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Enhancing Physician Perspectives of Skilled Occupational Therapy Services for Patients with Rheumatoid Arthritis

Valerie S. Trinidad
Nova Southeastern University, vt328@mynsu.nova.edu

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Enhancing Physician Perspectives of Skilled Occupational Therapy Services



for Patients with Rheumatoid Arthritis

Valerie S. Trinidad, OTD-S

Doctoral Capstone Mentor: Dr. Thomas Decker, EdD, OTD, OTR/L

Site: Gulf Coast Rheumatology

Introduction

This Capstone Project sought to identify a relationship between self-reported functional performance and self-report participation restriction using a correlational study design. The established Health Assessment Questionnaire Disability Index (HAQ-DI) and the newer Keele Assessment of Participation (KAP) were the two outcome measures of focus for surveying participants diagnosed with rheumatoid arthritis (RA) or similar arthritis-related conditions. Results from this study indicate that assessment of factors pertaining to participation restriction rather than only assessing an individual's functional ability in rheumatology settings may be the key to increasing referrals to skilled occupational therapy (OT) services. The potential collaboration between the two professions would attend to the physical function, quality of life, and overall well-being of the individual with RA or similar arthritic condition.

Enhancing Physician Perspectives of Skilled Occupational Therapy Services for Patients with Rheumatoid Arthritis

Be a part of the CHANGE

The purpose of this study is to provide support for the inclusion of skilled occupational therapy services in the treatment protocol for patients with rheumatoid arthritis (RA). Data collected will help to distinguish differences between performance ability and participation satisfaction among activities of daily living (grocery shopping, self-care, dressing, homemaking, etc.).

We are particularly interested in learning if questions pertaining to satisfaction in performance rather than performance ability, for individuals with RA, provide a deeper understanding of a patient's level of function, disease management, and overall well-being.

If you are over 18 years old and have been diagnosed with RA, obtain a waiver of documentation of informed consent form and be sure to complete ALL parts of the survey. Participation is completely voluntary, and no payment or compensation will be provided. The survey will take approximately 10 minutes to complete.

This is a research study between Gulf Coast Rheumatology and researchers at Nova Southeastern University's Entry-level Doctor of Occupational Therapy Program.

Contact Information
Principal Investigator: Thomas Decker, EdD, OTD, OTR/L
Phone: (813) 574-5347
Email: tdecker@nova.edu
Co-Investigator: Valerie Trinidad, OTD-S

Figure 1. Recruitment flyer

Site Description

Gulf Coast Rheumatology is a privately owned medical practice under the ownership and directorship of Dr. Adam Grunbaum, DO, FACOI, FACR. Dr. Grunbaum graciously provided access to his patients and guidance during the development and deployment of this study.

Summary of Needs Assessment

- There is a significantly decreased number of patient referrals to skilled OT services by rheumatologists due to a lack of understanding of the role the OT profession plays in the care of patients with RA.
- There is also a lack of assessment of factors attributed to one's quality of life among individuals with RA.
- This study will be the first of its kind to assess correlations, or relationships, between self-reported functional capacity and participation restriction using the two measures among adults with RA.
- This study yields the potential to bring awareness to rheumatologists of inherited attributes, which can be a root cause of decreased occupational performance, quality of life, and disease management.

Literature Review Summary

- Medical interventions for RA have historically considered the objective processes of the disease and have failed to acknowledge the subjective patient-perspective in disease management, which Yamanaka et. al (2013) states is an important factor in establishing effective treatment outcomes.
- Use of only objective measures without the complement of subjective measures to determine disease interventions may limit and hinder the incorporation of additional intervention approaches that are suitable for individuals with RA such as skilled OT services.
- The incorporation of OT into the multidisciplinary team for patients with RA has been emphasized and supported to aid in the management of disease progression across various life occupations and to improve adherence and effectiveness of early treatment (de Almeida et al., 2015).
- Li and Iverson (2005) conducted a study that found only 26% of patients with RA receiving a referral to OT by a rheumatologist. Assumptions for the lack of patient referral to rehabilitation were attributed to a lack of understanding of the role the profession plays in the multidisciplinary team.

