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IMPACT OF A PHARMACEUTICAL CARE SERVICE OFFERED TO PATIENTS SUFFERING CELIAC DISEASE WITHIN AN AMBULATORY SETTING

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ABSTRACT
The objectives of the study were to evaluate the impact of a newly developed pharmaceutical care services directed to patients with celiac disease attending an out-patient setting. A total of 51 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, group A patients were re-assessed. Group B patients were re-assessed a second time and a pharmaceutical care session was offered to Group B patients. At phase 3 both groups were re-assessed a third time. The newly developed individualized 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, Celiac Disease, Drug Therapy Problems, Pharmacist Contribution.

INTRODUCTION

Celiac disease is a chronic (long-term) digestive and immune disorder that damages your small intestine. The damage may prevent your body from absorbing vitamins, minerals, and other nutrients from the food you eat. This can lead to malnutrition and other serious health problems. Celiac disease is triggered by eating foods that contain gluten. Gluten is a protein found in wheat, barley, rye, and other grains. It may also be in other products like vitamins and supplements, hair and skin products, toothpastes, and lip balm. Celiac disease is different from gluten sensitivity and wheat allergies. Some of the symptoms may be similar, but those conditions don't damage the small intestine.

The exact cause of celiac disease is not known. Research suggests that celiac disease only happens in people who have certain genes and eat food that contains gluten. Researchers are studying other factors that may play a role in causing the disease.[1,2,3,4]

How is celiac disease diagnosed?
If you have symptoms of celiac disease, your health care provider will look for signs that you might have celiac disease. To do this, your provider will get your medical and family history and do a physical exam.

If your provider thinks that you could have celiac disease, you will have some tests. Providers most often use blood tests and biopsies of the small intestine to diagnose celiac disease. The biopsy would be done during an upper gastrointestinal (GI) endoscopy. For this procedure, your provider uses an endoscope (a flexible tube with a camera) to see the lining of your esophagus, stomach, and small intestine. It also allows your provider to take a sample of tissue for a biopsy.

What are the treatments for celiac disease?
The treatment for celiac disease is following a gluten-free diet for the rest of your life. Sticking with a gluten-free diet will treat or prevent many of the symptoms and other health problems caused by celiac disease. In most cases, it can also heal damage in the small intestine and prevent more damage.

Your provider may refer you to a registered dietician (a nutrition expert) who can help you learn how to eat a healthy diet without gluten. You will also need to avoid all hidden sources of gluten, such as certain supplements, cosmetics, toothpaste, etc. Reading product labels can sometimes help you avoid gluten. If a label doesn't tell you what is in a product, check with the company that makes the product for an ingredients list. Don't just

assume that a product is gluten-free if it doesn't mention it.[5,6,7,8,9]

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.[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 were 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 patients. 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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