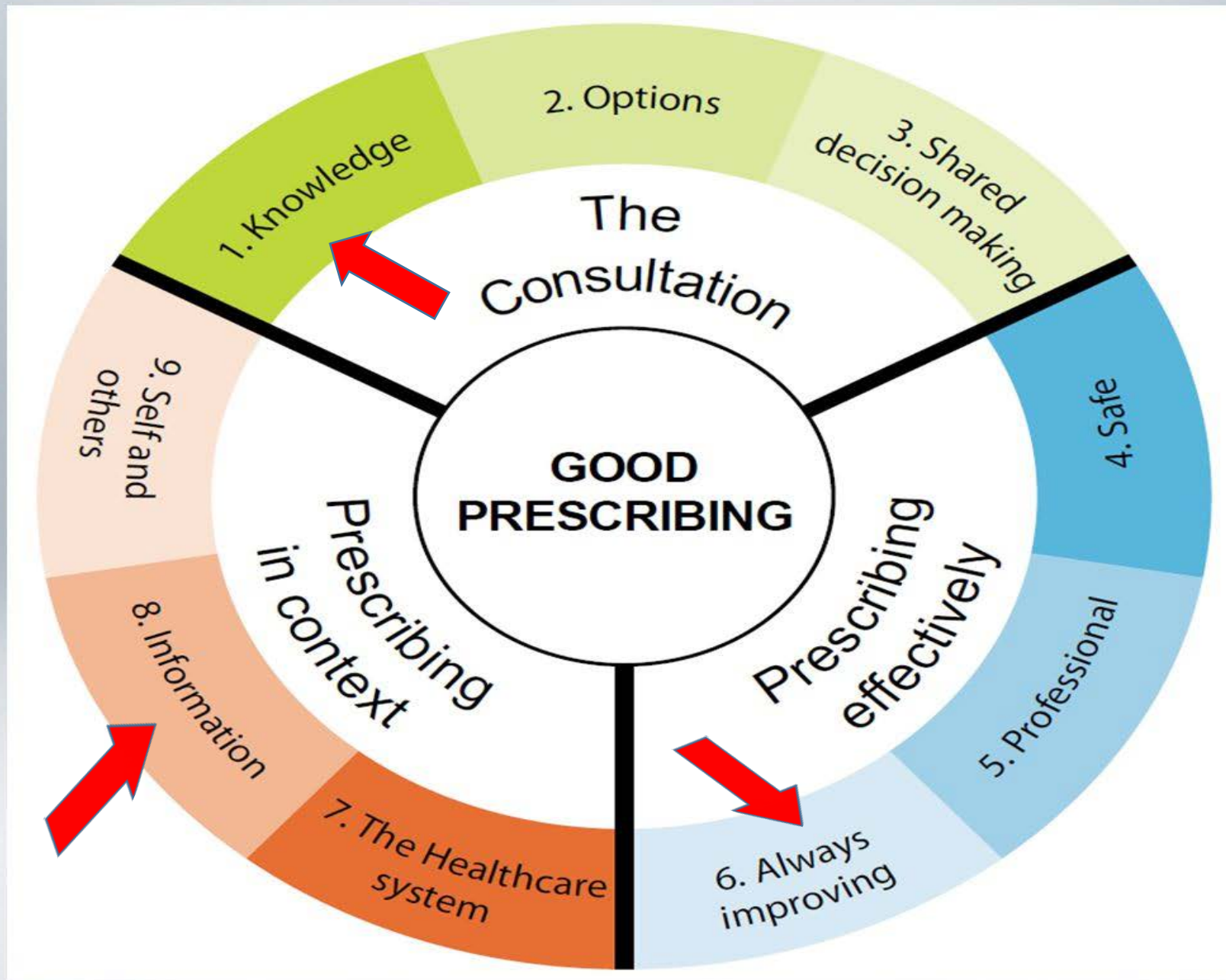


Finding evidence for prescribers

Dr Elaine Maxwell
Clinical Advisor
NIHR Dissemination Centre



The Challenge

KNOWN

UNKNOWN

KNOWN

Current
competency

Identified
educational needs

UNKNOWN

Things you should
know about

New knowldege

Evidence required

- Pharmaceutical –*mechanism of drug*
- Socio technical –*the way people use drugs*
- Efficacy –*relative advantages*
- Alternatives –*non pharmaceutical*
- Governance –*including legal accountability*

How do non medical prescribers make decisions on prescribing?

OpenAIR @RGU **RGU** **ROBERT GORDON UNIVERSITY ABERDEEN**

This publication is made freely available under GREEN open access. 

