

# Holistic approach of Occupational Therapy in the management of work disability for chronic pain patients

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Chronic pain does not only produce unpleasant bodily feels of pain, but also lowers the level of life functioning to return to work. This results in work disability for chronic pain patients. Dr. Loisel (Loisel et al, 2001) proposed the arena of work disability (diagram 1) which clearly displays the complexity of work disability in an organized manner. He categorized the determinant factors of work disability into four systems: health care, workplace, legislative and insurance; and personal coping. Each of the systems already has impact onto the level of work disability for each individual. The interplay between the systems further complicated the potential for the chronic patients to return to work and their level of work disability. For occupational therapist, the management of work disability for patient with chronic pain is a proactive process. It aims to minimize the impact of pain on the individual's capacity to participate competitively in the work or job market environment.



Diagram 1. The arena in work disability prevention

## Chronic Pain and Potential to return to work

The outcomes to return to work of the chronic pain patients depend on their level of impairment and the psycho-social impact of trauma or chronic pain (diagram 2). There are five levels of return to work potential: very high, high, moderate, low and very low. For those with no or mild level of impairment, they can spontaneously return to work and normal life after the completion of their conventional rehabilitation. They do not have work disability and their need of work rehabilitation service is minimal.

Long Term Disability	Psycho-social Impact of Trauma or Chronic Pain			
	No	Mild	Moderate	Intensive
Minimal	High			
Isolated		Moderate		
Regional			Low	
Multi-regional				
Whole body				Very Low

Diagram 2. Correlation of long term disability and psycho-social impact of chronic pain to return to work potential

For those with moderate permanent impairment or chronic pain; they need some adjustment at home and work place before they can return to their usual life. Their potential to return to work is moderate; depending on whether the workplace can accommodate them. They need intensive work rehabilitation program including work hardening training, work accommodation, return to work coaching and progressive return to work plan at the workplace to help them to return to work. For those with no accommodation at work place, they need vocational rehabilitation service to seek for jobs that can match with their capacity. During the work hardening program; the patients increase the awareness of their residual work capacity and understand the barriers that limited them to resume previous job. They need help from the vocational rehabilitation services which include vocational counseling, retraining skill for new trade, job placement and post-employment support to help them to transit to new job.

For those with severe permanent impairment or major loss of function, they require major assistance to adjusting to a new life by adaptation in self care, domestic, community living & social life. Their chances of return to labour market is low or very low, even they completed their work rehabilitation program. Helping these severe chronic pain patients to live their lives with meaning and constructively use of free time would be of immediate priority. Temporary out of job market for a period of time to adapt to new lifestyle at home and community is a realistic goal. They would benefit from home resettlement and lifestyle redesign program which includes home resettlement, community re-integration, occupational lifestyle redesign program and learning adaptive strategies training through activity program.

### Pain and lifestyle dysfunction

Chronic pain produce unpleasant bodily feels of pain, it also disturbs mood and thinking, and interrupts daily habits and life role of patients, leading to occupational lifestyle dysfunction. Patients with lifestyle dysfunction is characterized with a lifestyle centers around treatment and treatment seeking behaviors; or living in a life with very little happiness inducing activities in social, leisure and work domains. Lifestyle dysfunction further disturbs moods, generates negative thinking and behaviors, and may damage interpersonal relationship, and even hampers mental health. These processes further accelerate and deepen the vicious cycle of “pain-mood disturbance-lifestyle dysfunction” (diagram 3).

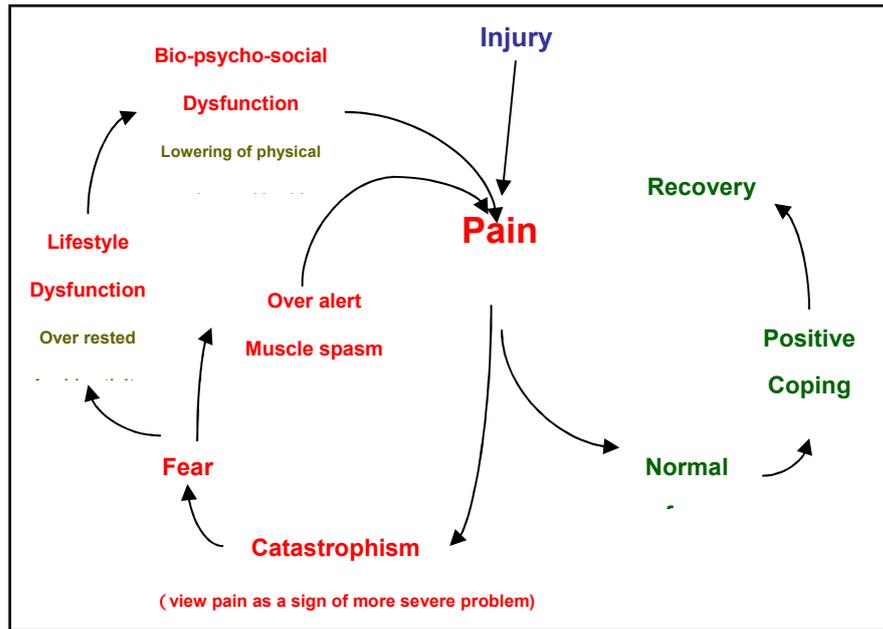


Diagram 3. Vicious cycle of “pain-mood disturbance-lifestyle dysfunction”.

### Aims of Occupational Therapy

The aim of occupational therapy in pain service is to assist the patients to break the vicious cycle of lifestyle dysfunction, coach them to re-develop a successful and happy life with the limitation of pain, by using their residual function, personal, financial and social resources. In short, occupational therapists teach patients to control and live with the pain successfully through Occupational Lifestyle Redesign program.