Methods

- Participants were recruited over the course of a week following approval from the Nova Southeastern University Institutional Review Board (Figure 1).
- Information regarding demographic information was collected from each participant as well as information regarding a history of receiving a type of rehabilitation service (physical therapy, OT, and/or speech therapy) for their diagnosis. The survey concluded following completion of the HAQ-DI (Figure 2) and KAP (Figure 3) with a descriptive statement and question asking the participant to state whether they were aware of the scope of the OT profession.
- Statistical analysis procedures were conducted using IBM SPSS version 28.0. Scaled scores of the HAQ-DI and KAP were standardized (z-scores) prior to performing tests of correlation.
- Tests of correlation pertaining to the outcome measures were conducted separately for participants who reported having RA from the rest of the study population as the HAQ-DI has been historically considered only for individuals with the disease.

Results

- A total of n=71 participant responses were collected and analyzed (62 respondents identified as female and 9 identified as male). Data related to the respondent's age and whether they had a diagnosis of RA or a related condition (Figure 4) was collected in reference to five age groups (Figure 5).
- Participants with RA (n=37): A Spearman's rank correlation was performed between the total HAQ-DI score and total KAP score. A significantly strong positive correlation between the two outcome measures was identified $r_s(35) = .70, p < .001$. The test was also performed using the dichotomized value of the respondent's total score on the HAQ-DI. The majority, n=31, of respondents had a total HAQ-DI score between the values of 0 and 1 which is indicative of some to no difficulty in completing activities. A significant positive correlation was identified once again between the two outcome measures, $r_s(29) = .67, p < .001$.
- Participants with related conditions (n=34): A significantly strong positive correlation between the two outcome measures was identified $r_s(32) = .74, p < .001$ for participants identifying as having a diagnosis of OA, psoriatic arthritis, lupus, or fibromyalgia. A significant positive correlation was identified between the two outcome measures for this group, $r_s(29) = .76, p < .001$ using the dichotomized value of the respondent's total score on the HAQ-DI, score between 0 and 1.
- Detailed information pertaining to prevalence of participation restriction among occupations outlined on the KAP (Figure 6) and history of skilled rehabilitation services was also collected (Figure 7).

Health Assessment Questionnaire – Disability Index (HAQ-DI)

Please answer each question, even if you do not think it is related to you at this time. Try to complete as much as you can yourself, but if you need help, please ask. There are no right or wrong answers.

	Without ANY difficulty (0)	With SOME difficulty (1)	With MUCH difficulty (2)	Cannot do at all (3)
Dressing & Grooming – are you able to:				
Dress yourself including shoes and buttons?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shampoo your hair and wash your hair?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arising – are you able to:				
Stand up from a straight chair?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Get in and out of bed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Eating – are you able to:				
Cut your meat?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use a full cup or glass to your mouth with one hand?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Open a new milk carton?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Walking – are you able to:				
Walk outdoors on flat ground?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Climb on stairs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hygiene – are you able to:				
Wash and dry your body?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Care for dentures?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reach – are you able to:				
Reach and get down a 5 pound object from above your head?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Send down to pick up object from the floor?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Get in and out of car:				
Open car door?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Open previously opened jar?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Turn faucet on and off?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Activities – are you able to:				
Run errands and shop?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Get in and out of the car?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do chores such as vacuuming, dishes or yard work?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How much pain have you had because of your Rheumatoid Arthritis over the past week?

NO 0 1 2 3 4 5 6 7 8 9 10 SEVERE
PAIN 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

NO 0 1 2 3 4 5 6 7 8 9 10 VERY WELL 1 2 3 4 5 6 7 8 9 10 VERY POORLY

Figure 2. The Health Assessment Questionnaire Disability Index

Keele Assessment of Participation

We are interested in some of the things that are necessary for you to live your life in the way you choose. We are particularly interested in how often these things are achieved in the way you would like. When answering the questions, please think about the past four weeks. It does not matter if you require the help of other people or from gadgets and machines. We would simply like to know if the activity is achieved to the extent that you need it to be.

