"The Changing Face of Dental Hygiene Practice:
Expert clinician, skilled motivator and preventive specialist"

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Course Outline:

MODULE 1: Changing Trends in Clinical Practice

I. Historic trends and changing roles in Dental Hygiene

a. What healthcare changes can cause a shift in our profession or roles?

b. Skills self-assessment survey ***(see attached survey - Handout A)***

c. *Mid-level Providers and Dental Therapists* defined

d. Creating your "E-Portfolio"

i. Qualifications: resume, licensure, professional references

ii. Practice contributions:

1. increased production, use of new products/procedures
2. Thank you notes from patients
3. Employer annual review/positive comments
4. List of technologies you have mastered

iii. Professional Development

1. Continuing education programs you attended
2. Professional membership
3. Association offices held/volunteer opportunities

iv. Community Services

v. Presentations/Publications: to dental programs, K-12 schools, professional journals

II. Role of Technology: Screening and Electronic recording

a. **Oral Cancer** Screening Devices

i. Velscope®

1. http://www.velscope.com/education/training-videos/

b. Periodontal assessment, probing and treatment planning

i. Screening probes and application in practice

ii. Voice Works™ - www.floridaprobe.com

c. **AAP** Periodontal Screening Risk Assessment

i. Risk Factors: Smoking, Diabetes, Cardiovascular Diseases and Pregnancy

ii. Periodontal Disease: www.AAP.org or www.collagenex.com

d. **CRA**: Caries Risk Assessments (CAMBRA, CDA Foundation and ADA CRA)
    i. Source for risk assessment downloads:
    Dental Caries: www.ada.org or www.cda.org

    ii. CAMBRA (*Caries Management by Risk Assessment*)
    iii. Comparing 2 case studies utilizing CAMBRA to guide treatment decisions
    iv. Developing Treatment Protocol: ***(CAMBRA/Guidelines, source: CDA Journal Oct 2010, Vol.38)***

New issues – Oct, Nov 2011 CDA Journal – Implementing CAMBRA in Practice

III. Minimally-invasive - Caries examination

a. International Caries Detection and Assessment System **(ICDAS)**
    i. Assessment of disease activity using visual examination procedures
    ii. Reference: *Evolution of Caries Diagnosis by Andrea Ferreira Zandona, DDS, MSD, PhD Dimensions in Dental Hygiene Journal, September 2011 Issue*

****Addendum Charts B & C on ICDAS and use of diagnostic technologies***

b. Caries Detection Technology systems:
    i. Diagnodent™ by KaVo®
    ii. CariVu™ by DEXIS
    iii. Spectra™ by Air Techniques®
    iv. SoproLIFE™ by ACTEON North America
    v. CarieScan™ by DentistryIQ®
    vi. Canary System™ by Quantum Dental Technologies

IV. Fluoride & Calcium/Phosphate innovations **** See Addendum Chart D***

a. Understanding the differences in various product chemistry/efficacy
b. Chart reviews the mechanism of action, bioavailability/solubility and product technologies
    i. ACP
    ii. CPP-ACP
    iii. Novamin
    iv. TCP

V. Expanding Instrumentation Skills

a. Ergonomic considerations for operator positioning and instrument choices
b. Patient Care Set-ups:
    i. Diagnostic assessment of patient
    ii. Clinical symptoms, pain management and “active vs. re-care” protocol
    iii. Selecting appropriate instruments: power-driven, hand scaling, air polishing?
    iv. Design advancements and application
    v. Maintaining Implants (next section)

VI. Implant Maintenance & Instrumentation:

a. General information

i. Success rate of implants when placed = 90-94% - however longevity in remaining healthy, stable and functioning is 61%.
ii. Early intervention when complications arise is key!
iii. Periodontal infections around implants after placement occur more than 50% of the cases
iv. Peri-implant mucositis (similar to gingivitis) occurs in approximately 80% of patients with implants and in 50% of all implant sites.

b. 5 - Step Assessment

(Accord to Wingrove S. Periodontal implant therapy for the Dental Hygienist, 2013)

1. **Visual examination** of gingiva: keratinized or non-keratinized?

2. **Probing**: light pressure to avoid penetrating perimucosal seal (epithelial attachment)
   - Baseline depths established after healed implant
   - Probing is safely acceptable in 3months post-surgical on mandible and 6 months on maxilla. 6 months after regenerative osseous grafts. Rx consultation with dental surgeon who placed implant(s).
   - PPD, BOP and Radiographs must be conducted at every visit by hygienist

3. **Cement or Calculus**: evaluate presence by using specialized floss wrapped in a "shoe-shine" effect to examine fraying and remove with safe instruments
   - Cement left causing infection will exhibit soft tissue swelling, soreness, bleeding or exudate on probing.

4. **Mobility or Pain:** test for movement with two blunted instrument handles and compare with radiographic survey to ascertain source
   - Presence of pain requires dentist's evaluation of possible occlusal trauma, infection or poor osseous integration

5. **Bone level:** proper focus of implant threads are critical to inspect any changes around the implant from visit to visit
   - Radiographs can reveal bone remodeling, biological width invasion and bone loss due to cement left beneath prosthesis.

c. **Radiographic interval Rx**: Take one at surgical placement; cover screw stage, prosthesis placement, six-month and then once yearly thereafter.