AUTHOR(S): MCINTOSH, T., STEWART, D., FORBES-MCKAY, K., MCCAIG, D. and CUNNINGHAM, S.

TITLE: Influences on prescribing decision-making among non-medical prescribers in the United Kingdom: systematic review.

YEAR: 2016

Publisher citation: MCINTOSH, T., STEWART, D., FORBES-MCKAY, K., MCCAIG, D. and CUNNINGHAM, S. 2016. Influences on prescribing decision-making among non-medical prescribers in the United Kingdom: systematic review. Family practice [online], 33(6), pages 572-579. Available from: <http://dx.doi.org/10.1093/fampra/cmw085>

- This systematic review has identified a paucity of research around NMPs' prescribing decision-making with only three studies meeting the inclusion criteria.
- Evidence based guidelines key influence
- Opposing influences included prioritisation of experience and concern about complications over evidence base, and peer conflict.

Risky Business

Medication errors comprised 11% of the 1.2 million incidents recorded via the National Learning and Reporting Service in 2011 (NRLS 2011)

But no difference between professions



The screenshot shows the NHS Dissemination Centre Discover Portal. The header includes the NHS logo and the text "National Institute for Health Research". The navigation bar contains links for Home, Signals, Highlights, Themed Reviews, Categories, Journals, and Tools, along with a search box. The main content area features a "NIHR Signal" article titled "Nurses and pharmacists can prescribe as effectively as doctors", published on 21 March 2017. The article text states: "Prescribing by suitably-trained pharmacists and nurses offers similar outcomes to prescribing by doctors, at least in the management of chronic conditions. This Cochrane review pooled clinical outcomes and patient satisfaction across 45 studies of nurse or pharmacist prescribing compared with doctor prescribing. Most studies were of chronic disease management in primary care settings in high income countries (25 from the US and six from the UK). Independent and supplementary prescribers in the NHS include not only the nurses and pharmacists, as covered in this review, but also other professions such as podiatrists, optometrists, and physiotherapists. At a time of high demand for NHS resources, with shortages of doctors in some specialties, prescribing by other professionals may help ease the workload, but safety, time and costs of training need to be considered." To the right of the article is an "Expert commentary" box with a quote: "This review confirms what many people have long believed from practice. Nurses and pharmacists, trained as independent prescribers, produce comparable clinical outcomes to doctors, when caring for patients with long-term conditions. Now, a wider group of healthcare professionals work as independent prescribers in even more settings. Independent prescribers, for example, are working as advanced clinical practitioners in acute and emergency practice. The challenge to researchers over the next few years is to generate further robust evidence as to the impact of these independent prescribers in the latest cutting-edge practice."

Prevalence, Nature, Severity and Risk Factors for Prescribing Errors in Hospital Inpatients: Prospective Study in 20 UK Hospitals

Authors

Authors and affiliations


Darren M. Ashcroft , Penny J. Lewis, Mary P. Tully, Tracey M. Farragher, David Taylor, Valerie Wass, Steven D. Williams, Tim Dornan

