ORIGINAL RESEARCH PAPER

Volume-8 | Issue-4 | April-2019 | PRINT ISSN No 2277 - 8179

INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

EVIDENCE BASED ROLE OF SPECIALIST NURSE, PHYSIOTHERAPIST AND OCCUPATIONAL THERAPIST IN THE MANAGEMENT OF RHEUMATOLOGICAL DISORDERS

Rheumatology

Hasnayan Sabir Assistant professor, Department of Medicine, AVBRH, DMIMS, JNMC, Savangi, Wardha, Maharashtra.

ABSTRACT

Rheumatological disorders are prevalent in India (0.7%). Prevalence reported: RA (0.4%), OA knees (3.4%), Spondyloarthritis (0.3%), AS (0.1%) etc. Due to the systemic nature of these disorders, multidisciplinary follow-up is necessary for the proper management of the impact of the disease on various aspects of life. MDT should include specialist nurse, physiotherapist and occupational therapist. Specialist nurse is a trained nurse who has experience in looking after patient's physical, emotional and social needs. People with arthritis referred to a specialist nurse as soon as disease has been diagnosed and their treatment planned.Physiotherapist provides care in a variety of setups including hospitals, outpatient clinics, private practices and rehabilitation centers. Various physiotherapy modalities such as heat, cold, electrical therapy, and hydrotherapy are used. Occupational therapist provide means for the prevention of functional limitations, adaptation to lifestyle changes and improvement of psychosocial health.

KEYWORDS

Rheumatological disorders,MDT, occupational therapy, physiotherapy

INTRODUCTION

Rheumatological diseases have been reported to affect up to 0.7% of the Indian population and account for over 30 % of primary care encounters.[1] These diseases are often multi-systemic in nature and affect several domains. A multidisciplinary team (MDT) approach is often used in the management of rheumatology patients as each healthcare professional has a role to play in the care for these patients. Specialist nurses, physiotherapists, and occupational therapists are amongst the various healthcare professionals that each share specific roles in minimalizing the impact of disease. This combined approach makes use of the skills and knowledge of all team members in an effort to improve both patient assessment and disease management. Quality evidence is present to support the use of allied health care services in the management of rheumatology patients and is endorsed by several organizations like National Institute of Clinical Excellence (NICE).[2]

Role of specialist nurses

The European League Against Rheumatism (EULAR), British Society of Rheumatology (BSR) and NICE all recommend the use of rheumatology specialists nurse in hospitals as well as in the community [3]. Like in UK, due to an on-going shortage of medical staff, rheumatology units are increasing their MDTs to include more senior nurses to undertake extended roles and manage patient groups.

Specialists nurse serve a variety of roles ranging from patient education, supporting a patient from the time of diagnosis and also throughout the disease process. They are involved in drug monitoring and counseling as well as reviewing and requesting investigations. There have been many studies which show an overall positive impact of the rheumatology nurse on patient outcomes.

- Disease process: Several studies comparing the outcomes of an nurse-led versus consultant-led clinic found that both groups showed improvements in disease activity . The nurse-led clinic, however showed that patients were in less pain, had reduced morning stiffness, had greater knowledge of their disease and was more satisfied with the care they received. One study showed advances in disease activity by means of improvements in DAS28 (disease activity score) [4].
- Patient wellbeing: One RCT tested the hypothesis that consultation with specialist nurse in a drug monitoring clinic has a significant impact on the well-being of a patient. The outcome was positive and the results of arthritis impact measurement scale and rheumatology attitude index were higher in the intervention group.
- Education: Nurse also serve to educate patients about their disease and improve a patient's ability to cope with their condition. For example, one RCT looked at patients receiving nurse-led therapeutic education in addition to conventional drug therapy and whether this led to reductions in disability and pain when compared to standard pharmacotherapy alone. The results after 18 months of receiving education reported improvements in pain, number of swollen joints and also improvements in disability when compared to controls.[5]
- Communication: Studies have shown that nurses are excellent at facilitating communication between different members of the MDT in an effort to give their patients the best possible treatments and interventions early on. This leads to a positive impact on the patient's quality of life. NICE recognized that rheumatology specialists nurse address several issues and complement the skills of the rheumatologist. They are able to aid the recovery of patients by reviewing medications and working effectively with other health care professionals based in the community, thereby reducing the length of hospital stay and positively influencing a patient's experience and quality of life.
- Cost-Effectiveness: Studies have demonstrated the cost-effectiveness of well-structured nurse-led clinics. They have been shown to reduced rates of unplanned hospital admissions and use of emergency services. This not only suggests an improvement in the disease process but also increases the cost-effectiveness of these clinics [6].

Role of physiotherapy

The role of the physiotherapist is to restore, maintain and ultimately advance a patient's maximum movement and physical functional ability. Physiotherapists adopt a multi-modal approach when managing rheumatology patients; the domains behind their approach consist of a combination of patient education, physical exercise programmes and agents for pain relief. The evidence is present to support and refute some of the methods employed by physiotherapists:

