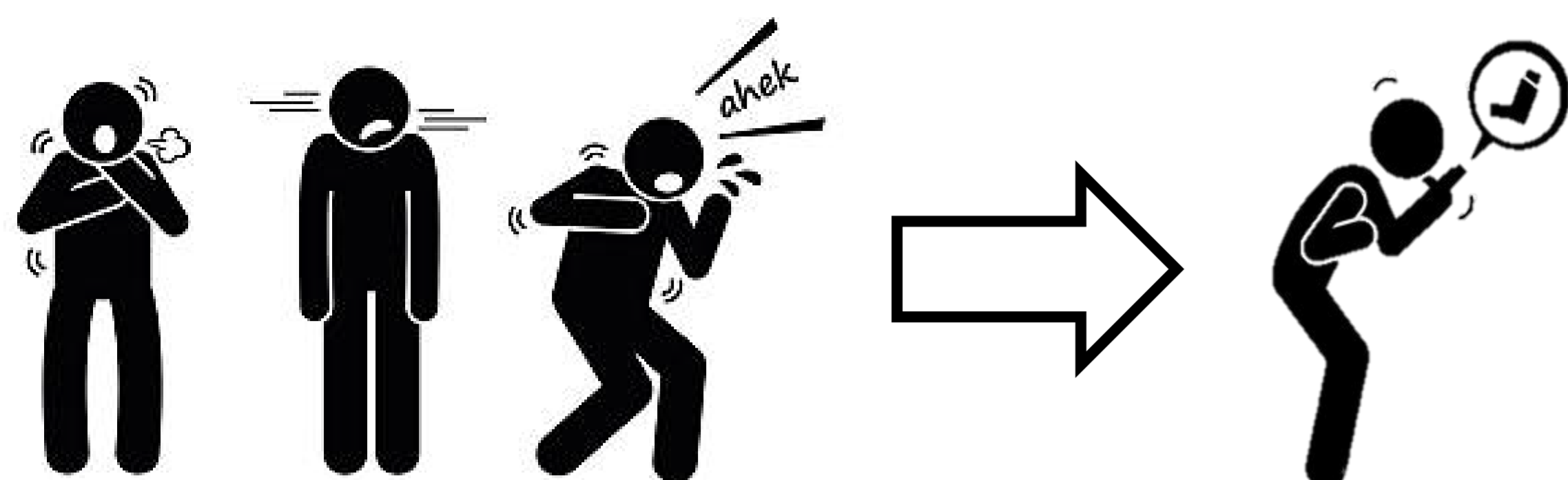# Response profiles to a Motivational Communication-based inhaled corticosteroid adherence intervention in adults with asthma

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BACKGROUND

- Daily adherence to inhaled corticosteroids (ICS) is critical for achieving optimal asthma control
- However, adherence is generally low
- An ↑ of **1 canister/year (8%)** = 21% decrease in asthma-related mortality
  - clinically significant

OBJECTIVE

Determine the characteristics of patients who achieved the target increase in adherence level (succeeded) following a brief Motivational Communication-based intervention

METHODS

- 14 adult patients with physician-diagnosed asthma
  - Poorly controlled (M ACQ score ≥ 0.8)
  - Non-adherent (%ICS ≤ 50)

- Recruitment in tertiary centre

- Nonparametric tests were used to determine the response profile of those who attained, vs. didn't, the targeted increase in adherence at 1 year follow-up (**8%** or more).

Participants' characteristics

	Total (n=14)
Age ± SD	51.4 ± 4.9
Men, n [%]	7 [50]

Less than half the sample (43%) reached the target

RESULTS

	Success (n=6)	No success (n=8)
BMI ± SD	29.1 ± 3.9	27.1 ± 5.6
Years living with asthma diagnosis, M ± SD	27.2 ± 25.6	19.5 ± 10.5
Have a partner, n [%]	5 [80]	3 [38]
Non-smokers, n [%]	6 [100]	2 [27]
Physical illnesses other than asthma, n [%]	6 [100]	4 [50]
Mental health issues, n [%]	4 [67]	3 [38]
Baseline scores of perceived competence (PCS), M ± SD	6.1 ± 1.1	5.5 ± 1.6
Baseline scores autonomy-support (HCCQ), M ± SD	5.5 ± 1.0	4.4 ± 1.5
Initial asthma control (ACQ), M ± SD	2.2 ± 1.1	1.5 ± 0.8
Asthma-related quality of life (AQLQ), M ± SD	4.6 ± 0.7	5.2 ± 0.9

CONCLUSIONS

- On average, those who succeeded had higher **BMI**s and had asthma for a longer period of time. They all reported being **non-smokers** and most had a **partner**.
- This group reported more **physical illnesses** other than asthma and **mental health issues** than the group that did not reach the targeted increase in adherence. Those who succeeded also had higher mean baseline scores of **perceived competence**, **autonomy-support**, worse initial **asthma control**, and lower **quality of life**.

Findings suggest that:

1) Having higher levels of self-efficacy, perceived autonomy-support, social support and a healthy lifestyle but more health issues may be linked to increased ICS adherence in response to motivational counselling

2) This may be due to the benefits of changing being more obvious, patients being more autonomously motivated to change, and being better equipped to face the challenge

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