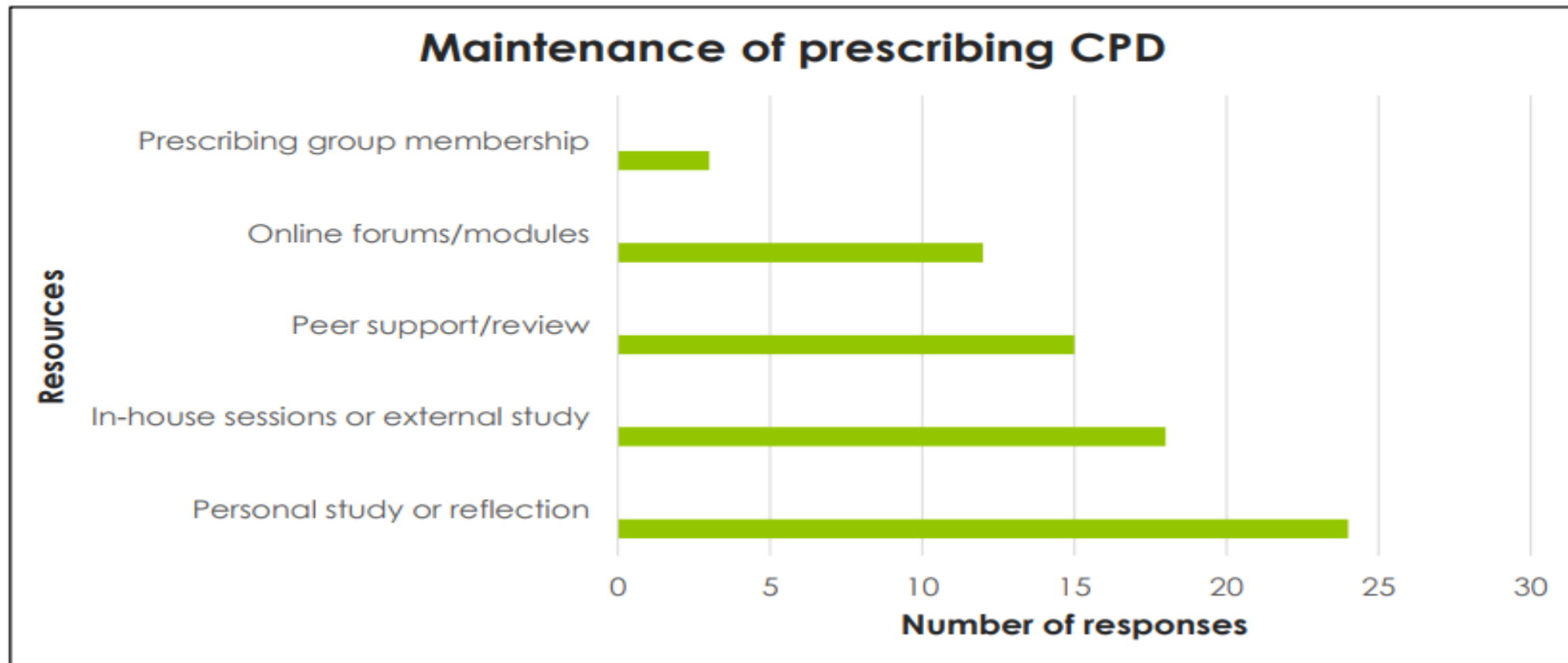
Table 2

Prescribing error rates per medication order written by prescriber and prescribing stage

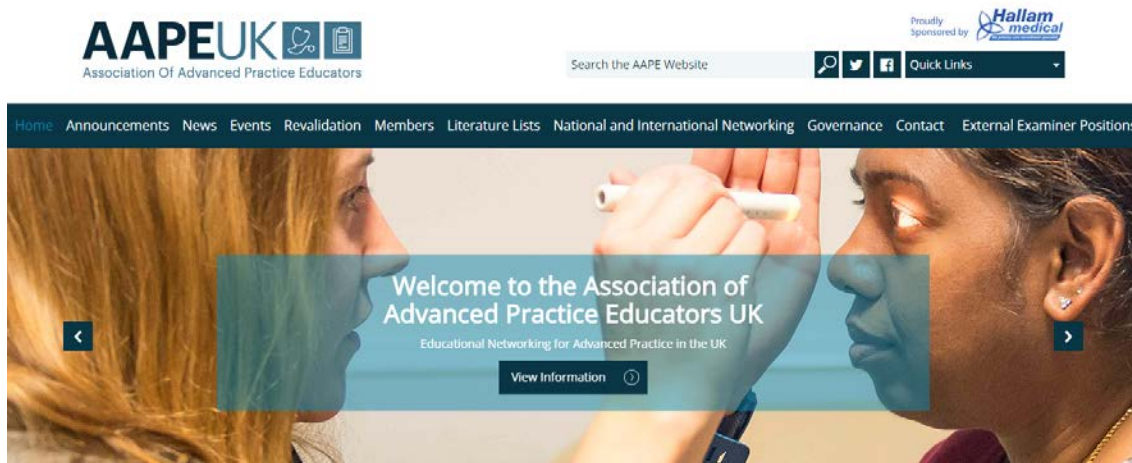
Prescriber	Description	On admission	During stay	When drug chart re-written	At discharge	Missing
Pharmacist prescribers	Orders written	12	41		131	3
	Errors (<i>n</i>)	6	0		0	0
	Errors [% (95 % CI)]	50.0 (0–101.7)	0.0 (–)		0.0 (–)	0.0 (–)
Nurses prescribers	Orders written	456	366	32	114	56
	Errors (<i>n</i>)	21	22	0	6	4
	Errors [% (95 % CI)]	4.6 (2.3–6.9)	6.0 (2.1–9.9)	0.0 (–)	5.3 (0.7–9.9)	7.1 (0.1–14.2)


How do NMP get their for evidence?





(Nimmo, Paterson and Irvine, 2017)




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What does the AFP do?

For ten years, the Association for Nurse Prescribing (ANP) has been a leading voice campaigning for, and promoting, the role of nurse prescribing. The association, whose Patron is Baroness Julia Cumberlege, CBE, and President Dr June Crown, CBE, achieved its objectives in May 2006, when legislation was changed enabling appropriately qualified nurses to prescribe from the full British National Formulary within their area of competence.