Please read each statement below and put a cross in the box, which comes closest to how much you agree with the statement. Please put a cross in one box only for each line.

Please read each statement below and put a cross in the box, which comes closest to how much you agree with the statement. Please put a cross in one box only for each line.

- During the past 4 weeks, I have moved around in my home, **as and when I have wanted.**

All the time	Most of the time	Some of the time	A little of the time	None of the time
--------------	------------------	------------------	----------------------	------------------
- During the past 4 weeks, I have moved around outside my home, **as and when I have wanted.**

All the time	Most of the time	Some of the time	A little of the time	None of the time
--------------	------------------	------------------	----------------------	------------------
- During the past 4 weeks, my self-care needs (examples are washing, toileting, dressing, feeding, maintaining healthy) have been met, **as and when I have wanted.**

All the time	Most of the time	Some of the time	A little of the time	None of the time
--------------	------------------	------------------	----------------------	------------------
- During the past 4 weeks, my home has been looked after, **as and when I have wanted.**

All the time	Most of the time	Some of the time	A little of the time	None of the time
--------------	------------------	------------------	----------------------	------------------
- During the past 4 weeks, my things (belongings) have been looked after, **as and when I have wanted.**

All the time	Most of the time	Some of the time	A little of the time	None of the time
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Continue to Next Page

Figure 3. Page 1/2 of the Keele Assessment of Participation

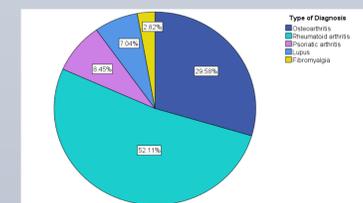


Figure 4. Percentage of respondents with RA and other conditions.

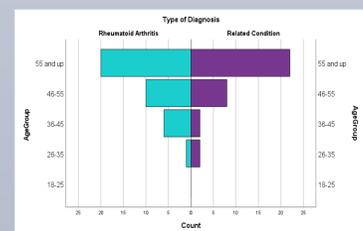


Figure 5. Type of diagnosis in relation to age groups. Note. Related condition includes: OA, lupus, psoriatic arthritis, and fibromyalgia.

Prevalence of Participation Restriction Identified by the KAP

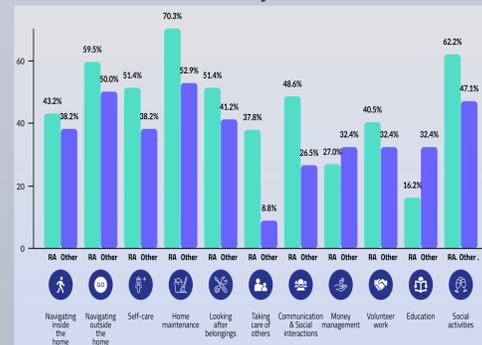


Figure 6. Prevalence of participation restriction among the occupations outlined on the KAP for respondents with RA and other conditions. Note. Other conditions include: OA, lupus, psoriatic arthritis, and fibromyalgia.

Skilled Rehabilitation Services

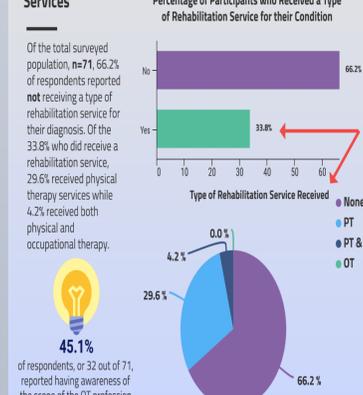


Figure 7. Data related to history of receiving a rehabilitation service, type of service, and awareness of the scope of OT.

