



Dental PBRN Newsletter

Spring 2006

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Welcome to the Dental PBRN quarterly newsletter! This newsletter is designed to provide you a synopsis of the contents of our website, <http://www.DentalPBRN.org>. The website has been updated with exciting new features, including literature articles, a poll, and a helpful tip of the month. We have also begun a Dental PBRN e-mail list. This will give you an opportunity to chat with other dentists participating in the network and discuss the latest trends and newest materials in dentistry.

You can also view the projects we are currently recruiting dental practitioners for 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.

News Items

DPBRN Study 1 to begin recruitment soon!

The first study is a questionnaire entitled “**Assessment of Caries Diagnosis and Caries Treatment**”. The only requirements are that you perform some restorative dentistry in your practice and have completed the enrollment questionnaire, which can be found at our website, www.DentalPBRN.org. Study 1 will be the first in a series of studies. After completing the Study 1 questionnaire, you may be asked to participate in Study 2 and/or Study 3. Completing Study 1 is necessary to participate in Study 2 and/or Study 3, but completing Study 1 does not mean that you are agreeing to participate in Study 2 and/or Study 3, nor that you will necessarily be asked to.

Study 2 is entitled “**Reasons for Placing the First Restoration on Permanent Tooth Surfaces**”. Study 3 is entitled “**Reasons for the Replacement or Repair of Dental Restorations**”. Please visit the website, www.DentalPBRN.org, for details of the studies.

For the second and third studies, practitioners need to be certified in Human Subjects Protection. You can take an online course at www.DentalPBRN.org for this certification. If you are unsure of your certification status or need certification, please contact your regional coordinator, found in the “Contact Us” section of this newsletter. We also will schedule a class for those who do not want to take the course online.

Practitioners also need to attend an orientation session in person or view an orientation session video prior to the second study. If you are unsure if you have attended a session, please contact your regional coordinator, found in the “Contact Us” section of this newsletter, or the “Contact Us” section of our website, www.DentalPBRN.org.

Our Mission:

“To improve oral health by conducting dental practice-based research and by serving dental professionals through education and collegiality.”

DPBRN Orientation Session held

On February 4th, 2006 an orientation session was held at the University of Alabama at Birmingham School of Dentistry Annual Alumni Weekend. A total of 10 practitioner-investigators attended the session. Drs. Gregg Gilbert, Sonia Makhija, and Ivar Mjör gave presentations and discussed DPBRN's activities to date and planned activities. This orientation session resulted in new research topic ideas for future projects!

Abstracts for proposed DPBRN Studies 4,5,6 are ready for review

The abstracts for DPBRN Studies 4, 5, and 6 have been posted to the Dental PBRN website. The purpose of the abstracts is to provide a synopsis of the next three studies planned for DPBRN. We welcome your comments about these proposed protocols, each of which recently received initial approval by the DPBRN Executive Committee. Once the final versions of the protocols are approved by the Executive Committee, they will be sent for review by the DPBRN Protocol Review Committee. To review these abstracts and submit any comments, please visit the Discussion Forum of www.DentalPBRN.org.

DPBRN presentations in Minnesota

Dr. Brad Rindal presented a DPBRN poster at the two major dental meetings in Minnesota: Minneapolis District and St. Paul District. Merry Jo Thoele, MPH, RDH presented to the dental hygiene students at the University of Minnesota.

The Dental PBRN is an effort to help dental professionals directly improve the efficiency and effectiveness of dental care. Essentially, it is research done about and in the "real world" of daily clinical practice.

Future Meetings***DPBRN regional annual meetings***

The Florida regional meeting of DPBRN practitioner-investigators will be October 19, 2006. The dates for the Oregon, Minnesota, Alabama, and Scandinavia have not been finalized yet.

Other meetings relevant to AL, FL, and MN practitioner-investigators

Alabama Dental Association Fifth District in Anniston,AL - May 12
 Alabama Dental Association (ALDA) in Orange Beach,AL - June 15-16
 American Dental Hygiene Association (ADHA) in Orlando,FL – June 21
 Academy of General Dentistry (AGD) in Sandestin,FL - September 7-8
 Minnesota Dental Association (MDA) in Minneapolis,MN – May 1

Member Highlight

This issue, we are highlighting Valeria Gordan, DDS, MS. Dr. Gordan is an Associate Professor in the Department of Operative Dentistry at the University of Florida College of Dentistry and the Principal Investigator for DPBRN Study 1: Assessment of Caries Diagnosis and Caries Treatment. She led the extensive questionnaire development process for DPBRN Study 1. Her interest in this topic arose after an extensive literature review and the need to understand the decision making process for caries diagnosis and treatment. She is interested in how clinicians make decisions regarding dental treatment and what process is used when a need to alter behavior exists. She is also involved in Studies 2 and 3, which deal with placement and replacement of dental restorations.

