

June 26, 2019 • [Technology](#) • By [Asian Scientist Newsroom](#)

Eczema Apps Inconsistent With Clinical Guidelines

A research team in Singapore has found that information in a third of eczema apps falls short of or does not agree with international guidelines.



AsianScientist (Jun. 26, 2019) – One-third of eczema management mobile applications provide information that does not agree with international treatment and condition guidelines, according to scientists in Singapore. Their work is published in the *British Journal of Dermatology*.

Eczema, characterized by itchiness and red, inflamed skin, is the top skin condition seen at the National Skin Centre in Singapore. Half the eczema patients in Singapore have to manage the condition throughout their lives.

There is currently no cure for eczema, but maintenance treatments of daily moisturizing can keep it under control. Smartphone apps have emerged as a novel approach to support the self-management of eczema. However, the efficacy or clinical accuracy of such apps has not been examined in detail.

In the present study, researchers led by Associate Professor Josip Car at Nanyang Technological University, Singapore, have found a huge variation in the quality of eczema management apps available worldwide.

The team arrived at the conclusion after assessing 98 such apps—67 in English, 22 in Chinese and nine in Spanish. They evaluated these apps using international eczema guidelines from Singapore, the UK, the US, Argentina and China to assess eczema educational information, eczema-specific tracking functions and compliance with health information principles.

Of the apps assessed, 84 percent provided educational information, 39 percent had tracking functions and 13 percent had both functions. Among 38 apps with a tracking function, 82 percent measured specific symptoms, disease severity or current skin condition, and 89 percent helped users to record medication usage, including application of topical treatments. 34 percent of all apps recorded environmental or dietary allergens.

Of the apps providing educational information, 34 percent contained advice that was not in agreement with international guidelines. Only 15 percent of all apps provided information supported by international guidelines on pharmacological therapies. This figure was 16 percent for apps providing information on non-pharmacological therapies for eczema.

None of the included apps complied with all criteria for educational information, tracking functions or health information principles. 11 percent of the apps even failed to mention mainstay therapies such as the use of emollients and moisturizers.

“Perhaps the most useful way to address this issue would be to publish a list of recommended apps to aid clinicians in suggesting the appropriate options for eczema patients and caregivers,” said Car.