



Structured allergy training for health professionals improves quality of life in patients with perennial rhinitis: randomised controlled trial

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Background

Perennial rhinitis is a common condition affecting up to 35% of the UK population and accounting for approximately 3% of general practice consultations. Symptoms such as sneezing, nasal blockage and rhinorrhoea can be disruptive, and can result in significant impairment of quality of life (Juniper et al 2002).

The aim of this study was to evaluate the effects of standardised allergy training for health professionals on patients' quality of life in a parallel group randomised controlled trial.

Participants and methods

- Patients with a documented diagnosis of perennial rhinitis in the previous 10yrs and/or a prescription for topical nasal medication with/out antihistamines in the preceding 24 months were identified from general practice records
- Patients were included if they were aged ≥ 18 y and had perennial rhinitis according to validated diagnostic questions (ISAAC; Strachan et al 1997). Patients with seasonal symptoms alone were excluded. Other exclusion criteria were: participation in other studies involving antihistamines, nasal and/or inhaled steroids, anti IgE or allergen immunotherapy and failure to give informed consent
- Patients were centrally randomised to either the intervention or control arm
- The intervention was the National Respiratory Training Centre Allergy Course consisting of 11 modules covering all aspects of allergic disease delivered to 20 health professionals from 12 UK general practices. Training was delivered over 6 months through face-to-face and distance learning
- Control patients received usual care and a leaflet about rhinitis

- Primary outcome measure of interest was the change from baseline in the validated Rhinoconjunctivitis Quality of Life Questionnaire (RQLQ) (Juniper & Guyatt 1990) between the two groups at 13 months after randomisation i.e. 6 months after completion of the intervention
- RQLQ was measured on a scale of 0 (not troubled) to 6 (extremely troubled)
- Student t-tests were used to compare changes in RQLQ between the intervention and control arms at 13/12 on an intention-to-treat basis
- Results are presented as means and standard deviations (SDs).

Results

- 202 adults with perennial rhinitis took part in the study; 101 patients in each group (see Table 1)

	Control group (n=101)	Intervention group (n=101)
Age (y) (SD)	56.6 (14.8)	56.7 (15.0)
Sex (M/F)	46/55	43/58
Baseline RQLQ	1.79	2.04

Table 1: Baseline clinical data

- 99/101 patients in the control group and 100/101 in the intervention group completed the study
- Health-related quality of life (RQLQ) improved significantly in the intervention group ($p=0.009$) but not in the control group (Table 2)
- There was a trend for a greater improvement in RQLQ in the intervention group compared to the control group at the end of the study ($p=0.08$)
- Number needed to treat (NNT) = 9
- Global assessment of nasal symptoms also showed a trend for improvement from baseline in the intervention group compared to the control group ($p=0.09$)

Pre-control	Post-control	Pre-IV	Post IV	P value
	1.7 (1.3)		1.8 (1.1)	0.9
1.8 (1.2)	1.7 (1.3)			0.7
		2.0 (1.1)	1.8 (1.1)	0.009
1.8 (1.2)		2.1 (1.1)		0.1
Pre-post control 0.03 (0.9)		Pre-post IV 0.3 (0.97)		0.08

Table 2: ITT analysis of all patients randomised to intervention (n=101) and control (n=101) groups

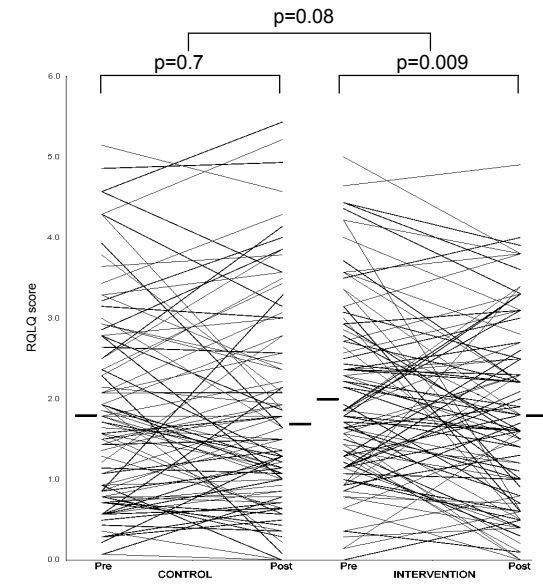


Figure 1: RQLQ scores at baseline and six months in intervention and control groups

Conclusions

Standardised allergy training undertaken by primary health care professionals resulted in improvements in validated measures of disease-specific quality of life in patients with perennial rhinitis.