Physical Activity Knowledge, Attitudes and Preferences in Pulmonary Hypertension Patients

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Rationale: Exercise limitation in pulmonary hypertension (PH) is common, multifactorial and reflects a combination of physical and psychological factors. Despite recent recognition of the beneficial effects of exercise in patients living with PH, physical activity and formal exercise training programs for this population rarely exists. Numerous barriers to exercise training persist and there is a dearth of research concerning exercise preferences and support needs in this population. Therefore, the aim of this study was to assess the patient perspective of exercise in PH, in order to expand our understanding of the dimensions influencing physical activity and to inform our practice and research priorities.

Methods: 19 adult patients attending the National Pulmonary Hypertension Unit in the Mater Misericordiae University Hospital, with established diagnoses of pulmonary hypertension, participated in virtual, qualitative, semi-structured interviews. Thematic analysis was employed to analyse interview content and patient recruitment ceased on reaching thematic saturation.

Results: Regarding baseline demographics, 13 subjects were female (68%), with an average age of 51 years old (± 12) and a mean duration of PH of 8 years (± 4). Thematic analysis identified five central themes related to exercise with PH: Multidimensional barriers including fear; Desire to increase physical activity; Suboptimal PH specific resources; Clinician support and Exercise preferences. Fear, disease-related symptoms and lack of motivation were identified as important barriers to exercise in this population. Participants recognised the benefits of physical activity and expressed a desire to engage in more exercise. Furthermore, study participants highlighted suboptimal education and resources to support exercise, including specific reference to guidance from PH health professionals, which was highlighted as important and desirable. Participants indicated a preference for home-based exercise programs, with associated structured support and feedback. Conclusion: This study of the patient perspective of physical activity and exercise training in pulmonary hypertension provides interesting insights, that will have implications for our current clinical practice. Important barriers were identified, including fear and a paucity of PH specific patient information, education and support. Furthermore, improved communication between PH healthcare professionals and individual patients regarding exercise practices was advised. This study underscores the urgent need for dedicated exercise training programs for patients living with PH.

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