

# Smartphone Applications Providing Information about Stroke: Are We Missing Stroke Risk Computation Preventive Applications?

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Dear Sir:

Zhang et al. reviewed iPhone and Android applications using search terms "stroke prevention".<sup>1</sup> We agree with their impression that mobile phone applications can serve as readily accessible source of healthcare information for general public.

In our study, Apple iTunes and Android Google Play Store were searched for stroke-related applications using terms "stroke, brain attack, intracranial hemorrhage, subarachnoid hemorrhage, and cerebral infarction".<sup>2</sup> Each application was analyzed and classified on the basis of cost, target audience, type of information, validity, involvement of health-care agencies and usefulness based on audience reviews and ratings. The applications were analyzed for general information about the disease process; recent research and advances; tools and scoring systems among others. Even though we didn't classify the tools individually (AF-stroke, ABC of stroke etc.), they were clubbed together in a common group. Depending upon the information and target audience, we further classified these tools as being useful to health-care professionals or general population.

Mobile applications or tools for 5-year and 10-year projected risk of stroke appear to be a practical approach towards increasing stroke risk factor awareness and primary/secondary stroke prevention. Although it is based on the assumption that all individuals utilizing this application are completely aware and educated about their medical conditions and understand the intricacies of the same. The scoring systems without proper education or assistance of health care providers may lead to inaccurate es-

timation of stroke risk, subsequently leading to unsolicited anxiety on the part of individuals if inaccurate higher score is obtained or continued inattention to risk factor prevention if lower score is derived. We agree with Zhang et al. that estimation of dynamic risk factors using cell phone will prove to be extremely valuable in the future, once the prognostic values of these factors have been clearly validated.

## References

1. Zhang M, Ho RC. Smartphone Applications providing information about Stroke: Are we missing Stroke Risk computation preventive applications? *J Stroke*.
2. Dubey D, Amritphale A, Sawhney A, Amritphale N, Dubey P, Pandey A. Smart phone applications as a source of information on stroke. *J Stroke*. 2014;16(2):86-90.

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