d. **Diseases:**
   i. **Peri**-implant mucositis – reversible with mechanical and chemotherapeutic intervention
   ii. **Peri**-implantitis – changes in osseous levels and infection present requires surgeon referral

e. **Instrumentation on Implant sites**

i. **Probes**

1. Plastics and color-coded
2. Safe tip diameter for comfort and calibration of pressure

ii. **Scalers**

1. Titanium vs titanium coated scalers
2. Know the "hardness scale" of the implant / abutment to determine safe selection of scalers when using titanium coated scalers
3. Plastics, Resins and Resin-reinforced Graphite scalers
4. Ultrasonic inserts with safe tip sleeves *(contraindicated for use up to six months after newly restored implant site)*

iii. EMS / Hu-Friedy® Air Flow™ uses glycine powder and recommending "subgingival" debridement with careful placement of tips and low setting

f. **Polishing** with least abrasive agents – fine grit or implant approved pastes

i. ***Selective*** polishing:

1. 2PRO™ for the ease in using the soft tip for better adaptation on abutments, interproximal sites and along crown margins to reduce plaque

g. Patient-centered biofilm management at home

i. Power brushes, air flosser, implant safe materials for threading floss, rubber tip
ii. Chemotherapeutics: antibiotic local or systemic delivery based on presence of infection or localized inflammatory condition
iii. Enamelon™ Preventive Treatment Gel is stabilized 970ppm of $SnF_{2\ /\ ACP}$
Safe gel to apply once nightly/ no rinse. Very low abrasive rating and inclusion of a patented Ultramulsion™ is unique in creating substantivity and improves gingival health

REFERENCES – IMPLANT DEBRIDEMENT

- Fox SC, Moriarty JD, Kusy RP. **The Effects of Scaling a Titanium Implant Surface with Metal and Plastic Instruments: An in Vitro Study**. *J of Periodontol Aug* 1990; 61(8):485-490.
- Dmytryk JJ, Fox SC, Moriarty, JD. **The Effects of Scaling Titanium Implant Surfaces with Metal and Plastic Instruments on Cell Attachment** J of Periodontol Aug 1990, 61(8): 491-496.
- Louropoulou, A, Slot D.E. Fridus A, Van der Weijden. **Titanium surface alterations following the use of different mechanical instruments: a systematic review.** Clin. Oral Impl. Res. 23, 2012: 643-658.
- Sternberg V, Eskow R, Kuzumasa H, LeGaros, J. **Quantitative Assessment of Three Ti Surfaces Subjected to Prophylactic Instrumentation.** *Information available upon request*
- **Clinician's Report**. July 2013, (6): 7 – *Implant Scalers: Are They Necessary?* Conclusive results indicated the Premier® Implant Scalers (Graphite) and Hu-Friedy® *Plastee*l™ scalers were least scratching of implant surfaces.
- Mishler O, Shiau, HJ. Management of Peri-implant disease: Current Appraisal. J Evidence-based Practice Special Issue-Annual Report on Dent Hygiene. June 2014: (4), Supplement I – 53-59.
- Wingrove, S. Dental implant maintenance: the role of the Dental Hygienist and Therapist. Dental Health: Vol 50: 5 of 6; Sept 2011: 8-13

MODULE 2: Effective Whitening Strategies for the Next Decade

Dental Hygienist role in guiding esthetic improvements in the practice

a. Demographics and professional guidance for success in safe bleaching

   i. Patient choices for success

   ii. Predicting best options based on type of stains and shade origin

b. Challenges in **OTC** versus "**in-office**" or "**take-home**" choices

   i. Patient compliance

c. Preventing and/or treating sensitivity

d. Enamel microabrasion techniques (when necessary)

e. Practice building and marketing for new patients

MODULE 3: MOTIVATIONAL INTERVIEWING: A Positive Approach in Guiding Patients to Change!

Excellent Reference Textbooks on use of Motivational Interviewing in Dental Practice:

- *"**Motivational Interviewing in Health Care" – Helping patients change behavior**.*

Authors: Stephen Rollnick, William R. Miller, and Christopher C. Butler: 2008 Guilford Press, NY. www.guilford.com

- ***Motivational Interviewing in Dentistry: "Helping People Become Healthier"***

Author: Lynn D Carlisle DDS; and Forward by Wm R. Miller PhD. www.spiritofcaring.com

- ***Health Behavior Change in the Dental Practice**. Authors: Ramsier & Suran.*

I. **Goal:** Convey just enough of the essential method of MI to make it accessible, learnable, useful and effective in healthcare practice

II. **Define "*Motivational Interviewing*"**

III. Rationale

A. Shift of “treating acute illness” to “managing chronic illness”
B. How MI guides practitioner in helping patients change behavior/poor lifestyles

IV. Origin?

A. Principles of Carl Rogers but introduced in 1983
B. Chronic illness trials tested MI in 1990’s – for patient behavior changes
C. Activate the patient’s “internal motivation” to adhere to change/treatment

D. Spirit of MI:

i. Collaborative
ii. Evocative
iii. Honor patient autonomy

E. Built on 4 Guiding Principles: “RULE”

i. **R**esist Righting Reflex
ii. **U**nderstand
iii. **L**isten
iv. **E**mpower

V. How it fits into dental/healthcare practice?

A. Communication styles

i. Following
ii. Directing
iii. Guiding

B. Why MI Guiding works?

C. 3 CORE - Communication skills

i. Asking
ii. Listening
iii. Informing

D. Practicing skillful guiding

i. Ask

ii. Inform

iii. Listen

E. Understanding AMBIVALENCE:

What do you listen for during patient dialog?

VI. Listening for Change Talk – to BEHAVIOR CHANGE

- Cues that imply the following degree of change stages: listen for "*wish*", "*want*", "*like to*" …

A. Acronym for "change talk" is D.A.R.N.

i. Desire
ii. Ability
iii. Reasons
iv. Need

B. Final 2 stages: (DARN)

i. Commitment
ii. Take Steps
    1. Take gentle small steps and don't force the change!

VII. Asking effective questions

A. Open ***vs***. Closed-ended questions

B. Don't apply *"**TAG**"* questions to good open-ended questions

General Notes: