Expanding Access to Rheumatology Care: The Rheumatology General Practice Toolbox

Abstract:

Management guidelines for many rheumatic diseases are published in specialty rheumatology literature but rarely in general medical journals. Musculoskeletal disorders comprise 14% of all consultations in primary care. Despite this, formal post-graduate training for primary care practitioners in managing rheumatic diseases is limited. The Rheumatology General Practice (GP) Toolbox is an intensive one day course designed to offer up to date information to primary care practitioners in the latest diagnostic and treatment guidelines for seven common rheumatic diseases. The course structure involves a short lecture on each topic and workshops on aspects of arthrocentesis, joint injection and DXA interpretation. Participants evaluated their knowledge and educational experience before, during and after the course. Thirty-two primary care practitioners attended, who had a median of 13 (IQR 6.5, 20) years experience in their specialty. The median number of educational symposia attended in the previous 5 years was 10 (IQR 5, 22.5), with a median of 0 (IQR 0, 1) in rheumatology. All respondents agreed that the course format was appropriate. Numerical improvements were demonstrated in participants confidence in diagnosing and managing all seven common rheumatic conditions, with statistically significant improvements (p<0.05) in 11 of the 14 aspects assessed. The Rheumatology GP Toolbox is an effective educational method for disseminating current knowledge in rheumatology to primary care physicians and improved participants self-assessed competence in diagnosis and management of common rheumatic diseases.

Introduction

There is a disconnect between the flow of knowledge and burden of care in the management of rheumatic diseases. Musculoskeletal disorders comprise 14% of all consultations in primary care. Despite this, formal post-graduate training for primary care practitioners in managing rheumatic diseases is limited. The Rheumatology General Practice (GP) Toolbox is an intensive one day course designed to offer up to date information to primary care practitioners in the latest diagnostic and treatment guidelines for seven common rheumatic diseases. The course structure involves a short lecture on each topic and workshops on aspects of arthrocentesis, joint injection and DXA interpretation. Participants evaluated their knowledge and educational experience before, during and after the course. Thirty-two primary care practitioners attended, who had a median of 13 (IQR 6.5, 20) years experience in their specialty. The median number of educational symposia attended in the previous 5 years was 10 (IQR 5, 22.5), with a median of 0 (IQR 0, 1) in rheumatology. All respondents agreed that the course format was appropriate. Numerical improvements were demonstrated in participants confidence in diagnosing and managing all seven common rheumatic conditions, with statistically significant improvements (p<0.05) in 11 of the 14 aspects assessed. The Rheumatology GP Toolbox is an effective educational method for disseminating current knowledge in rheumatology to primary care physicians and improved participants self-assessed competence in diagnosis and management of common rheumatic diseases.

Primary care practitioners can be trained to effectively treat complex diseases as exemplified by the case of hepatitis C. There are advantages to the community provision of care for chronic conditions in terms of patient convenience, frequency of visits, the development of trust over time and the ability to provide more holistic care by physicians familiar with patient personal, cultural and societal circumstances. This is particularly important for conditions, such as many forms of arthritis, which can have profound life-long impacts in terms of social function and interaction. The aim of this study was to evaluate the Rheumatology GP Toolbox, a novel educational method for disseminating current knowledge on rheumatology disorders to primary care practitioners.

Methods

The Rheumatology GP Toolbox was designed based on our own personal interactions with General Practitioners (GPs) over a number of years in a variety of educational and clinical settings. In addition one of the authors had worked in primary care for several years, prior to becoming a consultant rheumatologist and had experience of attending and running symposia for primary care. The findings of the 3rd survey of Irish GPs demonstrating limited access to rheumatology teaching were also considered. The course is completed by three practical workshops of thirty minutes duration on arthrocentesis and joint injection of the knee and shoulder, and interpretation of dual-energy X-ray absorptiometry (DXA) scan.

Traditionally courses have focused on either lectures or workshops and rarely blended both into a cohesive structure. The Rheumatology GP Toolbox is an intensive one day course with the aim to provide up to date information to primary care practitioners in the latest diagnostic and treatment guidelines for seven common rheumatic diseases. The course structure involves six lectures of thirty minutes each on these topics followed by an interactive discussion. The course is completed by three practical workshops of thirty minutes duration on arthrocentesis and joint injection of the knee and shoulder, and interpretation of dual-energy X-ray absorptiometry (DXA) scan.

Statistical analysis was carried out using Microsoft® Excel (Microsoft, Redmond, WA) and GraphPad Instat version 3.10 (GraphPad Software, San Diego, California, USA). Descriptive statistics were used, including as appropriate, means / standard deviations (SD), medians / inter-quartile ranges (IQR) or numbers / percentages, with P Values for between-group differences calculated using t-test for continuous variables and Fishers exact test for categorical variables. Statistical significance was set at P<0.05 throughout. The study was approved and conducted in accordance with the audit guidelines of Galway University Hospitals.

Results
Thirty-two primary care practitioners attended. All participants were fully-qualified primary care practitioners (general practitioners, family practitioners). The attending physicians had a median of 33 (IQR 6.5, 20) years experience in their specialty. The median number of educational symposia they had attended in the previous 5 years was 10 (IQR 5, 22.5), with a median of 0 (IQR 0, 1) in rheumatology. Twenty-five (78%) of the thirty-two participants commented that their personal interest in rheumatology stood out before initial contact with the Rheumatology GP Toolbox. This suggests that they had some prior knowledge of and confidence in diagnosing and managing common rheumatologic conditions, and would improve the quality of their referrals. Table 1 demonstrates participants self-assessed confidence in diagnosing and managing the covered conditions pre and post course. There were numerical improvements in self-assessed confidence for diagnosis and management in all seven topics covered. Statistically significant improvements were seen in all areas apart from referrals to encompass both appropriateness and quality would aid evaluation, however the lack of a validated objective assessment method made this unfeasible in our setting. The model of programme delivery was designed based on our personal knowledge of the target audience and well worked in our local area, unique features of other healthcare locations and systems may necessitate modification of the approach prior to introduction of similar programmes. As such we would not suggest that our programme be directly replicated but rather would provide a framework for the delivery of medical education to experienced physicians. In conclusion, this pilot study establishes the feasibility of the Rheumatology GP Toolbox model as an educational method for disseminating current knowledge to primary care physicians and improved participants self-assessed competence in diagnosis and management of common rheumatic diseases.

Correspondence: R Conway
Department of Rheumatology, Galway University Hospitals, Merlin Park, Galway
Email: drrichardconway@gmail.com

References

Email: drrichardconway@gmail.com
Department of Rheumatology, Galway University Hospitals, Merlin Park, Galway

Expansion Access to Rheumatology Care: The Rheumatology General Practice Toolbox 2