



**Service Priorities and Programmes**  
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**Hong Kong West Cluster (HKWC) Multidisciplinary Non-specific Back and neck Pain Rehabilitation program**

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**Introduction**

Patients with back and neck pain are encouraged to acquire pain self-management concepts and participate in active rehabilitation in early phase, in order to reduce the pain recurrence and chronicity. The orthopedic team in HKWC launched a multidisciplinary Back and Neck Pain Rehabilitation Program (BNPP) in 2017, with the aims to enhance the respective clinical management and rehabilitation protocol during the in-patient phase in Queen Mary Hospital(QMH) and MacLehose Medical rehabilitation Centre(MMRC). The BNPP team includes the Orthopedic doctors, Nurses, Physiotherapists(PT), Occupational Therapists(OT) and Clinical Psychologist(CP) in QMH and MMRC.

**Objectives**

To review the results of the newly launched program.

**Methodology**

Patients transferred to MMRC for the BNPP after screening performed by orthopedic doctors or nursing consultant in QMH. PT and OT offered same day assessment on the day of admission. The two-week BNPP covered a structured psycho-educational class on pain management and active training by PT, OT and CP for at least 3 hours daily. PT adopted exercise approach to control pain and muscle spasm. OT provided activity training for postural awareness and active coping strategies to overcome pain and fatigue in daily activities and work. CP provided psychological screening for all patients, and necessary psychological intervention to those in need. The clinical outcomes included Numeric Pain Rating Scale(NPRS), Patient Specific Functional Scale(PSFS), Roland Morris Disability Questionnaire(RMDQ), Global Rating of Changing Scale(GRCS), Modified Barthel Index(MBI), Lawton's Instrumental Activities of Daily Living(IADL), Oswestry Disability Index(ODI) rated before and after the program. Results were analyzed using Paired Sample T-test.

**Result**

A total of 127 patients (male:46(36%), female:81(64%), mean age 57.1 years) were recruited in 2017. The average length of stay(LOS) was 11 days. There was significant decrease of average pain scores in NPRS of 3.8( $t=16.3, p<0.001$ ), and reduction of patient-rated disability in RMDQ of 8 scores( $t=17.9, p<0.001$ ). The PSFS had significant improvement for 4.6 scores( $t=-18.4, p<0.001$ ). There was also significant functional improvement after training with gain of MBI and IADL scores of 5.3( $t=-7.6, p<0.001$ ) and 4.7( $t=-12.3, p<0.001$ ) respectively. The ODI showed significant improvement with 15% reduction in disability( $t=9.2, p<0.001$ ). The average change of patient conditions in GRCS was 54% after intervention. There were about 30% of patients showed at least one of the following psychological problems, including depression, anxiety symptoms, maladaptive pain perception and/or suicidality. There were 13.4% of patients referred to Family Medicine for further management after discharge.

Conclusion:

The multidisciplinary BNPP was proved to be successful in pain management within the 2-week training and functional restoration.