Title: Benefits obtained following a 12 week pulmonary rehabilitation programme

Body: Introduction: Pulmonary Rehabilitation (PR) is a recommended standard of care in Chronic Obstructive Pulmonary Disease, but to date, there is no consensus of opinion regarding the optimal duration of the interventions. Method: 60 subjects suffering from COPD were recruited after being screened by medical doctors and physiotherapists. A multidisciplinary programme was delivered which consisted of two classes per week for 12 weeks. All participants were reviewed again after 4, 8 and at the end of the 12 weeks. Exercise capacity using the 6 Minute Walk test was measured and the oxygen saturation was measured before, during and after the test. Dyspnoea scores were taken using the Borg Category Ratio Scale. The St George’s respiratory questionnaire (SGRQ) and Hospital Anxiety and Depression scale (HAD) were administered to the participants. The subjects were then enrolled into a one hour of exercise training and was then followed up by one hour of educational talks. Results: This study shows that a multidisciplinary programme increases the walking distance reaching statistical significance by the 8th week of rehabilitation p< 0.034 and further improved by the 12th week p<0.000, improves HRQL with most improvements being reported by the 8th week (symptom score p<0.000, activity score p < 0.010 week 8, p<0.009 week 12, Impact score p<0.000 week8 and total score p <0.000 by the 8th week) improves anxiety and depression scores p <0.000 by week 8 for both measures. There were no significant changes in the BMI, ESR and CRP levels. Conclusion: In the present study it has been shown that pulmonary rehabilitation can help in the amelioration of exercise tolerance and improvement in health related quality of life measures.