TITLE OF THE PROJECT: **Determinants and burden of dyspnea in respiratory diseases and non-respiratory conditions: relationships with patient reported outcomes and physical activity**

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SUMMARY

Background

Dyspnea is a major symptom in respiratory diseases, particularly COPD and asthma. It may also occur in heart failure, obesity, less frequent causes being metabolic, behavioral (hyperventilation syndrome) or neuromuscular disorders. Its prevalence is high in epidemiologic studies, around 25-30 % in middle age or older subjects. It has also a high prognostic significance both in subjects with or without respiratory disorders. The impact of dyspnea on patient reported outcomes, physical limitation and activity is however ill defined in population studies, particularly in asthma or non-respiratory conditions, most studies being focused on COPD.

Objectives

The main aims of study are to evaluate:

1. the determinants of dyspnea among risk factors, respiratory and non-respiratory diseases, spirometry findings, mood disturbances

2. the burden of dyspnea in patients with respiratory diseases (particularly COPD and asthma) vs subjects without respiratory disorders.

Methods

Dyspnea is assessed in the Constances questionnaire and its main determinants will be sought through a large set of data: anthropometric, risk factors, respiratory symptoms and diseases, spirometry findings, co morbid conditions including cardio-vascular and mood disorders.

The impact of dyspnea will be assessed on health related quality of life (SF12), self-reported activity and physical limitation. During follow up, the correlations between trends in dyspnea intensity and those of other variables will be analyzed, to evaluate more precisely the directionality of these relationships (i.e. the determinants and impact of dyspnea).

Additional evaluations will be performed in a sample of 5000 subjects, including a more precise assessment of dyspnea by the UCSD-SOBQ questionnaire, HAD (anxiety-depression) and IPAQ (physical activity) questionnaires. The PROactive questionnaire will also be added in this sample as soon as available.

Perspectives

Previous studies suggest the major clinical relevance of dyspnea in both the general population and patients with cardio-respiratory disorders. The data obtained in the large Constances cohort including its follow up will provide a better understanding of this symptom. Additional data and analysis may be suggested for the follow up period. These new findings in the general French population should improve the awareness of this major "integrative" symptom, thus allowing better targeted interventions in both public health and individual medical practice.

Note: this project is part of the research consortium 'CONSTANCESRespi – Surveillance, determinants, natural history and impact of chronic respiratory diseases and accelerated lung function decline in CONSTANCES - An Integrative project'