Can a Patient's Perception of the Dental Hygienist's Role Influence Oral Healthcare?

An Action Research Project Presented
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Dental Hygienists are called many names throughout their careers by their patients. Some call us an "assistant" and others "nurse". Sometimes, on rare occasions, we even have been called "doctor". I have played this role for seventeen years but am not sure if patients have a clear image of who I am and what role I play in healthcare. Understanding what patients think they know about the part I play in dentistry is something I need to explore so I can use that information to become a better clinician and patient educator.

The theories that Dental Hygienists have about the role they play and the one created in the minds of patients can be very different. I know that Dental Hygienists are professional oral healthcare providers with a wide range of qualifications, education and a varied scope of practice having passed my State and Regional Boards after years of schooling and having gained experience in dental practices and Continuing Education courses. Patients may possibly have an inaccurate perception of the role Hygienists play regarding oral health prevention and treatment because they are not aware of the facts, which may impact the therapies they accept. The assumptions they have about a Hygienist's role are influenced by a patient's previous exposure to those in the profession.

The goal of this action research project is to establish whether or not the above assumption; that the public is unaware of our qualifications, education and knowledge, is accurate. It is through this research that I will be able to determine whether the patient's trust in their clinician's knowledge encourages them to proceed with treatment and where my efforts should be focused to improve the public's awareness of the Dental Hygienist's role and therefore impact patient's oral healthcare.

An educational environment within my own dental hygiene department, and on a more statewide level through the American Dental Hygienists' Association State and its Local Components, will need to be created if it is found that the perception of my role is contrary to reality. I also have to be open to the fact that my theory may be incorrect; that the public's perception of a Hygienist's role and reality are one in the same. If that is so, then I will need to change my outlook based on the initial findings and create/implement a plan to change the perception within myself.

Background

In order to do the research for this project I found that it was important to first research the education and licensure requirements of the dental practitioners in my State of Pennsylvania.

This information helped me formulate a questionnaire/survey to determine if the public's knowledge of the role of Dental Hygienist is an issue worth researching.

Educational Requirements for Non-Surgical Hygiene Periodontal Therapy

The American Dental Association's (ADA) Commission on Dental Accreditation (CODA), states that a Dental Hygiene Student must complete at least six hours of clinical practice per week for the preclinical semester and at least eight to twelve hours of clinical practice time per week for the 2nd semester. During the prelicensure year each student is scheduled for at least twelve to sixteen hours of practice with patients per week in the dental hygiene clinic. This equates to approximately 720 clinical hours of periodontal data collection and therapy on actual patients.

The CODA states that for ADA accreditation a dental school must show that Dental Students "be competent in providing oral health care within the scope of general dentistry"(ADA.org 2013). There is no mention of required hours of hands on instruction in the literature.

Expanded Functions Dental Assistants (EFDA) have been recently permitted to perform coronal polishing in Pennsylvania after completion of a 3 hour hands on clinical continuing education course. (State Board of Dentistry Special Notices 2013) Non-surgical periodontal therapy is outside of the scope of practice for EFDAs in Pennsylvania therefore no CODA Standard has been developed for EFDA's ability to perform non-surgical periodontal procedures.

Clinical Examination Requirements for Non-Surgical Hygiene Periodontal Therapy

Dentists and Hygienists must pass a clinical exam showing competency in order to be eligible for licensure, although recently, the North East Regional Board (NERB), the nonprofit organization who is charged with administering clinical dental licensure testing for Dentists and Dental Hygienists in 20 States throughout the USA including Pennsylvania, issued a letter and stated in its 2013 manual and a subsequent letter that the clinical periodontal portion of the exam is now an optional part of testing for dentists. The letter states that a "failing grade (less than 75%) in the optional Periodontal Clinical Examination does not affect whether the candidate has passed the exam for licensure" (Candidate Manual 2013), (Periodontal Examination 2013).

As stated earlier, in order for a school to be accredited by ADA Dental Students must show competency in providing oral health care, including periodontal assessments, diagnosis and treatment. This is contrary to the requirements for passing the Dental NERB licensing test. Dental candidates, who take the 2013 exam for licensure, may fail the clinical periodontal portion of the test, if they opt to take it, and still pass the dental examination, become licensed Dentists and provide periodontal care to patients. When licensed, these Dentists (who may or may not have taken the periodontal portion of the exam to show competency and who may or may not have failed the periodontal examination) are able to legally diagnose whether or not

periodontal disease exists. It is also fair to note that Dentists are the only dental professionals who may legally diagnose periodontal disease in Pennsylvania.

