OCCUPATIONAL HEALTH

SPECIAL INTEREST GROUP

GREETINGS OHSIG MEMBERS!

Happy New Year! This is the first issue of 2012 and we are looking forward to Combined Sections in Chicago. It's not too late to register!

OHSIG PROGRAMMING AT CSM CHICAGO, IL

OHSIG programming takes place Thursday, February 9th from 8-11:30. The OHSIG Membership Business Meeting will immediately follow the programming from 11:30-12:30.

CSM 2012: PARTNERING WITH BUSINESS TO CREATE A HEALTHY, HIGH PERFORMING WORKFORCE

PART I: 8:00 AM - 10:00 AM

Changing the Conversation from Injury Management to Wellness Activities: Health Promotion in your Practice Setting and on the Job Site

**Break: 10:00 AM - 10:30 AM

PART II: 10:30 AM - *11:30 AM

Changing the Conversation from Injury Management to Wellness

*OHSIG Membership Business Meeting: 11:30-12:30

Session Description

If you have ever wondered if there was a better approach to work injury prevention and management, don't miss this session! The Occupational Health Special Interest Group is excited to have a team of experts in Chicago for the Combined Sections Meeting. Dee W. Edington, PhD, Joanette Lima, CPE, and Cory Blickenstaff, PT, OCS, will lead the discussion. Key note speaker, Dee Edington has completed extensive research on health promotion within organizational environments and is the author of Zero Trends. Adding her experience in ergonomics, Joanette Lima, CPE, is the principal safety services manager for Disneyland. Cory Blickenstaff works with industry to directly provide services. They will combine their unique perspectives to present a thought provoking discussion on partnering with business to create a healthy, high performing workforce. Join your colleagues in this interactive session to "Change the Conversation from Injury Management to Wellness Activities, Health Promotion in Your Practice Setting and on the Job Site."

We hope to see you there!

NEW WORK REHABILITATION GUIDELINE POSTED

The Advanced Work Rehabilitation Guideline has been posted under the OHSIG on the Orthopaedic Section Web site. Log in, go to Occupational Health Guidelines, and you'll find Advanced Work Rehabilitation. We thank all those who worked on the guideline and hope you find this information helpful.

ANNOUNCEMENT OF OHSIG BULLETIN BOARD

If you missed it, the OHSIG now has an Electronic Bulletin Board on the Orthopaedic Web site. This is an active communication link for OHSIG members only! It's a great place to ask questions of your colleagues and share ideas. As of this writing, there have been 17 various topics discussed.

The link is https://www.orthopt.org/message_boards.php Login is required. This is a benefit of belonging to the OHSIG. We hope you will use it.

UPDATE: PETITION FOR SPECIALIZATION IN OCCUPATIONAL HEALTH PT

The ABPTS had questions related to our Petition for Specialization in OH. A face-to-face meeting was held mid-September to respond to questions. John Lowe, Dee Daley, Jill Galper, Lorena Pettit, and I met in Philadelphia. We continue to make revisions to the document and continue the path toward Specialization in OHPT.

OHSIG ACTIVITIES -- MEMBER PARTICIPATION

- APTA requested CMS to add a new Place of Service code for "work-site" to identify services that are delivered at the workplace when the practitioner does not maintain an office at that work-site. Karen Jost, Associate Director Payment Policy & Advocacy, APTA, informed the OHSIG that this request was being considered, and she requested additional information from OHSIG members. OHSIG members responded, providing her with the information she needed.
- OHSIG provided evidence for the efficacy of work hardening and work conditioning procedures with clinical examples for the Regulatory and Payment Counsel of APTA
- OHSIG members participated in an International Multistakeholder Return-to-Work (RTW) Survey.
- OHSIG submitted feedback to the Massachusetts HCSB Chronic Pain Treatment Guideline draft.
- OHSIG was asked to review the Employment Services Standards related to CARF's Employment and Community Services customer service unit. They convened a series of International Standards Advisory Committees and focus groups to review and revise standards in the area of Employment Services. Anita Bemis-Dougherty, Associate Director, Department of Practice, APTA, asked for our review and comments to proposed standards.

