

NUTRITIONAL STATUS IN PATIENTS ATTENDING INTERNATIONAL LUNG DAY IN A HOSPITAL SETTING

Cecilie Meldgaard Møller, Pia Sonne, Anne Wilkens Knudsen, Tina Munk
Dietetic and Nutritional Research Unit (EFFECT), Herlev Gentofte University Hospital, Herlev, Denmark

RATIONALE

International Lung Day is held once a year with the purpose of early diagnosis of lung diseases. To determine the relevance of nutritional counseling on this day we aimed to assess; 1) nutritional status and 2) to which degree nutrition impact symptoms (NIS) were present in this group.

| Table 1 Description of the participants | n= | |
|--|-----|----------|
| Female, % | 66 | 65 |
| Male, % | 36 | 35 |
| Age, years, mean ± SD | 98 | 71 ± 9 |
| Weight, kg, mean ± SD | 101 | 73 ± 15 |
| BMI, weight/height ² , mean ± SD | 101 | 25 ± 4 |
| Fat mass, kg, mean ± SD | 99 | 24 ± 10 |
| Fat free mass, kg, mean ± SD | 99 | 50 ± 11 |
| Fat free mass index, fat free mass/height ² , mean ± SD | 99 | 17 ± 2 |
| Muscle mass, mean ± SD | 98 | 27 ± 6 |
| Weightloss, kg, mean ± SD | 73 | -0.6 ± 2 |
| FEV1%, mean ± SD | 51 | 70 ± 12 |
| FEV1, mean ± SD | 51 | 2 ± 0.7 |
| FVC, mean ± SD | 63 | 3 ± 0.8 |
| Risk SNAQpoint <14, % | 101 | 22 |
| EQ-5D VAS score mean ± SD | 101 | 77 ± 18 |

Table 1. Results are presented as mean ± SD or %.

METHODS

A cross-sectional study was performed at Herlev and Gentofte Hospital. Nutritional status was determined by BMI and fat free mass index (FFMI) was measured with a Bioelectrical Impedance (BIA). Depletion was defined by FFMI <15 kg/m² for women and <16 kg/m² for men. Lung function was measured as FEV1% and lung obstruction was defined as FEV1% < 70%. NIS was assessed using the Eating Symptoms Questionnaire (ESQ). The Simplified Nutritional Appetite Questionnaire (SNAQ) was used to determine nutritional risk and quality of life was measured using the EQ-5D questionnaire.

RESULTS

In total 102 people were included (W: 65%). The median age was 73 years (IQR 65-77). Lung obstruction was evident in 41%. The median BMI was 24 (IQR 22-27), and 9% of the subjects were underweight (BMI≤20.5). Unintentional weight loss within the last three months was experienced by 15%, and 17% were depleted. According to the SNAQ 22% were at nutritional risk. Participants at risk according to the SNAQ had a significantly lower BMI (p=0.009) and a significantly lower VAS-score from the EQ-5D (p=0.003). The three most common NIS from the ESQ were; dry mouth (34%), stomach ache (31%), and diarrhea (25%).

