Arthritis New Zealand Summer Scholarships Report

Name of Student

Vy Nguyen

Supervisor's Names

Dr Sarah Stewart[a], Dr Angela Brenton-Rule, Dr Nicola Dalbeth

Primary Supervisor's Institution (including address)

[a]School of Podiatry, Auckland University of Technology, Private Bag 92006, Auckland 1142, New Zealand

Project Title

Podiatry needs and service provision for people with arthritis: a retrospective review of a rheumatology podiatry clinic in Aotearoa New Zealand

Statement Regarding Arthritis New Zealand Sponsorship

I am so privileged and humbled to receive this Summer Scholarship. I would like to thank Arthritis New Zealand for the funding and for providing me with this opportunity to advance my knowledge in arthritis and rheumatology and develop research skills.

Student's Personal Comment About Study/Experience

I have gained first-hand experience in conducting research, including protocol development, data extraction and data analysis. Also, it has been a great experience being instructed by enthusiastic and professional supervisors, who have given me a lot of valuable feedback on my research proposal and report. I felt comfortable discussing all aspects of the research with my supervisors as they always encouraged me to develop critical thinking and try different research tools and methods to achieve our research goals. I am also grateful to be named as first author in the publication arising from this research which I will be submitting to the Journal of Foot and Ankle Research.

To me, the most invaluable experience from this opportunity was gaining a better understanding of, and empathy for the challenges that patients with long-term rheumatic conditions face. The data extracted from our rheumatology clinic records over the past ten years has provided me a general picture of the patients and their conditions. I remember one patient reported that she had "only a couple of falls" since her last visit to our clinic, and she felt great as she 'normally' fell more than this. These small things really put things into perspective for me and brought me a great source of inspiration and motivation in podiatry practice and research. I believe we can do better for our patients and undertaking research is the first step to changing and helping patients with arthritis and other long-term conditions. I love the research I have done so far and am looking forward to further research activities once I graduate.

Summary of the Project

There is a high prevalence of foot problems in people with arthritis [1–4]; however, dedicated podiatry services directed toward these patients are scarce [5–7]. This project aimed to review the needs of people with arthritis and the podiatry services provided to them at the Auckland University of Technology (AUT) Podiatric Rheumatology Clinic since its establishment in 2010. The AUT Clinic is a student run clinic supervised by registered podiatrists and aims to provide services consistent with usual clinical practice.

From 2010 to 2021, 1570 appointments were provided to 157 patients with inflammatory rheumatic disorders (n = 123 rheumatoid arthritis, n = 14 psoriatic arthritis, n = 8 gout, n = 7 lupus, n = 5 other). The most common presenting concern was foot pain (reported by n = 121, 77.1% patients during at least one appointment), followed by skin/nail lesions (n = 98, 62.4%) and footwear/orthotic concerns (n = 90, 57.3%). The included patients were predominantly female (n = 121, 77.1%), European (n = 116, 73.9%), and within the 51-60 years (n = 29, 18.5%) and 61-70 years (n = 40, 26.8%) age groups. The proportion of Māori (n = 5, 3.2%) and Pacific people (n = 4, 2.6%) was relatively low compared to other ethnic groups. Data related to foot problems identified and treatments provided to the patients are presented in **Table 1**.

Table 1. Services provided to patients who attended the Podiatric Rheumatology Clinic (n = 157 patients)

Foot problems identified, n (%)	Dermatological	126 (80.3%)
	Vascular	68 (43.3%)
	Neurological	66 (42.0%)
	Structural	106 (67.5%)
	Functional (static)	131 (83.4%)
	Functional (dynamic)	101 (64.3%)
	Footwear/orthotic	116 (73.9%)
	Falls risk	3 (1.9%)
	Other	2 (1.3%)
Treatments provided, n (%)	Education	151 (96.2%)
	Skin/nail care	107 (68.2%)
	Orthoses	64 (40.8%)
	Footwear	96 (61.1%)
	Wound care	32 (20.4%)
	Padding/offloading	73 (46.5%)
	Exercise prescription	24 (15.3%)
	Referral to other health practitioner	22 (14.0%)

This is the first study focusing on foot care needs and podiatric service provision for patients with arthritis attending a specialist podiatric rheumatology clinic in Aotearoa New Zealand. Based on the data from our large cohort of patients, a range of foot health complaints and problems were identified, which is consistent with previous studies highlighting that foot pain, dermatological problems, footwear difficulties, and functional and structural impairments are among the most common foot-care needs sought by this population across all types of rheumatic disorders [2,3,8,9]. A range of studies and international guidelines recognise the importance of podiatrists in the interdisciplinary management of patients with arthritis in order to relieve pain, maintain function and improve quality of life [10,11]. In addition, the findings from this study have provided an insight into the current podiatric services provided to patients with arthritis in Aotearoa New Zealand, which extend beyond general skin and nail care, and address the multiple, and often overlooked, sources of lower limb pain in this cohort [12]. The results from this research will also assist us in developing strategies to engage Māori and Pacific patients who were underrepresented as patients at our clinic despite high prevalence rates of arthritis in these ethnic groups. The results will also inform the development of a standardised clinical assessment form to assist podiatry students in approaching patients with arthritis and developing appropriate management plans that are specifically targeted towards the patients' needs. Furthermore, the findings from this research will also be used to direct future studies that explore the experience of patients with arthritis receiving podiatry treatment and the efficacy of our interventions.

In conclusion, patients with arthritis attending our specialist podiatric rheumatology clinic report a wide range of foot problems related to foot pain, dermatological concerns, and functional disability. This study has also highlighted the extensive podiatry services provided to patients with arthritis and emphasises the importance of podiatrists in the interdisciplinary management of patients with arthritis to improve foot-related outcomes, maintain function, and improve the overall quality of life and wellbeing.

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