Experts urge caution on popular 'skin rash' apps

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A dermatologist examines a patient on December 4, 2008.

More than 200 mobile apps for diagnosing skin rashes and moles are now on the market, and US researchers Wednesday urged caution in relying on them over a doctor's advice.

Their names include attention-grabbers like "What's My Rash?" and "iSore."
Over half of the 229 apps studied are mainly targeted at consumers and patients, but only a few were clearly designed by medical personnel, said the study in the *Journal of the American Medical Association (JAMA)* Dermatology.

Some describe acne, rosacea, psoriasis or eczema in pictures and text. Others give recommendations on a sunscreen based on a user's skin type and the current weather conditions.

Of particular concern are those that allow the user to take a picture of a suspicious spot and scan it for an assessment of cancer risk, researchers said.

"Several smartphone applications that evaluate photographs of skin lesions and provide a malignancy risk assessment have demonstrated highly variable diagnostic accuracy," said the study.

Previous research has shown that these tests' sensitivity ranged from nearly seven to 98 percent, it noted.

One study sent pictures of malignant melanomas through an app, and found the device described 88 percent of them as "medium-risk." It wrongly advised users to simply monitor the lesions.

"The diagnostic inaccuracies of these apps may harm patients who substitute these relatively inexpensive tools for in-person medical care, by potentially delaying treatment for melanoma," said the JAMA study.

Just how popular the apps are with the public is unclear, since the number of downloads may not accurately reflect the number of people who actually use the apps regularly.

The 10 most reviewed apps were Ultraviolet-UV Index, VisualDx, SPF,
iSore, SpotMole, Pocket Derm, Skin Scan, Doctor Mole, What's My Rash? and Skin Conditions.

Researchers found that the top three had nearly 800 reviews combined, which may provide a "rough reflection of app use" though likely a "sizable underestimation," said the study.

More than half were free, and the average cost for a paid app was $2.99.

On the upside, researchers said that technology is improving, allowing for more accurate pictures that may be forwarded via smartphones to a medical professional, and offering new inroads to treating people in remote and underserved areas.

The US Food and Drug Administration announced earlier this week it would not regulate most mobile health apps, unless they serve medical purposes such as calculating radiation dosage for a cancer patient, measuring blood pressure or sending real-time electrocardiographs to a doctor.

Those who download the apps should not follow their advice over that of a doctor, said the JAMA study.

"Patients and clinicians should maintain a healthy sense of skepticism because studies regarding the safety and accuracy of such apps are limited," it said.

The study was conducted by researchers at the University of Arizona, University of Colorado, University of Washington, University of Pittsburgh, Department of Veterans Affairs Medical Center in Denver and the Colorado School of Public Health.

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