P159 PRELIMINARY EXPERIENCE OF A TAILORED ILD PULMONARY REHABILITATION PROGRAM AND INSPIRATORY MUSCLE TRAINING DELIVERED IN A HOSPICE AND HOME SETTING

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Background Dysponea, muscle wasting, and fatigue are common manifestations in interstitial lung disease (ILD). Pulmonary rehabilitation programmes (PRP) aim to improve symptoms and quality of life in ILD but research is very limited about the role and feasibility of inspiratory muscle training (IMT) in PRP.

Methods Six patients with a mixed disciplinary team diagnosis of ILD (5 males, median age 80 range 67–85) participated in a tailored PRP either in an IMT (n=3) or control group (n=3). PRP involved three days of exercises, one conducted in a hospice day therapy unit and two at home. The PRP session involved aerobic, strength, and stretching exercises with integrated education and relaxation sessions. Both groups received the same PRP, supplemented in the IMT group by the use of a *POWERbreathe Medic plus* respiratory muscle trainer. The trainer use consisted of 30 breaths twice daily with personalised resistance levels of 40% Maximal Inspiratory Pressure (MIP), which was measured and adjusted weekly. ILD outcome measures were recorded before and after PRP.

Abstract P159 Table 1

		IMT		Control	
Outcomes	**Normal Values**	**Before PRP (mean ±SD)**	**After PRP (mean ±SD)**	**Before PRP (mean ±SD)**	**After PRP (mean ±SD)**
K-Bild	105	70.0+15	72±5	68±14	69±12
Depression	0–7	4±2.64	4.67 ±0.577	6.33±5.77	5.33±6.65
Anxiety	0–7	6±1.73	6.33 ±0.577	5.0±2.646	4.33±3.22
FSS	9	46±20	41±7	45.0±12.	45±15
Visual analogue Fatigue scale	10	2.67±2.08	6.5±0.71	3.33 ±0.577	4.67±3.51
MIP (mmHg)	(n=65 to 75)	43±12.1	61.44 ±18.3	66.23 ±38.7	52.16 ±35.23
FVC (L)		3.13±0.33	2.5±0.52	2.45±0.78	2.3±0.79
Quadriceps strength (Newtons)		289±67	286±6	328±164	294±121
6MWT (M)		380±49	425±21	355±207	351±224

The table reports the mean and standard deviation of outcomes measured in the pulmonary rehabilitation program.
6MWT, six-minute walk test; IMT, inspiratory muscle training; SD, standard deviation; MIP, maximum inspiratory pressure; FVC, forced vital capacity; FSS, fatigue severity scale; KBild, King's Brief Interstitial Lung Disease health status questionnaire.

Results All patients completed the PRP with adherence of ≥80% for the full program. There were no major complications or adverse events and patients reported liking and enjoying the PRP and environmental setting. *Table 1* report the PRP outcomes. Description: there was a considerable prevalence of baseline limitation in term of depression, anxiety, fatigue severity scale (FSS), forced vital capacity (FVC) and six-minute walk test (6MWT). These limitations were maintained after PRP and there was a reduction in FVC in both groups, consistent with disease progression. In the IMT group there was a trend for an improvement in MIP, 6MWT, FSS, and visual analogue fatigue scale and a maintenance of quadriceps strength when compared with the control group.

Conclusion We believe this is the first description of a successful pilot of bespoke ILD PRP in a hospice and home setting. The PRP was acceptable and appreciated by both patients and healthcare professionals. IMT during PRP for ILD in a hospice setting is feasible and longitudinal measurements of fatigue, 6MWT, and MIP were practicable end points that warrant further study.

P160 MORTALITY FROM IDIOPATHIC PULMONARY FIBROSIS IN ENGLAND AND WALES BY BIRTH COHORT

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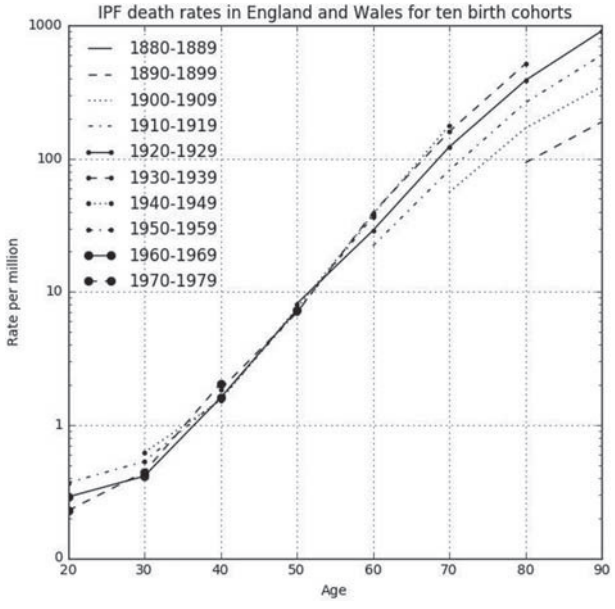
Introduction and Objectives The incidence of idiopathic pulmonary fibrosis (IPF) has been increasing at a rate of 5% per annum since 2000. By definition, the diagnosis of IPF is not made in the presence of an identifiable cause. However, the distribution of the disease in the population (more common in men, manual workers, and those living in more industrial areas of the country) suggests a causal contribution from an occupational or environmental source. This would be expected to produce a cohort effect. Our aim was to examine trends in IPF mortality data for evidence of such an effect.

Methods Age and sex stratified mortality data for IPF were obtained for England and Wales from the Office of National Statistics for the period 1974–2012. Data were age-



Abstract P160 Figure 1