Improving Whole Person Healthcare Through IPE

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Objectives

After reviewing the clinical presentation PowerPoint and actively participating in the hands-on, interprofessional education (IPE) screening exam session, participants will be able to:

1. Discuss IPE/IPP, competencies
2. Discuss strategies of implementation
3. Define discipline-specific terms
4. Perform discipline-specific history and screening procedures used.
The “New” IPE
Inter-professional Practice and Education

While called by different names, we call it Inter-professional Practice and Education—as a way to create a shared space between inter-professional education, inter-professional practice, and collaborative practice.

It intentionally supports people--including health professionals, students, patients, families and communities—to learn together every day to enhance collaboration and improve health outcomes while reducing costs.
Interprofessional Practice and Education

Interprofessional Education

• “When students from two (2) or more professions learn about, from, and with each other to enable effective collaboration and improve outcomes”

Interprofessional Practice

• “…Multiple health workers from different professional backgrounds work together with patients, families, carers (caregivers), & communities to deliver the highest quality of care…” (WHO, 2010)
Inter-Professional Team-Based Care

Care delivered by intentionally created, usually relatively small work groups in health care, who are recognized by others as well as themselves, as having a collective identity and shared responsibility for patients or group of patients (e.g., Rapid Response Team, Palliative Care Team, Operating Room Team, etc.).
IPE Competencies

1. **Values/Ethics** for collaborative practice: work with individuals of other professions to maintain a climate of mutual respect and shared values.

2. **Roles/Responsibilities**: Use the knowledge of one’s own role and those of other professions to appropriately assess and address the healthcare needs of the patients served.

3. **Interprofessional Communication**: Communicate with patients, families, communities, and other health professionals in a responsive and responsible manner that supports a team approach to the maintenance of health and the treatment of disease.

4. **Teams and Teamwork**: Apply relationship-building values and the principles of team dynamics to perform effectively in different team roles to plan and deliver patient-/population-centered care that is safe, timely, efficient, effective and equitable.
Practice Challenge

► Finding mutual time for Stakeholders to meet
  - staff (scheduling & billing)
  - faculty/clinicians
► Defining most appropriate patient population
► Faculty development
► Student instruction
Approach

The development of synergism between an Osteopathic Medical School (ATSU/SOMA) and the School of Dentistry and Oral Health (ATSU/ASDOH) leading to a program of Inter-Professional Teamwork and Collaboration; that emphasizes cooperation, collaboration, and coordination of relationships between professions delivering “Patient-Centered, Whole-Person” care.

With Complete support from Leadership of AT Still Univ.
Educational Challenge

is defining and delivering teamwork competencies that will:
- guide the preparation of current & future health care providers
- foster the ability and desire to work together with patients and communities to meet the needs in a variety of settings.
Finding Common Ground

Pair and Share:
Discipline-Specific Screening Exams
Pair and Share

1. Voluntary basis for students and faculty. (DO, DMD, PA, PT, OT, AuD)


3. Learning activities are linked to the IPEC competencies:
   - value/ethics; roles/responsibilities; communication; teamwork.

4. Lead team develops a clinical presentation ppt followed by a wikipedia-like method of adding other disciplines unique hx, screening, pt. management strategies

5. Assessment: Brief post-survey, including 5-point Likert-scale questions and open-ended responses. (~95% positively rated 4-5)
Real-time, role-play, enhances learning through touch, mutual respect
Pair and Share - A Starter kit for IPE

1. Successful, stand-alone activity with a high degree of flexibility


3. Implementation requirements are minimal- ppt. projector and space to perform screening exams.

4. Avoids common calendar logistics and minimal budgetary support

5. Increases visibility of all professions

6. Emphasizes appropriate referrals and can be adapted for the Preventative aspects of patient care
Meet Mary

Mary is a 20 y/o female has complaints of right-sided headaches. She has aching pain on the right side of her face and right neck. She associates the onset of HA’s with wisdom teeth extraction about a year ago when the right side had been more difficulty to extract. She does report clenching at night. The pain varies in intensity and it is rated as an 5/10. She describes the pain as coming from her right jaw area and radiating up the side of her head and also has right-sided neck pain that also radiates up the back of her head and face. She denies nausea and photophobia or other symptoms with the headaches.

She has tried icing/heat, which helps for a little while as well as, Ibuprofen.
Meds: Ibuprofen pm, daily vitamin
Allergies: NKDA, no environmental/food
Tobacco: none
Alcohol: rarely
Immunizations: current
Med Hx: Recent illnesses: currently has a ‘cold; history of headaches associated with neck pain and right occiput
Surg Hx: wisdom teeth removed (19 yrs),
Fam Hx: mother: Diabetes Mellitus; father: HTN, siblings healthy
Falls/trauma Hx: Multiple sports injuries as child with lots of concussions. Stress frx. Right fibula 3 yrs ago- treated with walking cast for 6 weeks;
Soc Hx: currently dental student, married 3 yrs, no children
Our extra questions...

What position makes the pain worse? What makes it better? Have you had other treatment for it? Had this complaint before?

