to failure develop over time, and to follow restorations placed in a practice-based setting for up to three years. Data collection is currently underway and is expected to be completed at the last practice in early 2012.

- **Longitudinal study of dental restoration placed on previously unrestored surfaces**
  The purpose of this study is to use data from “primary” restorations to assess how defects that may lead to failure develop over time, and to follow restorations placed in a practice-based setting for up to three years. Data collection has been ongoing since 2008.

- **Development of a patient-based provider intervention for early caries management**
  This purpose of this study is to focus on improving the quality of dental care by fostering movement of the latest scientific advances into daily clinical practice in the area of early caries treatment. Data collection is complete and data analysis is currently underway.

- **Blood sugar testing in dental practice**
  This purpose of this study is to investigate the prevalence of hyperglycemia in dental patients. The global aim of this study is to determine the feasibility of blood sugar testing and diabetes screening in dental practice. Data collection is complete and data analysis is currently underway.

- **Primary care management for TMJD pain (CONDOR TMJD study)**
  The purpose of this study is to collect data to be used in preparing an application for a Clinical Trial Planning Grant and then in designing a subsequent Phase III clinical trial. The ultimate goal is to determine the most practical approach to conduct a randomized clinical trial to evaluate initial interventions for patients with painful temporomandibular muscle and joint disorders (TMJD) in primary care clinics. Data collection is complete and data analysis is currently underway.

- **Prevalence of questionable occlusal caries lesions**
  The purpose of this study is to investigate questionable occlusal caries lesions, why these occlusal lesions were questionable, the tools used to diagnose the lesions, the reason why a certain treatment was rendered, and the depth of the DPBRN Summer 2010 Newsletter lesions when treated operatively. Data collection is complete and data analysis is currently underway.
• **Impact of dental practice-based research networks on patient care**
  The three NIDCR-funded PBRNs (DPBRN, NWPRECEDENT, and PEARL), collectively known as the “Collaboration on Networked Dental and Oral Health Research” (CONDOR), have developed a strategy for assessing the impact of practice-based dental research on the PBRN practices and on the practice of dentistry in general by using a questionnaire that includes several questions from each PBRN that have been extracted from questionnaires previously administered as part of their initial research program activities. Data collection is complete and data analysis is currently underway.

• **Reasons for placement or repair of dental restorations**
  The purpose of this study is to investigate the main reason that primary restorations were placed, the preoperative and postoperative depth of the caries lesion on the previously unrestored surface, and the type of dental restorative material that was used. Data collection is complete and data analysis is currently underway.

• **Patient satisfaction with dental restorations**
  The purposes of this study are to determine the relative contribution and importance of characteristics of a restoration and restoration visit with overall patient satisfaction following a dental visit that involved a restoration replacement or repair; and to link patient’s satisfaction and perception of the dentist’s technical expertise with long-term objective outcomes of the dental restoration. Data collection is complete and data analysis is currently underway.

• **Reasons for placing the first restoration on permanent tooth surfaces**
  The purpose of this study is to record the main reason that the primary restoration was placed, the preoperative depth of the caries lesions on the previously unrestored surface, and the type of dental restorative material that was used. Data collection is complete and data analysis is currently underway.

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