The role of the AFP originally evolved to provide nurses with support and education in order that they feel confident in their role. The AFP is now supporting all non-medical prescribers. The AFP recognises that the patient is at the heart of every health professional's career and that all health professionals need to continue improving their standards of care, knowledge and proficiency.

Association for Prescribers:

- Provides a community for all non-medical prescribers and medical prescribers
- Promotes education, training and continued professional development for all non-medical prescribers
- Provides a unifying voice for the membership to influence government bodies, nursing organisations and other healthcare professionals on future developments in prescribing.
- Allows networking of all health professionals with an interest in prescribing
- Supports research into non-medical prescribing
- Shares good practice
- Offers advice and support to prescribers, higher education institutions and government bodies

Chair's Blog:



[Association for Prescribers Annual Conference 2017](#)


Places still available for the Association for Prescribers Annual Conference – NMP – Care, Innovation & Quality. As always this will b...

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Managing medicines for adults receiving social care in the community	NG67	March 2017	March 2017
Patient Group Directions	MPG2	August 2013	March 2017
Multimorbidity and polypharmacy	KTT18	January 2017	January 2017
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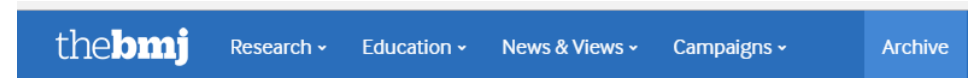


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NIHR Signal Flushing your nose with salt water may be moderately useful for symptoms of sinusitis
Published on 18 October 2016

Nasal irrigation seems moderately effective for symptoms of sinusitis. People using nasal irrigation showed greater improvement in their sinus-related quality of life compared to people who didn't use irrigation. They were also less likely to use over-the-counter medicines, and to have spent fewer days unwell with symptoms by six months.

Steam inhalation, meanwhile, seems to have minimal effect on quality of life compared with no inhalation. Neither treatment caused side effects or affected the rate of respiratory infections.

Sinusitis is common and can be difficult to treat, having considerable impact on daily life. Inhaling steam is a simple popular therapy, but past evidence has suggested that it's not very effective. Previous studies have shown that nasal irrigation is effective, but these were small, hospital-based studies. This UK-based trial treated over 600 people in general practice. However, the trial did not directly compare nasal irrigation with steam inhalation. As such it is not possible to say with complete certainty that one is better than the other.

Expert commentary
Chronic sinus symptoms are a common presentation in general practice and often result in recurrent antibiotics, prolonged corticosteroid use or ENT referral. This study sought to compare nasal irrigation and steam inhalation with placebo and in combination as conservative, free interventions. Results were gained through patient reported outcome measures at three and six months from baseline. The study was sufficiently powered. Nasal irrigation was found to be statistically significant, albeit with less effect than previously suggested. Steam inhalation was not found to be helpful. While not ground breaking this should empower GPs to provide accurate advice on self-management of long term sinus

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NIHR Signal New drugs for deep vein thrombosis may offer a safe alternative to warfarin
Published on 20 October 2015

This Cochrane systematic review found that two new types of drugs taken by mouth for deep vein thrombosis were as effective as standard treatment, which most commonly involves treatment by injection followed by warfarin tablets for at least three months. The new drugs have the advantage that they do not require monitoring or dose changes and were associated with a lower risk of bleeding.

This high quality review was based on evidence from 11 good quality trials and can be considered reliable. This review did not look at overall cost or cost-effectiveness. NICE has conducted some assessments of individual drugs and is conducting further assessments. Each assessment has a costing tool or statement that can be used by clinicians and commissioners weighing up the benefits and costs of potential changes to current treatment pathways (see Bibliography below for links).

Expert commentary
The management of patients with suspected deep venous thrombosis has proved challenging for NHS resources because of the limitations of existing drugs. The treatment pathway typically involves a difficult mixture of primary and secondary care consultations whereby patients receive injections for a few days whilst warfarin is titrated to target based on frequent blood tests. This is a hassle for patients and healthcare professionals, and the complexity of the process means that plenty of things can go wrong. There is now strong evidence from a Cochrane systematic review that newer, more convenient oral anticoagulants are safe and effective in management of patients with deep venous thrombosis. The big question now is

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NIHR Signal Existing drugs for rheumatoid arthritis may also improve associated fatigue
Published on 23 August 2016

Biological treatments for moderate to severe rheumatoid arthritis appear to reduce fatigue as well as other symptoms. Although existing studies looking at effectiveness have focused on symptoms such as pain, their combined results suggest this additional benefit.

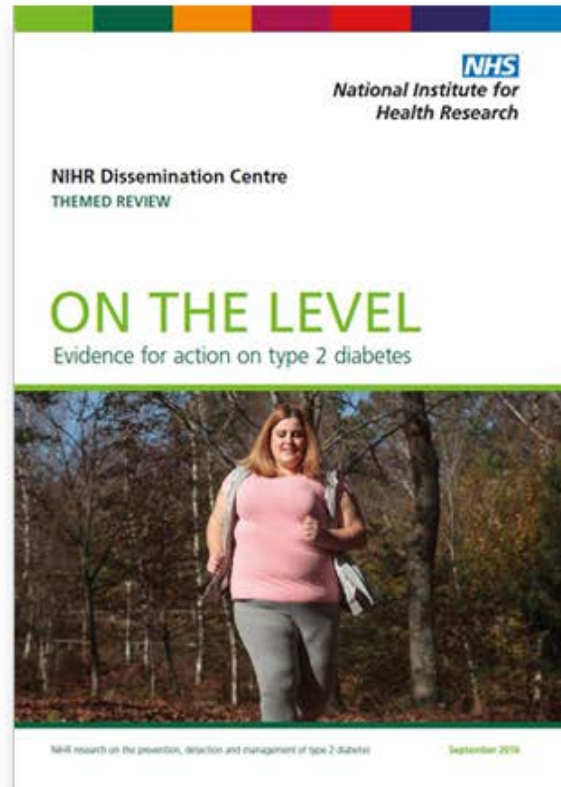
Biological treatments work by reducing the joint inflammation and destruction associated with the condition, but to date it has been uncertain if this could affect fatigue.

Fatigue was not a main outcome in any of the included studies in this Cochrane review. The way it was measured and reported varied between studies, making it harder to compare findings.

Overall, these drugs seem to give a small to moderate reduction in fatigue, which may be an important consideration for patients and prescribers.

Expert commentary
When most people think about arthritis, they think about pain. But rheumatoid arthritis can also cause severe exhaustion, compared by some with the condition to having bad flu, every single day. The impact of fatigue on wellbeing, ability to participate in everyday life or go to work is huge and people with arthritis consider it as important a symptom as pain. We don't routinely measure fatigue in clinical practice, though, or allow it to inform clinical decisions. If biologic drugs can have such an impact, maybe it's time we did?

Dr Benjamin Ellis, Consultant Rheumatologist, Charing Cross Hospital; Senior Clinical Policy Advisor, Arthritis



ON THE LEVEL

This themed review brings together NIHR research on each aspect of type 2 diabetes care. It features:

- 35 published studies
- 19 ongoing studies
- Questions for patients, commissioners, GPs, community nurses and others
- Patient voices

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Nursing Administration Quarterly. 40(1):76-86, January/March 2016.
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Emollients and moisturisers for eczema

Esther J van Zuuren ^{1,2}, Zbys Fedorowicz, Robin Christensen, Adriana PM Lavrijsen, Bernd WM Arends

First published: 6 February 2017

Editorial Group: Cochrane Skin Group

DOI: 10.1002/14651858.CD012119.pub2 [View/save citation](#)

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Abstract

Background

Eczema is a chronic skin disease characterised by dry skin, intense itching, inflammatory skin lesions, and has a considerable impact on quality of life. Moisturisation is an integral part of treatment, but it is unclear if moisturisers are effective.

Objectives

To assess the effects of moisturisers for eczema.

Search methods

We searched the following databases to December 2015: Cochrane Skin Specialised Register, CENTRAL, MEDLINE, Embase, LILACS, and GREAT. We searched five trials registers and checked references of included and excluded studies for further relevant trials.

Selection criteria

Randomised controlled trials in people with eczema.

Data collection and analysis

We used standard Cochrane methodological procedures.

Main results

We included 77 studies (mean duration: 6.7 weeks; 6603 participants, mean age: 18.6 years). Thirty-six studies were at high risk of bias, 34 at unclear risk, and seven at low risk. Twenty-four studies assessed our primary outcome of participant-assessed disease severity, 13 assessed satisfaction, and 41 assessed adverse events. Secondary outcomes included investigator-assessed disease severity (addressed in 65 studies), skin barrier function (29), flare prevention (16), quality of life (10), and corticosteroid use (eight). Adverse events reporting was limited (smarting, stinging, pruritus, erythema, folliculitis).

Six studies evaluated moisturiser versus no moisturiser. Participant-

Abstract

Summary of findings

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Objectives

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Results

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doi: 10.11124/jbisrir-2014-1423

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