Figure 1. The Three most common NIS

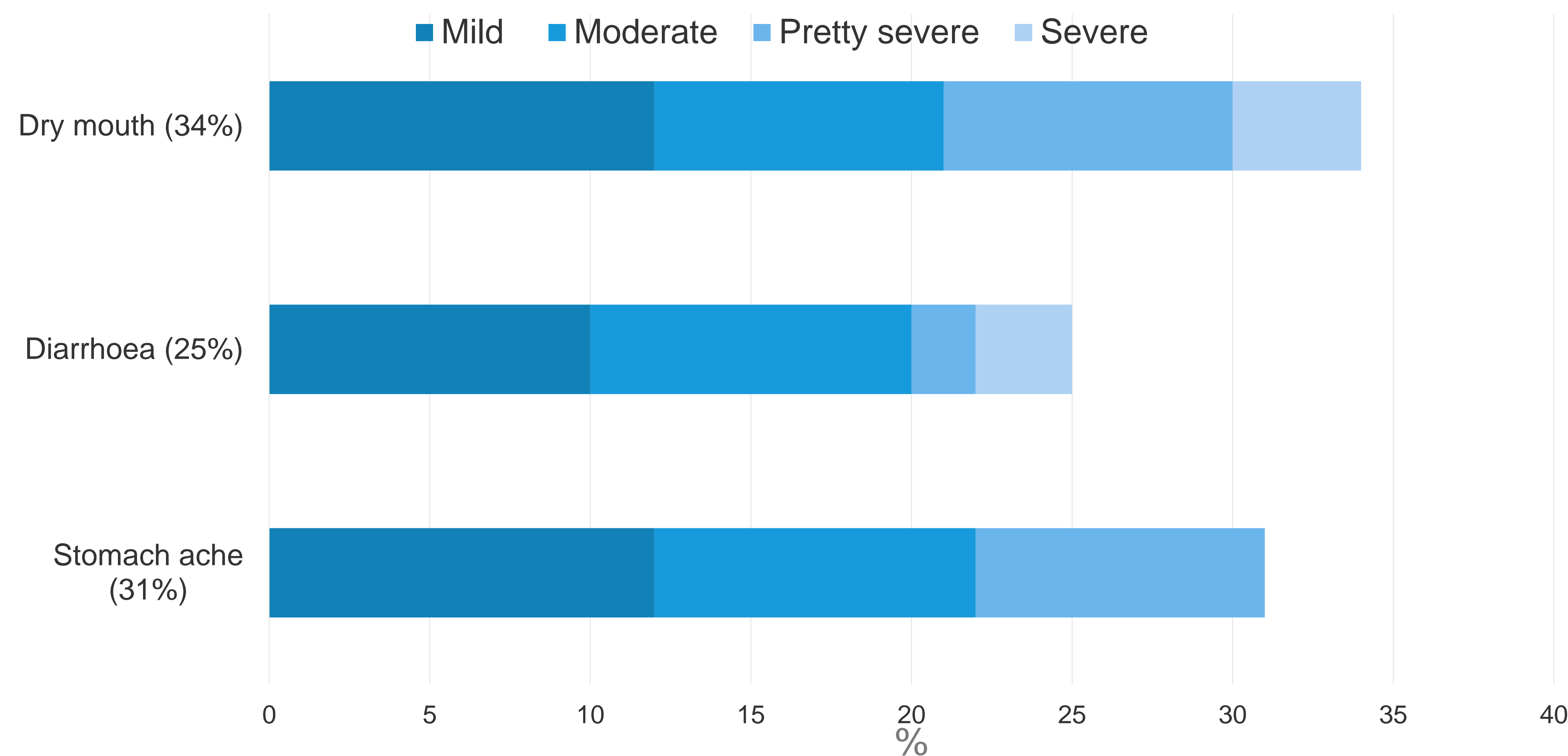


Figure 1. Distribution % of severity in the three most common NIS from the ESQ.

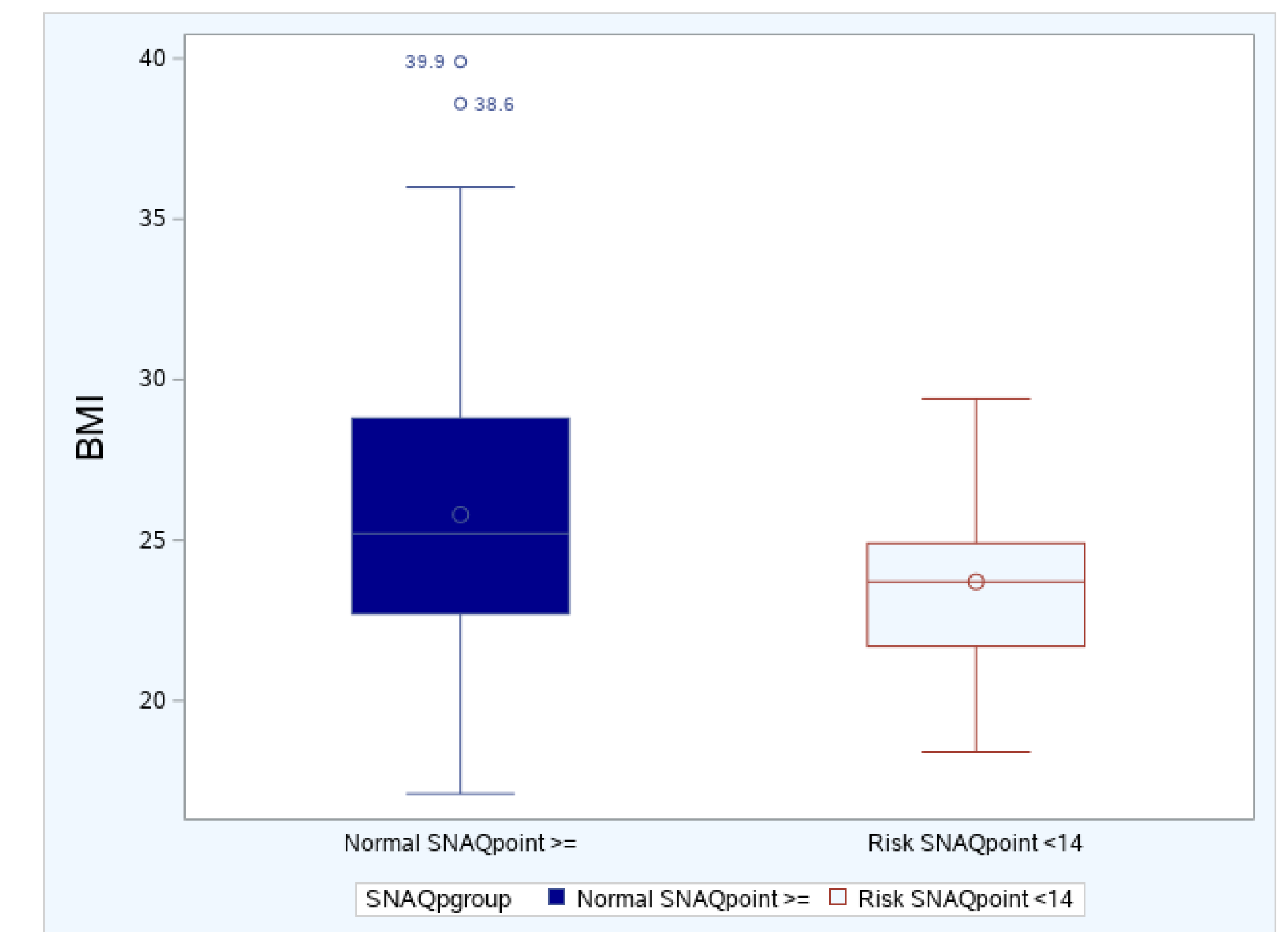


Figure 2. Participants with a SNAQ score < 14 had a significantly lower BMI (p=0.009).

CONCLUSIONS

Participants attending International Lung Day revealed a high prevalence of lung obstruction, nutritional risk and NIS. The presence of clinical dieticians at the International Lung Day is therefore important to identify participants in need of nutritional guidance.