LETTER TO EDITOR

Medical diagnostic self-examination application: Applied medical informatics technology for supporting primary self-care

Sir,

With the advanced computational technology, several new medical tools are developed based on the new technologies and those tools are proved to be useful. Several new medical diagnostic computer applications (Apps) are developed and publicly available. This kind of App is a solution to decrease the workload of medical personnel. People can have self-diagnoses using medical diagnostic Apps. The good example of downloadable medical diagnostic Apps for self-examination is the ocular diagnostic test. The App for measurement of visual acuity allows people to self-examine for visual sight. Detection of myopia is possible within few minutes. This can decrease the unnecessary workload at a medical center. The self-examination for visual acuity using Apps is proven acceptable and sometimes more accurate than standard technique.[1] Another interesting diagnostic App is the App for self-monitoring of heart rate and blood pressure. Mazoteras Pardo *et al*. found that App was valid without problem of measurement error[2]. For performing self-administered questionnaire test for diagnosis of eating disorder[3] and for assessment for stroke risk,[4] Apps are also possible. Those Apps can help early detect the medical problem. The results from using the medical diagnostic Apps can be saved and used for further consultation to the physician. The quality control of the validity and reliability of those online Apps is necessary. It is necessary to update knowledge on those newly available medical diagnostic Apps.

Conflicts of interest
There are no conflicts of interest.

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REFERENCES

1. Pathipati AS, Wood EH, Lam CK, Sáles CS, Moshfeghi DM. Visual acuity measured with a smartphone app is more accurate than snellen testing by emergency department providers. Graefes Arch Clin Exp Ophthalmol 2016;254:1175-80.
2. Mazoteras Pardo V, Losa Iglesias ME, López Chicharro J, Becerro de Bengoa Vallejo R. The qardioArm app in the assessment of blood pressure and heart rate: Reliability and validity study. JMIR Mhealth Uhealth 2017;5:e198.
3. Tregarthen JP, Lock J, Darcy AM. Development of a smartphone application for eating disorder self-monitoring. Int J Eat Disord 2015;48:972-82.
4. Baldereschi M, Di Carlo A, Piccardi B, Inzitari D. The Italian stroke-app: ICTUS3R. Neurol Sci 2016;37:991-4.

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