Clinical Research Results Abstract

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Patient selected goals in asthma: the relationship between physician and patient desired outcomes, the evidence behind them and how to apply them

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Aim: Poor adherence a well-documented barrier to successful control in difficult to treat asthma (1), which may be due to the discordance between patient and clinician treatment goals (2). In this study patients taking part in two RCTs were asked to select treatment goals to reflect successful treatment from a patient's perspective. The aim of this study is to identify patient-selected treatment goals, examine their relationship with physician treatment goals, and examine how they might be used to enhance the treatment of asthma.

Method: Patient-selected goals were categorized using an inductive thematic analysis approach. These categories were analysed using a Spearman correlation matrix, prompting re-categorization that fell more in line with a deductive thematic analysis approach. These categories were then compared against measures of adherence, lung function, and biomarkers from two RCTs.

Results: These goals were categorised as: disease-specific, knowledge-based, and functional (pertaining to activities of daily life). While current practice focusses on disease-specific goals for the longterm management of asthma, as outlined by GINA, almost half of patient-selected goals were functional as opposed to disease-specific.

It was found that patients whose goals aligned with those of the physician were more likely to achieve both control and their goal (n=98, odds ratio 1.789, 95% confidence interval 1.066 – 3.001). In addition to this patients with T2 high asthma are more likely to achieve their goal and control as evidenced by a decrease in T2 biomarkers (n=99, odds ratio 1.908, 95% confidence interval 1.049 – 3.471).

Using principle component analysis, it appears that the choice off disease-specific goal is more common in males, with a lower BMI and more obstructed lung function.

Interestingly, it was noted that once patients had achieved their goals, treatment adherence (both attempted & actual adherence) significantly reduced (see table 1, see figure 1).

Conclusion: Patient selected goals are rarely investigated in practice despite recommendations. Nearly half of goals selected do not align with physician treatment goals. Goal achievement is more likely in those with T2 high asthma, who's goals align with that of physicians. Once goals are achieved patients are likely to reduce adherence rates as they have achieved their desired outcome.

References and Clinical Trial Registry Information

1. Gamble J, Stevenson M, McClean E, Heaney LG. The prevalence of nonadherence in difficult asthma. American journal of respiratory and critical care medicine. 2009;180(9):817-22.
2. Juniper EF. The impact of patient compliance on effective asthma management. Current opinion in pulmonary medicine. 2003;9 Suppl 1:S8-10.

Logistic regression of adherence rates in goal achievers

Actual adherence	Coefficient	95% C.I.
Goals achieved (n=95)	-0.978	-1.741 – -0.215
Goals not achieved (n=105)	-0.352	-1.191 – 0.486
Attempted adherence	**Coefficient**	**95% C.I.**
Goals achieved (n=96)	-1.046	-1.923 – -0.168
Goals not achieved (n=111)	-0.372	-1.192 – 0.449

Attempted adherence and goal achievement

Attempted adherence and goal non-achievement

Adherence and goal achievement

Adherence and goal non-achievement