Are health apps beneficial for healthy people?

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Health apps have the potential to make a broad impact on the health of the general population, argues one expert in *The BMJ* this week. But another explains that there is not enough evidence to support such claims and suggests that health apps may even be harmful.

Widely available on smartphones, health apps aim to encourage people to adopt healthy behaviours ranging from weight loss to physical activity, and to help patients to manage conditions such as diabetes and high blood pressure.

Health apps have been around for more than 10 years and tens of thousands are available on smartphones, making them easy to access and use.

Some have been shown to improve health outcomes and have "great potential to reduce morbidity and mortality," argues Iltifat Husain, editor of iMedicalApps.com, and assistant professor of emergency medicine, Wake Forest School of Medicine, North Carolina, USA.

He notes two randomised controlled trials that have demonstrated that weight loss apps on traditional personal digital assistants increased compliance and improved weight loss when compared to traditional programmes.

While health apps are relatively new to researchers and few studies exist to demonstrate positive outcomes, doctors should not wait for scientific

studies to prove benefits because these have already been shown and many people are currently using these in large numbers, he argues.

Despite no evidence of harm, there still may be drawbacks of using health apps and research has demonstrated some conflicting results, he adds. For example, research has shown that the fitness apps "Fitbit" and "Jawbone" accurately count users' steps and physical activity, but results did not find improved outcomes or exercise rates.

Many apps have not been tested and may not be useful or effective, he notes. He explains that the US Food and Drug administration only regulates apps that turn smartphones into medical devices so industry can sell untested apps or make unvalidated health claims.

He calls on doctors to take a proactive approach and recommend apps which can help people to stay healthy.

In a second article, Des Spence, a general practitioner, argues that most health apps are "mostly harmless and likely useless", but he warns of the rise of apps used alongside wearable devices that monitor heart rate, blood pressure and so on.

These are untested and unscientific, and play on the fears of an "unhealthily health obsessed generation", he explains, adding that these can "ignite extreme anxiety" and "medical harm" through overdiagnosis of health conditions.

Medical technologies are already overused for magnetic resonance imaging and blood tests, for example, and "we should be sceptical of more medical technology," he cautions.

The series of articles includes a personal commentary by a healthy user of a health apps. Sylvia Warman, an office based worker in London,

describes her daily experience of using the fitness app "FitBit One", a pedometer that measures the number of steps taken and monitors sleep patterns.

Warman writes that she finds the app easier to use than traditional pedometers, and can see averages, make comparisons, and measure calories burnt. As a result, she has become more active on a day-to-day basis.

She also documents her sleeping patterns, and explains that the app links to others to compare walking routes, and record food and alcohol intake. Consequently, Warman abstained from alcohol use for six weeks as an experiment and found that this helped her to sleep better. She has also improved her diet.

More information: Head to head: Can healthy people benefit from health apps? www.bmj.com/cgi/doi/10.1136/bmj.h1887
Commentary: How I use health apps, www.bmj.com/cgi/doi/10.1136/bmj.h11986

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