- Exercise: Favorable responses in terms of physical and psychological wellbeing are evoked through dynamic exercise. Evidence has shown that aerobic exercise programmes have a positive effect on pain reduction, fatigue and functional capacity without accelerating joint damage[7]. For example, one RCT reported radiological improvements (assessed using Larsen score) in the joints of hands and feet as well as hip bone mineral density in patients with rheumatoid arthritis (RA) over a 2 year period of high-intensity aerobic exercise versus control. Specific improvements are seen in resistance training and exercises aimed at improving joint flexibility. Similar physical benefits are seen in patients undergoing hydrotherapy based exercises with additional positive psychological effects being demonstrated. Furthermore, studies have shown that when given the opportunity for group contact, patients are more likely to adopt exercise strategies and undertake regular physical activities.
- Thermotherapy and electrophysical agents: Evidence for clear benefit derived from these forms of therapy are conflicting at best. A clear benefit for the use of electrophysical agents is lacking, with much of the data being a result of poor quality studies showing inconsistent results. Some agents have been shown to show some short-term relief of pain such findings were mainly seen with the use of wax bath therapy and transcutaneous electrical nerve stimulation (TENS). However, results remain unreliable to this day. One meta-analysis found an improvement in joint tenderness on the same day in patients treated with TENS versus placebo for RA. It also reported an improvement in resting pain after 3 weeks

of treatment. Alternatively, a Cochrane review concluded that TENS was not found to be an effective pain relief agent for knee osteoarthritis, but did comment that much of the available data consisted of small trails of questionable quality.

- Comprehensive packages: There is some evidence to suggest improvements in long-term self-efficacy, disease activity, level of function as well as knowledge of disease management in those patients receiving a community delivered a comprehensive package of care that incorporates a combination of education, exercise, and certain pain relief modalities.

Role of Occupational therapy

Occupational therapists serve multiple roles in the care of rheumatology patients. They help to improve patients' abilities to perform daily activities both at home and in the workplace; they facilitate successful adaptations in lifestyle and help to promote a person's independence in doing so they aim to prevent or minimize functional and psychological dysfunction. Centered on improving the individual's ability to perform daily activities while limiting both losses of function and disruption to lifestyle, therapy utilizes a combination of both psychological & physical techniques. Evidence has shown that they have a role to play as a member of the multidisciplinary team in the field of Rheumatology:

- Hand function: Several studies have shown the impacts of hand therapy on hand function. One study in recent onset RA patients found that joint protection and energy conversation training (using a group educational-behavioral approach) resulted in significant reductions in morning stiffness and joint pains at 1 year when compared to controls. Similar results to morning stiffness were found in joint protection groups receiving 4 years of training.[8] Another RCT also showed that comprehensive occupational therapist input significantly improved work and functional related outcomes.
- Hand exercises: In collaboration with physiotherapists, hand exercises provided by occupational therapists incorporating a combination of strengthening and range of motion exercises led to significant improvements in grip, dexterity, and upper-limb function.
- Home assessments: Crossing the boundary into the patient's home for home-based assessments provide unique functional information that assists multidisciplinary teams, particularly in relation to discharge planning. These visits may help identify necessary environmental modifications to help promote independence at home ranging from safety aspects such as handrails in shower bays to the ergonomic positioning of desks/chairs to prevent symptomatic flares of conditions associated with prolonged poor posture.
- A systematic review showed significant reductions in pain in RA patients receiving psychological interventions delivered by occupational therapists (including imagery, relaxation, and teaching cognitive coping skills). This systematic review also demonstrated improvements in psychological status and function both at the end of treatment and on follow up. Effectiveness was noted however to be reliant on the nature of the intervention.[9]

CONCLUSION

Multidisciplinary team offers several distinct roles in the care of rheumatology patients. Evidence has shown that allied health professionals have a part to play in the monitoring of disease activity, maintenance of good control and positive influence on patient function. These aspects are facilitated by sustaining a high level of interdisciplinary communication and cooperation, as well as through mutual collaboration with the patients they care for. The end result is an individualized package that encourages each patient to become an active member of the team in an effort to improve adherence and promote independence whilst also addressing and managing all aspects of care.

Conflict of interest: None
Source: Nil

REFERENCES

(1) Symmons D, Bankhead C. Health care needs assessment for musculo-skeletal diseases: the first step – estimating the number of incident and prevalent cases. Arthritis and Rheumatism Council for Research 1994, UK.
(2) National Collaborating Centre for Chronic Conditions. Rheumatoid arthritis: a national clinical guideline for management and treatment in adults. London: Royal College of Physicians, February 2009.
(3) Van Eijk-Hustings Y, van Tubergen A, Bostrom C, et al. (2012). EULAR recommendations for the role of the nurse in the management of chronic inflammatory arthritis. Annals of Rheumatological Diseases. 71: pp13-19
(4) Ryan S et al. Impact of a rheumatology expert nurse on the wellbeing of patients attending a drug monitoring clinic. Leading Global Nursing Research. 2006;53(3)277-286
(5) Núñez M, Núñez E, Yoldi C, Quintó L, Hernández MV, Muñoz-Gómez J. Health-related quality of life in rheumatoid arthritis: therapeutic education plus pharmacological treatment versus pharmacological treatment only. Rheumatol Int. 2006 Jun;26(8):752-7.
(6) Ndosi M et al. The outcome and cost-effectiveness of nurse-led care in people with rheumatoid arthritis: a multicentre randomized controlled trial. Annals of the Rheumatic Diseases. 2014;73(11) pp 1-3.
(7) De Jong Z, Munneke M, Lems WF et al. Slowing of bone loss in patients with rheumatoid arthritis by long-term high-intensity exercise: results of a randomized, controlled trial. Arthritis & Rheumatism. 2004;50(4):1066–1076.
(8) Hammond A, Freeman K. One-year outcomes of a randomized controlled trial of an educational-behavioral joint protection programme for people with rheumatoid arthritis. Rheumatology. 2001; 40(9):1044–1051.
(9) Astin JA, Beckner W, Soeken K et al. Psychological interventions for rheumatoid arthritis: a meta-analysis of randomized controlled trials. Arthritis & Rheumatism. 2002;47(3):291–302.