Title: Social network size and social participation amongst community dwelling patients with COPD: A mixed methods study

Body: Introduction: Little is known about the social networks of people with COPD. The aim of this study was to provide preliminary information about social network size and characteristics of social relationships amongst a small group of patients with COPD. Methods: Six males and four females wait listed for pulmonary rehabilitation in South Australia participated. Severity of dyspnoea ranged from mMRC category 2 to 4. Qualitative and quantitative data were collected on 2 occasions in participants' homes. Two short (approx. 30 minute) qualitative interviews about experiences living with COPD and impact on social relationships were conducted, then, building on this discussion an ego-centric social network map was constructed. Information about social support (given and received) was collected as well as quality of life and fatigue, psychological distress, network type and socio-demographic characteristics. Results: Network size ranged from 3 to 55 members (Median=13.5). A "local self-contained" network type was most common (n=4) and all but 1 participant reported 'often' or 'sometimes' receiving social support from within their network. All participants identified significant physical and/or psychological barriers to engaging in social relationships. Participants described 'determination, adaptation, support (from a partner or close friend), and routine' as reasons for continued participation in social activities and relationships despite these barriers. Conclusion: Participants identified more than just physical barriers to social participation, but also described useful strategies to maintain and engage with their social network.