As a reminder, be sure to watch for E-mail blasts from the OHSIG. If you do NOT receive E-mail blasts from us and you are an OHSIG member, please contact Tara Fredrickson at the Orthopaedic Section office tfred@orthopt.org (800-444-3982 x203) or inform any member of the OHSIG BOD. Announcements are usually time sensitive, so E-mail blasts are the best avenue of communication for us. Also, we will use the OHSIG Bulletin Board when we can.

NEED AUTHORS

If you are interested in submitting an article for *OPTP*, please let us know. We thank our contributing authors for this *OPTP* issue: Chris Juneau, PT, DPT, ATC, EMBA, and Student PTs, Eric Ingram and Brent Robinson. Their article, Holistic Emphasis, recognizes the founders and mentors of physical therapy, today's physical therapy leaders, and the latest functional movement assessment screens.

MEMBER INVOLVEMENT

If you have suggestions, questions, or comments contact any of the BOD members. We'd love to hear from you! You can find the officer listing on the Orthopaedic Section Web site, under Special Interest Groups.

Professional Regards, Margot Miller, PT OHSIG President

HOLISTIC EMPHASIS

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INTRODUCTION

As clinicians and physical therapists, we play a pivotal role in improving or restoring patient quality of life and return to work status. An industrial sports medicine philosophy emphasizes how critical it is to recognize the source of dysfunction, as opposed to focusing primarily on pain. Pain is a subjective opinion, a personal experience or a personal perception, not an objective finding. As clinicians, if we can essentially recognize

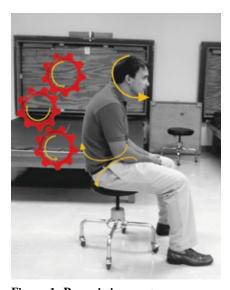


Figure 1. Poor sitting posture.



Figure 2. Proper sitting posture.

and address the source of the pain, in most cases, the pain and dysfunction can be treated and resolved.

It is with the vision and insight of our mentors and influential pioneers of physical therapy that we lay our therapeutic foundation. Mentors such as Mary McMillan,¹ Vladimir Janda, Florence Kendall, Stanley Paris, Shirley Sahrmann, and Gary Zigenfus have defined and established our therapeutic philosophy as clinicians. Current clinicians such as Gray Cook, Sue Falsone, and Kevin Wilk are refining and redefining our therapeutic and holistic approaches.

The purpose of this article is support the benefits of a holistic rehabilitation approach which skillfully identifies and emphasizes the whole individual. Physical therapists should implement a more individualized, holistic, and functional therapeutic exercise program designed specifically to the respective patient's deficits and dysfunctions. Dorland's Medical Dictionary defines *holistic* as pertaining to totality, or to the whole. Holistic health includes the physical, mental, social, and spiritual aspect of a person's life as an integrated whole.²

In 2008, Dr. Stanley Paris stated in a presentation during a Manual Therapy Certification Review in St. Augustine, Florida, that we, as physical therapists, are no longer treating medical diagnoses, but rather we are treating the whole individual. More specifically, we are treating the dysfunctions and impairments; however, they are related to the patient's respective issues or for the purposes of injury prevention.³ It has also been said that posture is one's outlook on life. In the Occupational Health sector of physical therapy, there is much validity to this statement. In Physical Therapy school, we are taught to identify a patient's deficits and create a problem list. As a practicing physical therapist, we may identify a number of deficiencies ranging from mobility, strength, balance, postural asymmetries, and functional deficits. Reflected by their posture, the patient may only identify one problem--pain!

Ironically, what is the common complaint among patients, athletes, and/or clients medically diagnosed with lower back pain? Pain! Biomechanically, the spine is a postural chain and changes in one region will affect another. Muscle tightness or weakness to any muscles attaching to these structures may cause altered postural position. Position of these structures is a key component concerning the assessment of posture and when

looking for the source of low back pain.

One potential cause of pain is musculoskeletal imbalance. Unfortunately, many clinicians may falsely prioritize pain and treat this symptom with modalities rather than further identify the source or underlying cause. There are two primary schools of thought regarding muscle imbalance: a structural approach and a functional approach.