Learning Objectives Achieved

- Employ data collection standards as outlined in the IRB, maintain participant confidentiality, and assess data appropriately
- Collaborate with both mentor and rheumatologist on potential developments for increasing awareness of OT services for patients with RA
- Expand the literature surrounding OT and its benefits and purpose in treating clients with RA
- Enhance clinician (rheumatologists and occupational therapists) understanding on this topic and promote an interdisciplinary approach for treating RA
- Create a publishable manuscript, an educational presentation, and resources for participants, practitioners, and students as seen below:

RESEARCH STUDY UPDATE

Enhancing Physician Perspectives of Skilled Occupational Therapy Services for Patients with Rheumatoid Arthritis

In May 2022, patients from Gulf Coast Rheumatology voluntarily participated in a research study in collaboration with Nova Southeastern University's Entry-level Doctor of Occupational Therapy program. The purpose of this study was to provide support for the inclusion of skilled occupational therapy (OT) services in the treatment protocol for patients with rheumatoid arthritis (RA).

This was accomplished through the assessment of questions pertaining to performance ability and participation satisfaction among daily occupations (grocery shopping, self-care, dressing, homemaking, etc.).

Results from this study indicated the participating environment hindered participation restriction among daily occupations although they were physically capable of performing the tasks. Thus, when individuals with RA and their conditions are asked to report on whether they have wanted rather than how they have wanted rather than their ability to complete the task, consistent responses may come about and provide a deeper understanding of the individual's quality of life.

Assessment of factors pertaining to participation restriction among occupations outlined on the KAP towards linking the specialty with the OT profession and with their scope of further access and their ability to living performance and participation in their occupation.

For more information about Occupational Therapy please visit the Nova Southeastern University Occupational Therapy website at: www.nova.edu/ot

SKILLED OCCUPATIONAL THERAPY SERVICES

For patients with RA and similar arthritic conditions

Individuals experiencing symptoms associated with RA may benefit from occupational therapy services for a greater quality of life.

OCCUPATIONAL THERAPY (OT)

Occupational Therapy (OT) is a type of healthcare profession which dates to 1917. It was first recognized into medicine as treatment for those suffering with mental illness and wounded soldiers who required activity to assist them to return to their daily lives. Today, OT aims to help persons of all ages who have difficulties with their everyday tasks because of a physical, mental, developmental, and/or emotional injury.

How do occupational therapists approach RA?

Occupational therapists are committed to supporting individuals with arthritis to live life to its fullest. Their practitioners have specialized knowledge and skills to create and modify environments that enable people to do those things they want and need to do.

In addition, they have a thorough understanding of chronic pathology, and the physical and emotional demands that daily activities place on the body. They engage clients in programs that increase their knowledge about the disease process, show them how to manage pain and related medications, and provide them with skills to participate in meaningful activities (occupations) (AGTA, 2011)

Occupational therapy practitioners are employed by private and contract rehabilitation centers, hospitals, and home care services. Additionally, they are employed in health care settings, such as day centers, occupational therapy services for research, and inpatient and outpatient settings. Occupational therapy services for research and inpatient and outpatient settings must be obtained prior to treatment.

Whether you're newly diagnosed or have been living with arthritis for years, you may benefit from an OT evaluation.

JOINT PROTECTION & EDUCATION

An occupational therapist can facilitate correct joint motion, which can assist with controlling pain and maintaining functional positions of the hand to support function. OT can also provide training in the use of joint protection and energy conservation techniques.

ACTIVITY MODIFICATIONS

An occupational therapist can help to identify and modify activities in the home, school, and daily home tasks to ensure adequate rest and to avoid overuse.

THERAPEUTIC ACTIVITIES & EXERCISES

OT can help to promote gross and fine motor control, range of motion, endurance, and strength, thereby improving functional abilities with basic tasks such as self-care, home management, work, and leisure activities.

Implications for OT Practice

- Insight into participation restriction among occupations not identified by sole use of the HAQ-DI has provided understanding for identifying when a referral to skilled OT services may be warranted based on results of the KAP.
- When individuals with RA and similar conditions are asked to report on whether they have participated in activities *when* and *how* they have wanted (KAP) rather than on their ability to complete the task (HAQ-DI), conflicting responses may come about and provide a clearer understanding of the individual's quality of life.
- Assessment of factors pertaining to participation restriction among rheumatology settings may be the key to linking the specialty with the OT profession and achieving better health outcomes as it is within their scope to further assess and treat factors limiting performance and participation in desired occupations.

References & Acknowledgments

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References Available Upon Request.