

Comparison of lotions, creams, gels and ointments for the treatment of childhood eczema: the BEE RCT

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Oxford (Oxford, UK) on an educational grant funded by Pfizer Inc. (Pfizer Inc., New York, NY, USA), unrelated to the submitted work. J Athene Lane is a member of the NIHR Clinical Trials Unit Standing Advisory Committee (2021–present) and a clinical trials unit funded by NIHR. Stephanie MacNeill is currently a member of the NIHR HTA General Committee (August 2020–present). Matthew J Ridd is a member of NIHR In-Practice Fellowship Selection Committee (2020–present), and was previously a member of the NIHR Systematic Reviews Programme Advisory Group (2019–20) and the NIHR HTA General Committee (2016–19). Amanda Roberts was previously a member of the Pharmaceuticals Panel, and a member of the NIHR HTA General Committee (2017–21) and HTA Fast Track Committee (2010–12). Miriam Santer has received funding for other NIHR projects and is a panel member for NIHR PGfAR (2018–present). Hywel C Williams directed the NIHR HTA programme from 2015 to 2020, which funded this study. He had no role to play in the funding decision.

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Plain language summary

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Plain language summary

One in five children in the UK have eczema, a long-term, itchy, dry skin condition. It can significantly affect both the child and their family. Most children are diagnosed and looked after by their family doctor (general practitioner) and are prescribed moisturisers (also called emollients) to relieve skin dryness and other creams (topical corticosteroids) to control flare-ups. However, there are many different types of emollients and, to our knowledge, limited research to show which is better.

In the Best Emollients for Eczema clinical trial, we compared the four main types of moisturisers – lotions, creams, gels and ointments. These types vary in their consistency, from thin to thick. We recruited 550 children (most of whom were white and had moderate eczema) and randomly assigned them to use one of the four different types as their main moisturiser for 16 weeks.

We found no difference in effectiveness. Parent-reported eczema symptoms, eczema severity and quality of life were the same for all the four types of moisturisers. However, overall satisfaction was highest for lotions and gels. Ointments may need to be used less and cause less stinging.

We interviewed 44 parents and 25 children who took part. Opinions of all four types of moisturisers varied. What one family liked about a moisturiser was not necessarily the same for another and preferences were individual to each user. Sometimes there was a tension between how well a moisturiser worked (effectiveness) and how easy it was to use (acceptability). In these cases, effectiveness tended to decide whether or not parents kept using it. People found moisturisers in pumps and bottles easier to use than those in tubs. A number of participants valued the information they were given about how to use moisturisers.

Our results suggest that the type of moisturiser matters less than finding one that suits the child and family.

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This report

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