Vladimir Janda defined functional pathology as "an impairment in the ability of a structure or physiological system to perform its job; this impairment often manifests in the body through reflexive changes." This concept requires a vast understanding of complex interactions of systems and structure. In reference to

Janda's approach, he defines muscle balance as "relative equality of muscle length or strength between an agonist and an antagonist."⁴

Can a muscle imbalance cause pain? The Biological Paradigm attempts to explain muscle imbalances resulting from prolonged postures and repetitive movements. Janda is considered the father of the neurological paradigm. In a time of dysfunction, the neural control units alter muscle recruitment strategies in order to stabilize a joint temporarily. This temporary change could alter a motor program and become more permanent. "The science and practice of movement screening and assessment is an organized system for discussing and documenting movement patterns."

Examples of Movement Screens include: The Functional Movement Screen (FMS) and Selective Functional Movement Assessment (SFMA) developed by Gray Cook, and Janda's Basic Movement Patterns. The FMS is a tool for risk assessment and management. The examiner is required to identify areas of movement-pattern limitation, asymmetry, and imbalance. The FMS attempts to detect dysfunctional movement patterns that can potentially present as contributors to future disorders. The FMS is a 7-step screening system with 3 clearing tests, designed to rank movement patterns basic to normal function of active people. The 7 components include the deep squat, hurdle step, inline lunge, shoulder mobility, active straight leg raise, trunk stability pushup, and rotary stability.⁵

The Selective Functional Movement Assessment (SFMA) is a movement-based diagnostic system consisting of 7 key full-body movement tests. It is designed to assess fundamental movement patterns in those with known musculoskeletal pain. The goal of the SFMA is to capture the patterns of posture and function, comparing these patterns to a baseline. Respectively, the SFMA is an assessment tool used to "gauge the status of movement-pattern-related pain and dysfunction." This tool uses movement to provoke symptoms and demonstrate limitations and dysfunctions. The SFMA top-tier tests consist of Cervical Spine Patterns, Upper Extremity Patterns, Multisegmental Flexion, Multisegmental Extension, Multisegmental Rotation, Single Lower Extremity Stance, and Overhead Deep Squatting.

Vladimir Janda identified 6 basic indicators for movement patterns that provide overall information about a particular patient's movement quality and control. Janda's basic movement patterns include hip extension, hip abduction, trunk curlup, cervical flexion, push-up, and shoulder abduction. When performing the evaluation, the therapist should pay particular attention not only to the firing order of muscle activation but also to compensatory movement patterns.⁴

For a quick reference, recommended uses of the Functional Movement Screen, Janda's Screen, and the Selective Functional Movement Assessment are listed below. The FMS essentially targets qualified health care providers that work with (holistic) movement as it relates to exercise, recreation, fitness, and athletics. The FMS can also be applied to military personnel, the labor work force, fire fighters, and other highly active occupations. The FMS is not intended for those displaying pain in the basic movement patterns. Those individuals displaying pain can be better assessed using the SFMA.⁵ Prior to the development of the FMS and SFMA, Janda identified 6 basic movement patterns that provide a fundamental and essential assessment of

the individual's movement quality and control. Janda's screen and respective approach is to increase endurance in repetitive coordinated movement patterns. Since fatigue is a predisposing factor to compensated movement patterns, endurance is more important than absolute strength.⁶

- 1. Functional Movement Screen
 - a. Athletic Screens
 - b. Pre-employment Screens
 - c. Fitness and Wellness Screens
- 2. Selective Functional Movement Assessment
 - a. Clinical Screenings
 - b. Initial Evaluations
 - . Differential Diagnosis
- 3. Janda's Screen
 - a. Clinical Screenings
 - b. Initial Evaluations

An important question to consider during a patient's therapy session is the following: "Is the location of pain simply a compensation for mobility or stability, and are there stability/ mobility issues elsewhere?" Even great athletes can be great compensators. Find and treat the source of pain, as well as the site. By assessing and observing respective movement patterns, the clinician will get an impression of how structural relationships are created and what we can do to restore function. The power of observation during examination is critical to this process.

Greater understanding of dysfunction using the holistic approach will lead to a more comprehensive exam process and more efficient treatment programs. Skilled physical therapy intervention requires that a therapist be able to identify and treat the respective patient in a holistic manner by assessing the whole individual, including issues that involve dysfunctional impairments such as strength, functional mobility, balance, and asymmetries.

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