A retrospective study: Review of Activities of Daily Living (ADL) profile of patients with chronic respiratory disease who have received Pulmonary Rehab Program (PRP) in Tuen Mun Hospital (Rehab Block) from 2013 to 2017

Cheung SHM, Kwok MPH, Lee PC, Yau MMH, Choy FWY, Cheung JTY, Poon JHK
Occupational Therapy Department, Tuen Mun Hospital

Keywords:
Activities of Daily Living (ADL)
Chronic Respiratory Questionnaire (Chinese version)
Pulmonary Rehab Program (PRP)
Occupational Therapy

Introduction
Pulmonary Rehab Program (PRP) is one of the key programs in managements of patients with respiratory disease (e.g. COPD). In NTWC, we have been running the PRP for more than 10 years. As Occupational Therapist, we are focusing on Activities of Daily Living (ADL) and one of the assessment tools - the Chronic Respiratory Questionnaire have been using word-widely for decades and Chinese version (CCRQ) have also been using in Hong Kong across all Occupational Therapy settings.

Patients were needed to mention of five ADL that they will need to perform and also have shortness of breath. Usually, average score of this dyspnea domain will be used in comparison in a micro sense and seldom do we group all these data together and review in a macro sense.

Objectives
The aim of the present study is to review on the profile of various ADL that patients with respiratory diseases would have difficulty to manage due to shortness of breath. As we would like to set goals with patients together based on the ADL selected and aimed to find ways to improve their performance in these areas. So the Chinese version of CRQ will be a good outcome to help us to achieve such a goal. We hope to categorise the items and can regroup them into different themes, so that the most commonly generated themes will certainly help us to refine our services.

Methodology
As this is a retrospective study, we would like to review all of the PRP patients in the last 5 years (2013 -2017) in RB of TMH. Patients with fair mental / cognitive function, e.g. unable to complete the CCRQ will be excluded. We have successfully included 64 patients and all of them were able to finish the CCRQ. As the data will be analysed in a qualitative or descriptive sense. So all the 5 ADL identified by each patient will be coded and grouped into new themes. Each ADL was counted and ranked from the highest to the lowest number of patients who have selected. These items will also be correlated with the Mets level achieved during the pre-PRP treadmill done by M.O.
Result
64 male patients were reviewed. Age ranged from 40 – 81 (Mean: 65.91, SD: 8.59). GOLD stages: mostly in level III & IV (33.3% & 53% respectively). Treadmill, Pre-Test (METs) range 1.4 – 6-7 (Mean 3.42, SD: 0.73).

For the part of CCRQ, 8 themes were generated: (i) Exercise (outdoor) (ii)ADL (Basic), (iii)IADL, (iv) Environmental issues (in the community), (v) Change in postures, (vi) Change in pacing, (vii) Social activities with others, and (viii) Others.

Amongst these items, those ranked highest 5 ADL were: (1) Bathing (51 times), (2) Outdoor walking exercise e.g. in nearby garden, to shopping mall, etc. (51 times), (3) Stairs walking e.g. need to go to nearby LRT station, flyover nearby as living in village house, etc. (32 times), (4) Buying grocery from market / supermarket (25 times), (5) Cooking (19 times).

With reference to the GOLD status or METs level achieved, one would easily regard that these group of patients should be quite sedentary, however, the ADL / IADL selected were actually reflecting another picture. So, we should think about that are these patients exerting themselves more than they should be? Or are we underestimating our patients? So, in planning our PRP activities, we should set goals with patients according to the ADL / IADL that they will like to improve and also more simulated activities in the format of groups can be included in the program so that patients can learn from each other apart from coaching of therapists. Concept of lifestyle redesign & energy conservation technique should also be reinforced in order to enhance the coping of the patients in these strenuous tasks. In addition, individual needs have also to be catered; e.g. two young patients have also mentioned about having difficulties in having sexual life with their wives. We can really learn from our patients and refine our daily treatments so as to enhance the quality and effectiveness of our services.