

**EVALUATION OF THE IMPACT OF A PHARMACEUTICAL CARE SERVICE
OFFERED TO PATIENTS SUFFERING ALLERGIC RHINITIS WITHIN AN
AMBULATORY SETTING****Ana María Rodríguez-Peláez y Peña***

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ABSTRACT

The objectives of the study were to evaluate the impact of a newly developed pharmaceutical care services directed to allergic rhinitis patients attending an out-patient setting. A total of 200 patients participated in the study and were randomly divided into two equal groups, Group A and Group B. The study was carried out over three phases. In phase 1, Group A patients were assessed and offered a pharmaceutical care session. Group B patients were assessed but no pharmaceutical care session was delivered. At phase 2 (4-6 months), group A patients were re-assessed (first assessment post pharmaceutical care plan). Group B patients were re-assessed a second time (second baseline assessment) and a pharmaceutical care session was offered to Group B patients. At phase 3 (time 10-11 months) both groups were re-assessed a third time. The newly developed individualised pharmaceutical care service provided by the pharmacist led to an improved quality of life as measured by the health-related quality of life questionnaires.

KEYWORDS: Pharmaceutical care, Quality of life, Allergic rhinitis, Drug therapy problems, Pharmacist contribution.

INTRODUCTION

The current management of Allergic rhinitis therefore focuses on early treatment using disease modifying agents and biological agents early on to slow the disease progression if not to stop disease progression and afford remission. Patient safety is a major feature in management decisions. Treatment must be individualized and patients helped to be actively involved in their own management and monitoring for effectiveness and safety. This could be achieved through a pharmaceutical care service. The context above raises questions about how to achieve optimal care within a multidisciplinary setting in which specialist pharmacists are providing new services requiring networking arrangements to underpin the quality of care as the patient moves between clinical settings, home, hospital, and clinic. The pharmacist input has been developing over the past seven years via inpatient services. The aim of this study was to evaluate the impact of a newly developed pharmaceutical care service within a multidisciplinary outpatients service.

Allergic rhinitis is seasonal or perennial itching, sneezing, rhinorrhea, nasal congestion, and sometimes conjunctivitis, caused by exposure to pollens or other allergens. Diagnosis is by history and occasionally skin testing. First-line treatment is with a

nasal corticosteroid (with or without an oral or a nasal antihistamine) or with an oral antihistamine plus an oral decongestant.

Allergic rhinitis may occur seasonally or throughout the year (as a form of perennial rhinitis). Seasonal rhinitis is usually allergic. At least 25% of perennial rhinitis is nonallergic.^[1,2,3,4]

Symptoms and Signs of Allergic Rhinitis. Patients have itching (in the nose, eyes, or mouth), sneezing, rhinorrhea, and nasal and sinus obstruction. Sinus obstruction may cause frontal headaches; sinusitis is a frequent complication. Coughing and wheezing may also occur, especially if asthma is also present.^[5,6,7,8,9]

The most prominent feature of perennial rhinitis is chronic nasal obstruction, which, in children, can lead to chronic otitis media; symptoms vary in severity throughout the year. Itching is less prominent than in seasonal rhinitis. Signs include edematous, bluish-red nasal turbinate, and, in some cases of seasonal allergic rhinitis, conjunctival injection and eyelid edema.^[10,11,12,13]

MATERIALS AND METHODS

A pharmaceutical care consultation led to the identification of pharmaceutical care issues. The session focused on determining whether all patient's drug therapy was the most appropriate, safe, effective and conveniently available for the patient. During the pharmaceutical care consultation, the clinical pharmacist identified pharmaceutical care issues. Actual drug therapy problems are problems which are present and hence need to be resolved immediately whereas potential drug therapy problems are problems which are not yet present, but which might arise in future and which could be avoided if the correct action is taken. The category non-drug therapy problems was added to the list to accommodate pharmaceutical care issues which were not directly related to drug therapy but relied on patient's perception, information on treatment or the need of other help from other health care professionals. Actions (checks or changes) needed to resolve each care issue problem were documented in the care plan within the patient's medical file.

RESULTS AND DISCUSSION

For group A patients the results indicate that there was an improvement in the quality of life of the patients reflected by a decrease in the health assessment questionnaire score which occurred following the pharmacist's intervention during the pharmaceutical intervention at Phase 1. This improvement in the quality of life of the patients increased over time (Phase 3) meaning that the impact of the pharmacist's intervention through individualized pharmaceutical care showed a further improvement in the quality of life of patients on a longer term.

Group B patients registered a statistically significant improvement in their health assessment questionnaire score following a pharmaceutical care session which mirrors the fact that pharmacist intervention improves quality of life. The impact of the pharmacist's contribution after 11 months resulted in an improvement of quality of life. However, for some domains namely physical function and role emotion this impact may take longer to result in an improvement. The results from Group B patients mirrored those of Group A.

CONCLUSION

Pharmaceutical care services offered within out-patient clinic multidisciplinary team can help to improve the patients' quality of life. This study has confirmed the positive impact of the pharmacist intervention within this multidisciplinary team on the patients' quality attending the out-patient clinic. This has been confirmed in other studies in other areas such as in the management of cardiovascular patients and diabetes patients¹⁸⁻²³. Processes to identify patients who would require pharmaceutical care services within the setting may need to be identified in the scenario that the pharmaceutical care services are offered to all patients attending the clinic. Research to standardize the pharmaceutical care

services is now being undertaken to ensure a harmonized evidence-based quality service.

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