Licensure Requirements (Pennsylvania Code 2013), (Pennsylvania Code 2013)

Graduating from an accredited dental school, passing the National Board Dental Examination (written examination) and passing the NERB exam are requirements that must be met in order for Dentists to be licensed by the State of Pennsylvania. Licensed Dentists must also submit thirty hours of Continuing Education Units (CEU) biannually to the State.

Dental Hygienists must also have graduated from an accredited dental hygiene school, passed the National Board Dental Hygiene Examination (written examination) and passed the NERB dental hygiene clinical examination to be licensed by the State. Twenty hours of CEU must be submitted biannually to the State to remain licensed.

Expanded Functions Dental Assistants must have graduated from a program consisting of at least 200 hours of clinical and didactic instruction from an accredited dental assisting program, focusing on restorative care. They must submit 10 hours of CEU to the State biannually. As stated previously, EFDAs may provide polishing to patients in a dental office once fulfilling a three-hour hands on course.

Research

I was prompted to begin investigating the existence of the issue being studied by use of an electronic survey due to the limited contact hours I have with patients in my practice. In this initial survey I researched individuals who have been treated in a dental facility under the rules and regulations set forth by the Pennsylvania State Board of Dentistry.

The survey was created and distributed via the internet to measure the perception of the education and qualifications of dental professionals, a patient's preferred provider based on perceived knowledge of the provider's role and if the education, licensure, and training of the dental auxiliaries is a concern to patients. The survey was intended to analyze the thoughts of those from all jurisdictions within Pennsylvania so that, if the assumptions are correct, plans can be made to implement an educational strategy in the regions of the State where it is needed. The results of the survey enabled me to create an action plan to implement and analyze in my clinical setting.

A 14-question survey was prepared, including close-ended and open–ended questions. Participation in the survey was voluntary and anonymous. Email addresses were requested to enable the researcher to address participants if follow up questions arose. Failure to provide an email address did not disqualify participants from participating in the survey.

Initial Survey Results

The survey was completed by 205 residents who visited a dental office within the past year for a preventive hygiene appointment in Pennsylvania. Questions were posed to the responders including "Who do you prefer to do your preventive care/cleanings?" and "Why do you prefer" a particular provider. Responders were also asked if they knew who could perform each task on a list and if it was important to know who is licensed in a dental office.

Exactly half of the responders prefer that a registered Dental Hygienist perform their hygiene services and believed that preventive hygiene services are what Dental Hygienists "were trained to complete". They felt that Dental Hygienists "would have a better understanding of what to look for with your gums and teeth". Others indicate that their Dental Hygienist has the time to focus on them and are "not as busy/rushed as a Dentist can sometimes be". One responder stated that Dental Hygienists "have been schooled for this particular job, they may actually do a better job at it than a Dentist who would likely rather focus on more involved dental procedures".

The patients that indicated that they prefer a Dentist for their hygiene services (12.3%) did so because they felt "that the Dentist is better at the cleanings than is the Dental Hygienist" and that their Dentist "is more gentle than any Hygienist" they'd ever had. The survey also shows that 40.7% of the responders who had their most recent hygiene appointment completed by their Dentists did not have scaling performed at that time.

Educational level and quantity/quality of time were the two main reasons that the persons surveyed prefer to have their Dentist perform their preventive hygiene services. Patients cited that they felt that Dentists were "paid too much for the time spent examining" them during their hygiene appointments and that the Hygienist "works too quickly in order to have (the patient) ready for the Dentist" as reasons they prefer to spend the entire hygiene appointment with their Dentist. Some patients indicated that they believe that their "Dentist should be more educated and experienced in what to look for" and they "trust his knowledge more". One survey responder indicated that "it has usually worked in his/her favor to have a Dentist perform the cleanings" because the consistency in personnel is not present.

Although half of the responders indicated that they prefer a Dental Hygienist perform their dental hygiene preventive services, the survey indicates they are not aware of the skills, training, education Dental Hygienists have and the duties that can be carried out in a clinical setting. One-third of survey respondents do not believe that Dental Hygienists are trained to perform a periodontal exam and only 46.3% believe that Dental Hygienists can recognize decay on a radiograph.

