Assessing quality of life of patients with severe asthma with patient reported outcomes

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BACKGROUND AND IMPORTANCE
Severe asthma, which affects approximately 5-10% of people with asthma, is a heterogenous, chronic and complex disease, with negative physical, mental, emotional and social impact.

OBJECTIVES
To analyze quality of life of patients with severe asthma currently treated with biological drugs using Patient Reported Outcomes Measures (PROM).
To identify which domains and specific questions most frequently altered, by using mini-AQLQ.

METHODS
Descriptive cross-sectional study conducted in April-May 2022 in a tertiary hospital

Adult patients with severe asthma on active treatment with a biological drug for at least one year who provided informed consent were included.

1. Electronic medical record was reviewed to obtain:
   - Age, sex
   - Number of asthma-associated comorbidities
   - FEV1 and FEV/FVC

2. A interview was conducted to record the PROMs:
   - Mini-AQLQ (maximum score: 7)
   - EQ5D-5L (maximum score: 1) (with Visual analogue scale (VAS))

Quantitative variables were expressed as mean plus standard deviation (SD) for symmetrical distributions and median and interquartile range for non-symmetrical distributions.

RESULTS
55 patients met the inclusion criteria → 38 agreed to participate were located

- Median age 65 (56-71.5) 60.5% (23)
- Median number asthma related comorbidities 2.5 (1-4)
- FEV1 76.3 (SD=3.2)
- FEV/FVC 69 (SD=1.3)

The mean score for the EQ5D-5L was 0.924 (0.818-1), while the median VAS was 70 (60-85).

Average score for mini-AQLQ 6.1. By domain:

<table>
<thead>
<tr>
<th>Domain</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental</td>
<td>5 (4.3-6.3)</td>
</tr>
<tr>
<td>Limitation activities</td>
<td>6.1 (5.5-6.7)</td>
</tr>
<tr>
<td>Symptoms</td>
<td>6.2 (5.8-7)</td>
</tr>
<tr>
<td>Emotional</td>
<td>7 (5.3-7)</td>
</tr>
</tbody>
</table>

A 81.6% (31) had altered limitation of activities and 79.3% (29) environmental followed by symptoms 73.7%(28) and emotional 55.3%(21)

Specifically the question that most frequently receive a score below 7 was “did you feel that tobacco smoke bothered you or did you have to avoid a place because of tobacco smoke?” in 76.3%(29) patients.

CONCLUSIONS
The quality of life of patients with severe asthma treated with biological drugs is good, according to specific asthma questionnaires used as PROM, although few patients do not have any altered sphere.
The most altered sphere was environmental. Tobacco is considered a major threat.