

# Service Priorities and Programmes Electronic Presentations

Convention ID: 200

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## Return to work: what are the determinants?

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## **Keywords:**

Return to work Physiotherapy Determinants

### Introduction

Injury-on-duty (IOD) patients presented with prolonged disability pose great economic burden to our society such as medical costs and productivity loss. Data from Hong Kong Labour Department revealed that over a million of working days were lost due to work injuries, and about 15% of IOD cases got work absence for one month or above. Early identification of crucial factors for successful return-to-work (RTW) helps to devise and implement an effective Physiotherapy (PT) work rehabilitation program for IOD patients so as to facilitate early RTW.

## **Objectives**

To identify high risk group of patients with poor RTW outcomes and explore RTW determinants, which facilitate to implement a cost-effective PT work rehabilitation program for IOD patients.

#### Methodology

A multi-centre longitudinal study design was employed. Patients referred for PT with history of IOD were studied within the period from 1 September 2010 to 2 September 2011. Pre- & post-clinical outcomes were compared. RTW status and duration of sick-leave period were included for regression analysis. Survival analysis determined the impact of those related variables within the period of sick-leave.

## Result

894 cases were studied. The most prevalently injured body parts were back (29%), followed by ankle and foot (16%), and knee (10%). The two common types of injuries were sprain & strain (29%) and fall (21%). There were significant difference in pain reduction on Numeric Pain Rating Scale (p < 0.05), improvement in quality of life in terms of SF 12 (p < 0.05) and pain interference (p < 0.05) on completion of PT training. Furthermore, "number of days from the day of injury to 1st PT session" (i.e. time lag of access to PT) was found to have negative correlation with RTW ( $\gamma = -0.483$ , p < 0.05)

0.05) (65.7 days for RTW group versus 135 days for non-RTW group). The key predictors of RTW status were identified and estimated by odds ratios (OR) as follows: pay status (3.78), initial pain level (1.44), injured body parts (2.06). Aged workers with sprain & strain injury to back appear to have relatively greater difficulty in RTW. Early PT intervention, initial pain intensity and perceived job physical demand level contribute to determine the success rate of RTW.