Surprisingly, 40% of the responders did not know if their dental providers were licensed and 35% felt that it was not important to know the differences between the roles od Dental Assistants and Dental Hygienists.

<u>Evaluation of Initial Survey Results</u>

While it is clear that patients appreciate the role of a Dental Hygienist, upon further evaluation of the electronic survey it was evident that there are many different views of the duties a Hygienist can complete and knowledge a Hygienist has based on a patient's past experience. It was also evident that I needed to focus on educating patients about the diagnostic procedures that Hygienists can perform such as a periodontal exam and, although we cannot legally diagnose decay, that we can recognize areas of concern radiographically and clinically. Once patients understand the scope of our knowledge we can form a trusting relationship, which may influence positive oral health decisions and acceptance of further treatment.

Action Research in Clinical Setting

Having the initial survey results prompted me to begin collecting data from patients seen within my practice to evaluate their knowledge of my role. New patients to the practice and existing patients of the practice who I had not previously treated were subjects for the clinical research portion of this study. It was important that I limit my evaluation to patients whom I had not provided care to in the past, as their perceptions of my role would have been influenced by my values and beliefs at earlier appointments.

Clinical Data Collection

In order to collect clinical data I found it necessary to create two forms. The first is a dental hygiene questionnaire for the patient. This document questioned the patient's overall feeling of their past dental hygiene experiences and compared it to today's experience. The second document was a checklist for me, as the clinician, to evaluate a patient's knowledge of the scope of practice of a Dental Hygienist. This document gauges my perspective of the patient's perception. The areas being evaluated, by my personal assessment, are: the patient's initial response to my introduction as their dental provider, their past hygiene appointment experiences, their impression of the hygiene examination, their newly acquired dental knowledge and their final response at conclusion of the appointment.

Each patient was greeted with a handshake in the waiting room with an introduction as I relayed my job title as "Dental Hygienist". I asked each patient if they had, in the past, their hygiene maintenance appointment performed by a Dental Hygienist and if they understood what the role of a Dental Hygienist is.

Each appointment began with radiographs (if prescribed), a complete periodontal exam (including data collection of probe depths, recession, furcation involvement and mobility), oral cancer screening (visual and palpation), occlusal evaluation, visual examination for evidence of parafunctional habits and signs of carious lesions and possible future caries risk.

Each part of the hygiene examination was explained to the patient in detail as it was being performed. The patient was returned to upright position and told of findings before the prophylaxis portion of the appointment was commenced. The patient was then asked if they had ever encountered an exam similar to the one performed by a Dental Hygienist in the past.

The patient was asked at conclusion of the appointment if they learned something during the visit that they hadn't known previously. This question was asked to rate the patient's newly acquired dental knowledge.

Clinical Assessments

Of the patents being studied one refused the appointment, as she preferred that the Dentist provide her hygiene care. The following paragraphs describe the appointment and how the education throughout our interaction motivated her to take action for an existing problem that she had neglected to treat for years.

Initially this patient decided that she would allow me to take the full mouth series of radiographs but would reschedule for the exam and prophylaxis. Dental auxiliary personnel always take radiographs in this practice.

She began to show interest in having me perform the hygiene procedure when I started to pose questions to her about the issues I could see on the digital radiographs as I was taking them. At the conclusion of the radiograph series she said that she would "give me a try" and allow me to perform her prophylaxis.

Looking back on this appointment I can see that my interaction and concern about her dental health, as well as my dental knowledge had created a trusting environment.

Her periodontal exam, which happened to be the first periodontal exam documented in the 3 years she had been a patient of this practice, showed mobility and 4 mm of gingival recession on the facial of tooth #24 without evidence of recession on adjacent teeth. When asked about the area the patient stated that she had been told to visit the periodontist for a gingival tissue grafting evaluation, which she had previously declined. After checking her occlusion I explained that her misaligned teeth were causing a traumatic bite in the area and that I believed that the trauma was creating bone loss and the recessed gingival tissue. She was shocked that she had not been told that before and I noticed that my explanation made sense to her.