### Occupational Lifestyle Redesign Program

Therapy is provided in form of occupational lifestyle redesign (OLSR) program. OLSR program is a combination of psycho-social occupational therapy and life coaching, and is conducted in form of group coaching class. In the weekly class sessions, therapists play the role as wellness and life coach and to guide and encourage participants to set weekly implementation goals and make detail planning on the pursuit of one or more happiness inducing activities, in the area of leisure and social life. Therapists provide information, practical tips, and guidance to the participants to ensure successful implementation of the activity plan during the week. Participants report their effort and share the feelings on the implementation of their activity plans. Therapists guide the participants to realize their achievements and sharpen their awareness of the positive feelings associate with the pursuit of happiness inducing activities. The cycles of activity planning, implementation, and sharing assists patients to improve sense of pain related self efficacy in controlling and living with pain, regain motivation and interests in life activities, and accumulate loads of positive feelings in a progressive gradual manner. These successful experiences help in breaking the viscous cycles of lifestyle dysfunction, and thus promote mental health, and resilience to life challenges.

## **Occupational Therapy Work Rehabilitation Program**

For those patients who have potential to return to work, work rehabilitation program will be provided. In Hong Kong, the work rehabilitation program provided by Occupational Therapy departments (OTCOC, 2008) comprises of five components: 1) work capacity and job demand evaluation; 2) work hardening program; 3) return to work program; 4) vocational re-training and re-settlement program; and 5) occupational health, safety and wellness program. The following is a brief description of these services.

### **Work capacity and job demand evaluation**

The purpose of work capacity and job demand evaluation is to collect information about the functional limitations of a person with medical impairment and the demand of the essential work tasks, work environment & work posture that need to perform the specific job. The work capacity evaluation includes measures physical strength and tolerance, and positional tolerance of the patient. Occupational therapists will analysis the data from these two aspects and decide whether the person's capacity is compatible to the demand of that specific job.

### **Work hardening program**

Work hardening program is a bio-psycho-social program design to promote the overall work capacity and work readiness for patients who have a potential to return to work. This is provided to patients who are not able to return to work after standard rehabilitation therapies in early medical rehabilitation phase. Patients are directed to work at various simulated workstations, and practice sets of predetermined work steps. There are generic workstations, which are relevant to a majority of work trade, e.g. lifting, carrying, assembly, cart pushing, ladder climbing, mechanic workstations, etc. There are also trade specific work stations, e.g. construction site workstation, plumbing workstation, electrician workstation, personal and nursing care workstation, domestic work workstation, flight attendance workstation, etc. Patients are assigned to practice at various work tasks which are slightly beyond their capacity. Therapists will gradually upgrade the tasks from light to heavy, simple to complex, short to long duration towards the demand of the target job. Usually, patients will attend work hardening 2 to 3 sessions per week, 1 to 3 hours per session, according to their tolerance. The specific objectives of the programs are: promote overall strength and endurance, promote co-ordinate use of the affected and unaffected body parts, increase pain tolerance, practice skills and postures that can avoid or reduce pain, promote awareness of personal strength and limitations, and facilitate transfer of sick to worker role.

### **Return to work Program**

Return to work program aims to liaise with the original workplace to arrange work accommodation (in terms of adjustment of workload or duration) or provision of assistive devices to facilitate patients to return to work. Sometime progressive return to work plan with be arranged with patients and their workplace so that patient can progressively to take up the original job demand.

Return to work coaching assists patients to handle the psycho-social component during the phase of return to their original work. This may involve detail coaching to overcome personal and interpersonal barriers for return to work and work support, etc. The service covers issues related personal emotion, thinking and interpersonal relationship in the work place. The program may start at later phase of OLSR program, extending into and after work hardening program period.

### **Patient retraining and vocational resettlement service**

The program is provided by a separate team of occupational therapy staff. Needed patients will be referred to this service at the later part or after the completion of pain clinic service. This is a collaborative service between QEH or PMH Occupational Therapy Department and the Employee Training Board (ERB). Service is provided to patients who are motivated to work, unable to return to original work, unable to find new job by themselves, and demonstrate potential to work in open job market. Patients join this service are regarded as trainees of the service rather than out-patients. Further, they can receive re-training allowance from ERB.

### **Occupational health, safety and wellness program**

The occupational health, safety and wellness program aims to promote and maintain the highest degree of physical, mental and social well-being of the workers; to prevent any adverse health effects caused by work or working environment; and to protect the workers from potential hazards related to work. Intervention are embraced by essential ergonomic principles and involving a broad consideration on the interactions of other essential components in OSH. Redesign of workstation, prescription of proper assistive devices as well as enhancement of workers' work practices are common strategies in managing work disability with emphasis on both workplace and the workers.

### **Conclusion**

Chronic pain can have enormous effect on the patients' life functioning. The psycho-social impact of chronic pain and the long term body impairment can results in various level of work disability. This group of patients needs a holistic approach from re-build their lifestyle to adapt to new lifestyle through Occupational Lifestyle Redesign Program, to Work hardening training, to Return to Work or Vocational Resettlement Service to help them to return to the workforce. Although the pace and pathway of each chronic pain patient going through is different, the approach adopted by Occupational Therapist on lifestyle redesign and work rehabilitation programs are effective means to assist patients to establish life roles and lifestyles which are compatible with their residual symptoms, functional capacity, personal aspiration and environmental resources.

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