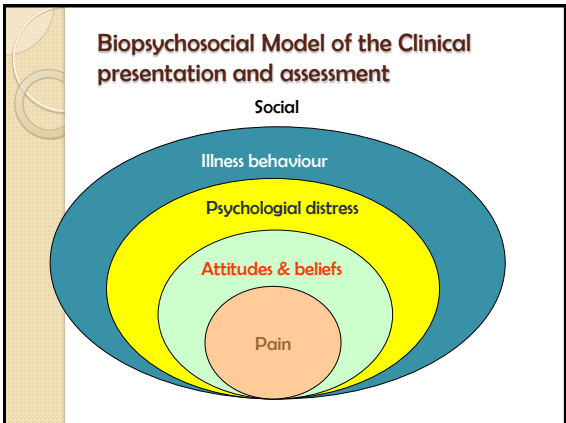


Role of PT in Disability Management / RTW

- ### Role of PT – M/S Assessment (1)
- Detailed history taking on
 - the mechanisms of injury
 - any report of injury incidence to supervisors
 - number of sick leave days
 - any arrangement of modified duty
 - Musculoskeletal examination
 - ◆ Swelling, increased temperature, redness
 - ◆ ROM, muscle power, gait
 - ◆ Outcome score
 - ◆ Limitations in daily functions

- ### Role of PT – Psychosocial screening
- Screening of psychosocial and occupational risk factors:
 - ◆ Psychosocial risk factors act as obstacles in recovery from M/S disorders. They influence pain perception and the development of chronic disability.
 - ◆ Successful management should be aimed at identifying and addressing the obstacles before they become disabling.
 - ◆ Influence of psychosocial factors on RTW is more pertinent in the early stages of absence, rather than prior to taking time off work.



The Clinical Flags

Clinical Red Flags 	Organic pathology Concurrent medical problems	Biomedical factors
Clinical Yellow Flags 	Iatrogenic factors, Belief, Coping Strategies, Distress, Illness behaviour, Willingness to change	Psychological or Behavioural factors (predictors)
Occupational Blue Flags 	Family reinforcement Work Status Health benefits & insurance, Litigation	Social and economic factors
Socio-occupational Black Flags 	Work satisfaction, Working Conditions Work characteristics Social policy	Occupational factors

- ### Factors associated with chronicity & outcomes
- Distress
 - ◆ Symptom awareness & concern
 - ◆ Depressive reactions; helplessness
 - Beliefs about pain & disability
 - ◆ Significance & controllability
 - ◆ Fears & misunderstandings about pain
 - Behavioural factors
 - ◆ Guarded movements & avoidance patterns
 - ◆ Coping style & strategies

PT Rx / Management Strategies (1)

- Minimal rest
- Encourage early RTW
- Reassurance, explanation and advice & supplemented with written material. Provide clear & simple advice.
- Not only include the traditional provision of diagnosis, investigation, prescriptions or sick leave certificates.
- Change of emphasis from:
 - ◆ treating symptoms to early prevention of factors that result in progression to chronicity
 - ◆ Rest & immobilization to active self-management
 - ◆ Examination of symptoms alone to assessment, which includes patients' understanding of their pain & how they behave in response to pain

PT Rx / Management Strategies (2)

- Establish collaboration – gain patients' confidence
 - ◆ Listen carefully to patients
 - ◆ Observe carefully patient's behaviour
 - ◆ Attempt to understand how the patient feels
 - ◆ Attend not only to what is said but also how it is said
 - ◆ Offer encouragement to disclose fears & feelings
 - ◆ Offer reassurance that you accept the reality of the pain
 - ◆ Correct misunderstandings about consultation

PT Rx / Management Strategies (3)

- Enhance accurate beliefs & self management strategies
 - ◆ Explain difference between 'hurt' & 'harm'
 - ◆ Reassure about the future & benign nature of S/S
 - ◆ Help to regain control over pain
 - ◆ "Pace" activities in graded stages
 - ◆ Advise analgesic on regular rather than a pain contingent basis
 - ◆ Set realistic goals such as small increase in activity
 - ◆ Suggest rewards for successful achievement e.g. listening to favorite music

Modern Pain Management

- Focus on function rather than disease
- Focus on management rather than cure
- Integration of specific therapeutic ingredients
- Emphasis on active rather than passive methods
- Emphasis on self care rather than simply receiving treatment

Pain control

- Early pain control
- Aggressive pain control
- Early mobilization
- Stay active
- Use of ET modalities or/ and exercises approach

Physical Exercises

- Aims:
 - ◆ Increase of activity tolerance levels
 - ◆ Avoidance of muscle dysfunction
 - ◆ Decrease of muscle fatigue
 - ◆ Increase of muscle strength & co-ordination
 - ◆ Improved motivation or feelings of well-being
- Aerobic fitness training, resistance training with graded activity
- When combined with cognitive-behavioral intervention, the no. of sick leave days significantly reduced.

Strength Training

- One-repetition maximum (1 RM) has been the standard for dynamic strength assessment.
- Frequency: 2-3 days/week with at least 48 hours separating for the same muscle group.
- Intensity: 60% - 80% of the individual's one RM .
- Repetition: 2 – 4 sets with 8 – 12 repetitions with a rest interval of 2 – 3 minutes between sets.