I could see that her perception of me changed as I began to educate her on the issues I was seeing. I know that I made an impact on her future dental health when she asked me for an Invisalign® pamphlet and to be scheduled with me for her next appointment. She also confided in me her positive feelings regarding the appointment she had with me verses the previous hygiene visit performed by the Dentist.

Another patient I studied presented for a comprehensive new patient exam with full mouth radiographs and prophylaxis. My introduction had already been made in the reception area but I wanted to get more information after I seated her as to what she thought a Dental Hygienist's role is. I asked her and she relayed back to me that a Dental Hygienist "cleans teeth".

As always, I explained what I was going to be looking for when I began to perform the periodontal examination. Before I proceeded with the exam this patient asked if my exam

would “cost extra”. I explained that this type of exam is something that she should expect from her licensed dental provider at every hygiene maintenance appointment.

During my exam I felt the need to take intraoral photographs of older restorations as they appeared to be fractured and worn. I reviewed my findings with the patient and explained possible treatment options should the Dentist feel the need to provide treatment. After my explanations she then asked me if it was necessary for the Dentist to come in for an exam today. I said that he would and was surprised by her response. She responded by saying, “Why? You’ve already done everything.”

I felt that this patient was comfortable with my assessments and that she was impressed with the detail that I exhibited during the appointment. She presented to the office the following week for treatment. I believe that the co-detection of the patient’s needs and her perception that I was a knowledgeable clinician prompted her to schedule for the needed treatment.

Other patients I had encountered indicated on their survey that they rated the hygiene appointment they experienced either Above Average or Excellent and that the knowledge they received at the appointment prompted them to proceed with recommended treatment. 100% of the patients surveyed scheduled for either operative treatment with the Dentist or their next preventive care appointment with me for their next hygiene maintenance appointment and all patients indicated that they learned something about their mouths that they had not known before.

Conclusion/Reflection

While completing the research for this project I had the opportunity to learn about the qualifications of dental professionals, how I am perceived as a Dental Hygienist, as well as how I can influence treatment acceptance.

Upon researching the various qualifications and education needed for licensure of each dental professional I was very surprised to learn about the optional NERB periodontal clinical examination for Dental Students. While the Pennsylvania State Board of Dentistry stated at their meeting, held on 25 January 2013, that they should revise the Regulations to require this portion of the exam the Dental Laws and Regulations do not reflect this at the time of this paper submission. Ideally, this should be publicized throughout the dental community so that we can advocate for our patients. A mandatory passing grade on the periodontal section of the NERB exam should be required to ensure that Dentists are skilled to provide non-surgical periodontal care to patients and are qualified to supervise Dental Hygienists, as required by the current Pennsylvania Dental Law.

I have also found that the role of the Dental Hygienist is an important one in a dental practice. Patients receive less positive reinforcements for needed treatment when they perceive the Dental Hygienist as a task performer instead of a problem solving healthcare practitioner. When Hygienists are considered co-diagnosticians along side our Dentist counterparts our patients are more inclined to have treatment accepted and completed, impacting the

profitability of a practice. Patients value dental professionals who make "them aware of existing prevention options, educated them about how to maintain a healthy mouth and teeth, and supported and reassured them frequently during visits" (*BMC Health Services Research 2012*) and do consider consistency in personnel crucial to creating a trusting relationship within a dental practice.

Taking the time to communicate the examinations that I am performing emphasizes in the patient's mind how educated I am. Many times I have missed opportunities to educate patients about my qualifications and dental knowledge and even the data I am collecting about them during an appointment. I can recall incidences in the past where I sensed a patient's reluctance to be educated and, because of that non-verbal communication, I failed to share knowledge with that patient. It is this vital education that we provide to patients that will help promote Dental Hygienists as healthcare professionals and involve patients in accepting their dental needs.

Patients come into dental practices with their own hypothesis about the role of the Dental Hygienist based on their previous encounters with dental professionals. I have found through this research of my patients and myself that a patient's perception of the Dental Hygienist's role can be influenced when I expose them to a learning atmosphere instead of a lecturing environment. Exposing patients to new ideas and examinations will be enable them to process the new knowledge and integrate that knowledge into forming a new awareness of the Dental Hygienist's role (Koch, S. and Deighton, J. 1996). It is by creating this enlightening environment that patients will come to respect the position we hold in healthcare and accept the treatment they need and deserve.

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