Do Instant Blood Pressure Apps Work?

According to an article published in JAMA Internal Medicine, a blood pressure smartphone app delivered inaccurate results in a small study. The findings suggest that more than three quarters of people who use these apps and who have hypertensive BP levels may be getting false reassurance that their blood pressure is under control.

The app - Instant Blood Pressure (IBP) estimates the individual's blood pressure by placing the edge of the smartphone on the left side of the chest and the right index finger over the smartphone's camera. The app was introduced in June 2014 and was removed in July 2015. During this time, it was on the top 50 best-selling iPhone apps for 156 days. Nearly 950 copies were sold for $4.99 each on each of these days.

See Also: SPRINT Study: Lowering Blood Pressure Lowers CVD Events

During this study, Timothy B. Plante, MD, of the Johns Hopkins University School of Medicine, Baltimore, and coauthors looked at the accuracy and precision of IBP. The researchers used the app and followed a standard protocol when using automated sphygmomanometers for standard BP measurement. 85 participants were included in the study - more than half of which had self-reported hypertension. 91 percent of the study participants were on antihypertensive medications. The findings show that the IBP app underestimated higher blood pressure and overestimated lower blood pressure.

“Our study has both clinical and public health relevance. While IBP recently became unavailable for unclear reasons, it is installed on a vast number of iPhones; furthermore, several ‘me-too’ apps are still available. Hence, we remain concerned that individuals may use these apps to assess their BP and titrate therapy. From a public health perspective, our study supports partnership of app developers, distributors and regulatory bodies to set and follow standards for safe, validated mHealth [mobile health] technologies,” the research letter concludes.

Source: JAMA Internal Medicine

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