Activity level: started running after college- frequent marathoner

Sleep patterns: sleeps well at night, no daytime naps

Diet: “normal”, some fast food

Birth hx: full-term vaginal birth- no known developmental delays

Orthodontia: Braces as teenager for 2 yrs. 3rd molars removed. 6 months ago used invisilign orthotic. Has "TMJ dysfunction"
ROS

General: overall feels good, no recent weight loss or change in appetite

Skin: negative

HEENT: intermittent headaches, no visual changes, slight nasal/sinus congestion

H/L/GI/GU: negative

Menstrual cycle: regular, 29 days

Neuro: no deficits

Psych: stress with school

Peripheral vascular: negative

**General:** normocephalic, well nourished, healthy appearing

**Psych:** Ox3

**Skin:** unremarkable, no rashes, bruising or edema

**HEENT:** mild erythema and swelling of the turbinates, incisal opening-3 fingers; jaw deviated to left; audible click right TMJ

**H/L:** normal S1, S2 no mumurs, rubs, gallops, lungs clear to auscultation bilaterally, normal percussion tones, no abnormal fremitus

**GI/GU:** abdomen soft, non-tender, bowel sounds present. GU unremarkable

**Neuro:** CN II-XII intact, DTR’s 2+ bilat ext, muscle strength 4/4; intact pain and light touch

**Musculoskeletal:** Lower back is warm, slightly boggy to palpation, Ilium R higher than L, Scapula L higher than R, AC joint L higher than R, Mastoid R higher than L; OA FS_R_L, C1RR, C3 FS_L_R, C5 FS_R_R, T4 FS_R_R, T9-11 FS_L_R, L5 FS_R_L, Sacrum R on L, leg length L longer than R by ~2cm
Figure 1. Sonograms of a normal TMJ. A, Closed mouth. The mandible condylar head (large arrow) and the temporal glenoid fossa (upper short arrow) are shown as hyperechoic curved lines. The disk (opposed short arrows) is shown between both over the mandible condyle. B, Open mouth. At maximal opening, the disk (arrows), shown as a hyperechoic line surrounded by a hypoechoic area, is seen over the mandible condylar head. C, Normal disk position (arrows) in a split image: closed mouth (left) and open mouth (right).
TMJ-MRI
Extraction of Teeth

- Third molars (wisdom teeth) put very strong forces through delicate cranial bones with complex functional relationships. Can result in: headache, migraine, neck and back pain can result.

- Chronic sinusitis
- Recurrent Otitis Media
- Recurrent Cephalgia/migraine
- Neck pain
- Back pain
Orthodontics

Moving teeth within their boney sockets involves strong forces for an extended period which introduce strains between the sphenoid and occiput with resulting cranial and facial asymmetry and visceral and musculoskeletal complaints.

Training in Osteopathy in the cranial field can resolve strains restoring symmetry and function.
Temporomandibular Dysfunction (TMD)

“…a collective term embracing a number of clinical problems that involve the masticatory musculature, the temporomandibular joint (TMJ), and associated structures…”

Classification: (3) groups
- Developmental Abnormalities
- Intra-capsular Disorders
- Dysfunctional Conditions (Most common)
Developmental Abnormalities

- Hypoplasia (Under development)
- Hyperplasia (Over-development)
- Boney Impingement of the Coronoid Process
- Chondroma
- Ossification of the Ligaments (Eagle’s Syndrome)
Intracapsular Disorders

► Arthritides:
  ► Degenerative
  ► Rheumatoid
  ► Psoriatic
  ► gout

► Osteochondritis

► Synovial Chondromatosis

► Infection

► Metastatic Tumors
TMD Dysfunctional Conditions (Most Common)

- Altered bite (Malocclusion) due to ill-fitting dentures, poorly restored teeth, missing and/or removed teeth
- Muscular imbalance
- Tooth grinding/clenching (Bruxism)
- Hypo/hyper mobility
- Disc displacement
- Trauma to Mandible
Osteopathic Manual therapy vs. Conventional conservative therapy in the treatment of TMD: A RCT

• Results: Patients in both groups improved during the six months. The OMT group required significantly less medication (NSAIDS and Muscle Relaxants).

Cuccia AM, Caradonna C, Annunziata V, Caradonna D: *Journal of Bodywork and Movement Therapies*; 2010; 14, 179-184
Also see:
Cuccia AM, Caradonna C, Caradonna D:”Manual therapy of the Mandibular Accessory Ligaments for the Management of Temporomandibular Disorders”; JAOA; Feb., 2011; Vol. 111, No 2; Pp 102-112
Osteopathic Postural Screening Exam
Standing Landmarks
Assess 6 levels for symmetry

- Mastoid processes
- AC jt
- Inferior medial scapula
- Iliac crests
- PSIS
- Trochanters
Compensatory lateral Curves

Head
Prefers Sidebending right

Shoulders and scapula
prefer sidebending left
Standing and Seated Flexion Exams

- Thumbs contact Posterior Superior Iliac Spine (PSIS)
- Fingers contact iliac crest
- Instruct patient: “Slowly bend at the waist”
- Observe rib motion for rotatory scoliosis
- Monitor PSIS for superior motion
  - (Means iliosacral jt. is restricted)
- Instruct patient: "Sit down" and repeat Flexion exam
Dental Screening Exam
Observation

- Look for Asymmetry;
- Any Painful Movements;
- Normal Opening (3 Fingers at the Central Incisors);
- Hypo-mobility from joint dysfunction;
- Closed Lock due to disc displacement;
- Muscle Palpation of Muscles of Mastication
Assessment of TMJ Dysfunction

- Gently probe the ear canal with the 5th digit (bilaterally)
- Instruct the patient “slowly open your mouth”
- Feel the anterior glide of the mandible
- Listen for audible clicks

- Place the index finger intraorally on the cheek posteriorly
- And the thumb over the lateral pterygoid muscle
- Gently press together and assess for hypertonicity and tenderness
Assessment of TMJ Dysfunction

• Instruct Patient “Slowly open your mouth”
• Observe mandibular deviation right/left
• Measure distance between incisors

• Can have patient use fingers
• expected 3-4 finger widths
PROVERB

…”Tell me and I will forget;

Show me and I MAY remember;

Involve me and I’ll understand…”
Thank you!
Questions?