Enhancement of first consultation service on Frozen Shoulder  
FAN CC(1), Tsang LY(1)  
Physiotherapy Department, Yan Chai Hospital  

Keywords:  
Frozen Shoulder  
Patient Empowerment  

Introduction  
Frozen shoulder is a common condition with uncertain etiology frequently seen in a physiotherapy department. A patient who is suffering from frozen shoulder is characterized by spontaneous onset of pain with progressive and significant restriction of both active and passive range of movement. Thus, it will greatly affect their activities of daily living (ADL) and quality of life (QOL). Patients in the Hospital Authority (HA) usually need to wait for at least few months before they can be arranged to have their first consultation of OPD physiotherapy treatment. At that time, most patient have already faced a long period of suffering of pain and many of them would have developed shoulder stiffness. Physiotherapist would then require much more time and effort to help them to regain full range of movement which prolong the suffering and rehab treatment to this type of patient.

Objectives  
This program aims at providing an enhancement of first consultation service by early intervention of education & exercise class to patient suffering from frozen shoulder before the patients receive physiotherapy treatment which is normally about 7 months later. We anticipated that the following objectives can be achieved: 1. Decrease the severity of pain 2. Improve mobility 3. Decrease the number of treatment session of the patient to physiotherapy department 4. Shorten the total rehabilitation period of the patient.

Methodology  
A total number of 40 patients who suffered from frozen shoulder problem were recruited for this project. Lists of inclusion and exclusion criteria will be checked during the triage process. Patients recruited to this program were asked to attend the shoulder education and exercise class within 4 week after triage. Small groups of about 6 to 9 patients joined in each class. Firstly, they were asked to watch a video (about 12 minutes) on definition, different stages, possible causes, self-exercise, home care and management on frozen shoulder. Then they were instructed by physiotherapist to perform the exercise until each patient did it correctly. An exercise pamphlet was given and served as a reminder for them to do the home exercise. The class took about 2 hours to complete the whole process. Three outcome indicators: DASH, Numeric Pain Rating Scale (NPRS) and shoulder flexion
range will be taken and recorded at the date of triage and 5 months after for further analysis.

Result
There is a significant reduction of NPRS of all patient attended the program (mean change= 70.94%, p< 0.01). Mean reduction of NPRS was from 5.26 to 1.58. There is a significant improvement in active range of shoulder flexion for all patients (mean=49.49%, p<0.01). Mean increase of shoulder flexion range was from 105 to 143. For patient attended more than 1 session and with pre- and post- DASH assessment, the baseline average of pre-DASH was 44.3, and the average of post-DASH was 27.535. The observed change of patients with pre- and post- DASH was -38.93% (p<0.01). Small class size, early intervention and emphasis on doing the correct exercise are believed to be the key success of this program. The enhancement program is worth to continue in the future which significantly benefit both patients and our department.