Cardiopulmonary Fitness Training

- For normal population:
- Heart rate maximum (HR_{max}) = $206.9 - (0.67 \times \text{age})$
- Heart rate reserve (HRR) = $[(HR_{max} - HR_{rest}) \times \% \text{ intensity desired}] + HR_{rest}$
- To achieve fitness benefit, exercise at least moderate intensity (i.e. between 40% to 60% HRR) is recommended.

Cardiopulmonary Fitness Training

- For clients with history of cardiac event:
 - Symptom-limited treadmill or cycle ergometer graded exercise testing in evaluating return-to-work status is well established.
- Aims:
 - patient's responses can help to assess prognosis
 - measured MET capacity can be compared with the estimated aerobic requirements of patient's job.

Cognitive-behavioral Intervention

- Learn coping skills & strategies
- Set up realistic goals
- Change the attitude towards pain sensation
- Operant approaches to eliminate pain behaviours (prolonged inactivity & over-medication) & substitute behaviours inconsistent with a sickness role e.g daily charting of exercises
- Relaxation training will alter subjective experience of pain

Education

- Providing correct information or knowledge
- Reassurance, explanation and advice & supplemented with written material
- Provide clear & simple advice.

Job Analysis (1)

- Collection of information concerning work tasks to enable a comparison of the demands of the tasks with the capabilities of the employee.
- Examine on employee's current job to ensure he can carry out the various tasks safely and effectively.
- Determine whether a new job – to which an injured employee might be transferred for accommodation – is appropriate.
- Provide information about physical job requirements for the employee's treatment providers.
- Provide relevant information when modifying jobs, thereby ensuring an appropriate match with the abilities of the employee.
- Develop an inventory of job tasks for use when implementing individual RTW plan.

Job Analysis (2)

- Data to be collected:
 - ◆ Work schedule
 - ◆ Essential job functions
 - ◆ Equipment, tools & material handled
 - ◆ Environmental conditions & hazards to which the worker may be exposed.
 - ◆ Personal protective equipment required
 - ◆ Duration & frequency of tasks performed
 - ◆ Physical functions & activities, such as lifting, bending, twisting, sitting, standing, walking
 - ◆ Critical worksite measurements
 - ◆ Modification & accommodation options a/v

Job Analysis (3)

- Self-reported format
- Job analysis questionnaires
- Analysis with the **busiest day of work**
- Ask for the **critical job demand** for classification
- Classify the job according to the **Physical Demand Classification of the Dictionary of Occupational Titles, U.S. Department of Labor, 1991**

Why do FCE require?

- Information on **pathology/ laboratory investigations/ imaging and simple measurement of impairment are not sufficient** for clinicians and patients to determine safe return to work.
- Ensuring an appropriate **match between the injured worker's abilities and work requirements** is an important purpose of work-related assessment (Innes & Straker 2001).

Role of Care Manager

- **Work internally** within their own organization or **externally** as a provider.
- Responsibilities include, but are not limited to, **expediting, coordinating and facilitating the return to work** of persons with injuries, illnesses and disabilities in a range of settings.

Role of Care Manager (1)

- facilitating the **communication between injured staff, medical rehabilitation team & working unit**
 - ◆ Coordinating and monitoring progress in rehabilitation services & RTW plans.
- providing **support & useful information to injured staff** about injury on duty issue.
 - ◆ Providing personal support & accompany the injured staff to attend medical treatment.
 - ◆ Providing information on the RTW process & workers compensation benefits to injured staff.
- making arrangement for safe return to work
 - ◆ Preparing a RTW plan to document suitable duties and work restrictions
 - ◆ Identifying appropriate suitable duties
 - ◆ Implementing & monitoring the RTW plan

Training Opportunities

Training Opportunities (PT)

- Skills for **musculoskeletal examination**
- **Knowledge of disease** and relevant clinical examination
- **Diagnosis and management** of work-related diseases
- **Occupational health and other related law**
- **Psychosocial screening** to identify the high-risk patient group
- **In-depth study on the PT intervention**, such as pain control modalities & **physical exercises**
- **Functional capacity evaluation** (fitness-for-work evaluation)
- **Job Analysis**
- **Ergonomic assessment** and intervention (assessing workplace environment)
- Gaining patient confidence to treatment

Training Opportunities (Case manager)

- **Domains of essential skills and competencies:**
 - ◆ **Demonstrate knowledge of disability management theory & practice**
 - ◆ **Apply legislation & benefits programs**
 - ◆ **Labour-management relations**
 - ◆ **Utilize communications and problem-solving skills**
 - ◆ **Disability case management**
 - ◆ **Return to work coordination**
 - ◆ **Health, psychological, prevention and functional aspects of disability**
 - ◆ **Development of program management and evaluation activities**
 - ◆ **Demonstrate ethical and professional conduct**

Source: Certified Return to Work Coordinator, National Institute of Disability Management & Research 2003

On-line Disability Management Training

- **National Institute of Disability Management & Research**
http://www.nidmar.ca/education/education_background/background_information.asp
- **Dalhousie University (Diploma in Disability Management Program)**
<http://disabilitymanagement.distanceeducation.dal.ca/index.html>

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