Management of Research Topic Ideas in DPBRN

DPBRN was selected to present a poster at the Inventory and Evaluation of Clinical Research Networks Meeting to be held in Rockville, MD May 31st. It highlights the process used to transform an idea into a study.

Studies from primary care practice-based research networks (PBRNs) suggest there may be more translation of research into practice when ideas come from clinicians. The NIH-NIDCR recently funded three oral health PBRNs, including "The Dental PBRN" (DPBRN). Our purpose is to describe how DPBRN facilitates developing practitioner questions into research protocols.

Some have referred to much of dental research conducted to date as "scientifically valid, statistically significant, but clinically useless". We would like to change that.

Practitioners from Alabama, Florida, Georgia, Mississippi, Minnesota, Oregon, and Scandinavia are included in DPBRN. Participants must complete a 101-item enrollment questionnaire including ideas for future DPBRN projects. Practitioners attend an orientation session given by DPBRN, yielding ideas for future projects. The DPBRN website (www.DentalPBRN.org) allows participants to email suggestions. Ideas are compiled, quantified, discussed and prioritized by the DPBRN Executive Committee (EC). After EC approval, a brief abstract is developed and submitted to NIDCR for assessment of inter-network overlap. Further development is directed by the EC. After final approval by the EC, the NIDCR "DPBRN Protocol Review Committee (PRC)" approves, recommends revisions, or rejects the protocol. Following PRC approval, it is then implemented in the network.

Approximately 40% of practitioners have responded with at least one study idea. In the first year of DPBRN, six ideas have been developed into protocols. Three have received PRC approval and three are under development.

DPBRN has developed a multi-step process for turning a practitioner's idea into a collaborative research project.

DPBRN Study 1 Questionnaire Development Process

The steps taken to develop the idea into a study involve a lengthy and thorough process. Below is the process used for DPBRN Study 1.

The Executive Committee met in June, 2005 and decided that preliminary information should be gathered from each practitioner-investigator regarding assessment and treatment of dental caries. This information would work as baseline data which could be used for comparison purposes as well as understanding data in future studies. This information would constitute the first study of a series of studies dealing with restorative treatment and longevity of restorations. Dr. Gordan was appointed as the Principal Investigator on Study 1.

A review of the literature revealed a lack of evidence base for caries risk assessment and certain preventive measures. The study background therefore focused on the following topics:

1. The prevalence of dental caries
2. The lack of a "gold standard" in clinical treatment planning

3. Caries risk assessment in treatment planning
4. The lack of consensus in caries treatment planning
5. Professional intervention in caries prevention in high caries risk adults
6. The individualized preventive treatment plan for high caries risk adults

After substantial input from DPBRN consultants (national experts in their fields) and practitioner-investigators, the questionnaire was initially pre-tested by six faculty/dentists from University of Florida and then another 3 dentists from UAB. The practitioner-investigators on the Executive Committee also participated in initial pre-testing. The feedback received by the participating dentists was carefully discussed between members of the study group and adjustments were done to the questionnaire accordingly.

The Executive Committee approved Study 1 in October, 2005 and the Protocol Review Committee approved it December, 2005.

Contact Us

If you have any questions, you can contact **Andrea H. Mathews, BS, RDH** at the University of Alabama at Birmingham. Her email address is ahmathews@uab.edu.

Pre-testing of the questionnaire was completed on February, 2006 with the assistance of 10 additional practitioners-investigators from across the network. Further testing, to assess the reliability of each question is currently under way, with input from 35 practitioners-investigators from across the network.

After the results of the reliability testing are gathered, analyzed, and final changes are made, the final Study 1 questionnaire will be distributed by the coordinating center to all participating practitioner-investigators.

Current Protocols

“An Internet Intervention to Improve Oral Cancer Prevention”

This is an internet-based clinical trial of oral cancer prevention. The project is directed at prevention of oral cancer in dentistry by offering internet education and tools for your practice and support for all members of your practice. **Due to the success of the recruitment of this study, we increased the number of participants from 140 to 190. As of March 21st, we have reached our target number of participating dentists!**

“Practice-Based Root Canal Treatment Effectiveness Among Diabetics and Non-Diabetics”

This a retrospective cohort study to test the hypothesis that endodontic treatment failure is significantly higher among dental patients with diabetes mellitus type II when compared to non-diabetic controls. The idea for this research project was a result of ideas provided by dentists who completed the Dental PBRN enrollment questionnaire. All that is required from you is to assist our Research Specialist, Ms. Jackie Love, to allow her to abstract treatment record information on these patients. Currently this protocol is only open to Alabama dentists because this project was funded before we received the large NIDCR grant to fund our Dental PBRN.

