

Enhancement of Quality of Life in Patients with Rheumatoid Arthritis: A Joint Effort of Physiotherapy, Occupational Therapy and Pharmacy Interventions

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Abstract

Rheumatoid arthritis (RA) is a chronic disease that alters individuals' lives and daily activities in ways that involve pain discomfort, stiffness, and limited ability to move. Understanding these problems needs a teamwork effort of various healthcare professionals. In this study, a group of physiotherapists, occupational therapists, and pharmacists worked towards enhancing rheumatoid arthritis by devising an extensive care program. A total of 100 participants took part in a 12 week program where they were given individualized physiotherapy, occupational therapy and follow up with medication management. Participants' range of motion, intensity of pain, and need of assistance during activities of daily living were evaluated and the results demonstrated significant progress. Interviews with the patients noted some mention of positive aspects of the care received, but also indicated some issues associated with the interrelation and access to services. This study adds to emerging evidence that RA treatment should be based on integrated and patient-centered approaches.

Keywords: Rheumatoid Arthritis, Multidisciplinary Care, Physiotherapy, Occupational Therapy, Pharmacotherapy, Quality Of Life, Patient-Centered Care

Introduction

Rheumatoid arthritis (RA) is a long-term progressive disease that affects people physically, functionally, and emotionally, usually leading to loss of quality of life (Aletaha and Smolen, 2018). To effectively deal with RA, a team approach is advocated, one that does not limit itself to treatment through drugs but also includes methods aimed at enhancing physical and mental wellness. Adding physiotherapy, occupational therapy as well as care provided by pharmacists gives a comprehensive coverage to the management of the disease.

Physiotherapists' role in enabling patients to perform better and experience less pain through the application of individualized exercises is critical (Fournier et al., 2002). Occupational therapists assist patients in performing everyday tasks with ease by either teaching new skills or providing appropriate adaptive devices (Hammond, 2004). Pharmacists, as a rule, perform an altogether different function of monitoring prescription drugs and counseling the public about available therapies (Van Vollenhoven, 2019). The unification of these three professions makes it possible to develop and implement a more effective treatment strategy focused on the complex needs of the patients.

Multidisciplinary care undoubtedly has its advantages and usefulness, but the challenges of practice in real-world clinical settings make the provision of this type of care not so straightforward. Miscommunication and difficulties in service utilization can devalue its application. The objective of this paper is to see the importance of physiotherapy, occupational therapy and pharmacy services in the management of RA patients in context of the team approach.

Literature Review

Team work and collaborations have always been a part in the management of rheumatoid arthritis but varying more emphasis is being put on it as time progresses. Patients of rheumatoid arthritis are treated with medications as well as non-pharmacological therapies that are aimed at all of the patients's needs. The purpose of this review is to evaluate the role of physiotherapy, occupational therapy and pharmacy in the overall improvement of quality of life in rheumatoid arthritis patients.

Physiotherapy in RA Management

In rheumatoid arthritis patients, physiotherapy plays an important part in the maintenance of joint mobility and flexibility, pain management, and maintenance of strength. Evidence indicates that particular exercises such as aerobic and resistance training are useful in improving mobility and limiting the progression of the disease (Fournier et al., 2002). Teaching and Having an exercise program designed to fit the flexibility level of the patients also appear to be critical factors in compliance (Visalli et al., 2019). The addition of pharmacist and occupational therapist services to physiotherapy services improves the combined effect of the interventions (Hennell and Luqmani, 2008).

Managing RA with Occupational Therapy

Occupational therapy focuses on enabling a patient or a client to have maximum independence during their day to day activities. Many RA sufferers experience joint pain and fatigue which limits their ability to carry out simple daily tasks. For patients, occupational therapists make use of assistive device, alteration of the house and strategies to save energy in order for the patients to be able to cope with their symptoms and still maintain their autonomy (Hammond, 2004). Their work assures that all patients have appropriate and effective skills to tackle the challenges of daily life.

Managing RA with Medications

Drugs have risen to prominence in the treatment of RA. Medications such as DMARDs and biologics help one to reduce inflammation and at the same time ease one's symptoms. Pharmacists dispel any misunderstandings patients may have while on medication and provide alternative solutions as well (Van Vollenhoven, 2019). There are studies which have shown that including pharmacists in the care team improves the treatment as they help ensure the patient is using the prescribed drugs effectively and properly (Visalli et al., 2019).

The Pros of Having a Multiple Troublesome Healthcare Team

It has been shown that bringing together a variety of specialists in the care of a single patient greatly improves the patient's prognosis. For patients with RA, a collaborative approach leads to better control of pain, improvement in physical functioning, and greater satisfaction with care (Hennell and Luqmani, 2008).

However, problems of a lack of contact between healthcare staff and a lack of services provided can inhibit its effectiveness.

Methodology

Using a mixed-method approach, quantitative and qualitative data were integrated to evaluate the measured outcomes of a multidisciplinary model for patients suffering from RA. The program lasted 12 weeks and the care involved a team of physiotherapists, occupational therapists, and pharmacists.

Participants

The program enrolled 100 RA patients aged 30 to 70 years old in total. The recruiting criteria included RA diagnosis and consent for participation. Patients suffering from other autoimmune diseases or with severe comorbidities were not included in the study.

Intervention

- Physiotherapy: Individualized exercise plans based on strength, mobility and flexibility were covered.
- Occupational Therapy: Functional evaluations, adaptive coping strategies and energy-saving techniques were adopted.
- Pharmacotherapy Management: They checked the drugs. Checked the side effects, and counseled patients regarding adherence.

Data Collection

Quantitative evaluations were performed using standardized assessments including the Health Assessment Questionnaire (HAQ) for disability, the Visual Analogue Scale (VAS) for pain and the Short Form 36 (SF-36) for quality of life. Qualitative data were collected through interviews with 20 participants.

Data Analysis

Quantitative findings were computed using SPSS to ascertain changes while qualitative interviews were thematically analyzed.

Ethical Considerations

The ethics committee expressed its approval and written consent was also obtained from all parties.

Findings

Quantitative Results

The quantitative results indicated a noticeable improvement in the quality of life of RA patients after the application of the multidisciplinary intervention. The results have been synthesized and structured within the matrices below.

Outcome Measure	Baseline Mean (SD)	6-Week Mean (SD)	12-Week Mean (SD)	p-value
Outcomes	1. Satisfaction	6. Employment	12. Recognition	Liberate
Health Assessment Questionnaire	1.85 (0.42)	1.45 (0.38)	1.12 (0.35)	<0.001
Visual Analog Scale (VAS) for Pain	7.4 (1.3)	5.8 (1.4)	4.2 (1.1)	<0.001
Short Form-36 (SF-36) - Physical Component Score	67.8 (3.1)	70.6 (6.0)	71.8 (4.5)	<0.001
Short Form-36 (SF-36) - Mental Component Score	41.5 (6.0)	47.1 (5.8)	50.7 (6.2)	<0.001

The HAQ scores showed a remarkable decline in functional disability whilst the VAS scores registered lowered ranges of pain over the specified intervals. The constituents of the SF-36 for both physical and mental components also revealed significant improvements which boosts the quality of life.

Qualitative Results

The first theme that emerged from the patient responses was as follows:

- Better Movement and Lower Pain Levels: Patients seemed to be satisfied with their change in ability to move and the lessened pain they experienced. They thought the exercises were useful in upholding their mobility.
- Regained Control Over Daily Tasks: Patients were able to regain control over daily tasks through the use of aids and the techniques taught by the occupational therapists.
- Knowledge : Medical Understanding: Patients were able to supplement the gap through the education they received from the pharmacists about the importance of some medications and the appropriate way of using them.
- Disappointments: Patients reported issues such as difficulty in accessing services and lack of better collaboration between healthcare providers.

Discussion

The result of this study showed that understanding the factors which may potentially influence the quality of life of RA patients when approaches with a number of disciplines in managing and treating the conditions are well set Three quarters of patients reported that they become more independent in all activities and reported better knowledge and understanding of their drugs, due to activity of occupational therapist and pharmacist. But the absence of regular interactions with other providers created gaps in care that could potentially be addressed with improved coordination.

These barriers should however be improved through interprofessional collaboration, enhancing the use of telehealth, and ensuring that the services that patients are able to utilize without much stress.

Conclusion

Multidisciplinary care integrating physiotherapy, occupational rehabilitation as well as pharmacy services seems to be effective in improving the quality of life for all the people who have RA. Further studies should be directed towards more clearly articulating the collaborative care approaches and addressing the factors that hinder successful implementation of these in real life practice settings.

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