Designing Usable Clinical Decision Support System for Cardiovascular Detection Risk Using Participatory Design Method: An Indonesia Study

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Abstract

This paper focuses on approach to design a usable Clinical Decision Support System (CDSS), specifically targeted to detect cardiovascular risk. Optimizing the usability of CDSS may enhance the usage of CDSS. CDSS has potency to reduce cardiovascular prevalence and thereafter can decrease the mortality caused by cardiovascular disease. In Indonesia, cardiovascular disease is identified as number one cause of death. Two CDSS applications were designed and tested in test scenarios involving general practitioner (GP) and public (non-GP). The testing led to clearer and better requirement specification than before. We believe that using scenario-based usability testing method is improving the usability of CDSS by providing user's experiences and values. A usable CDSS contributes to success or failure in real clinical system implementations.

Keywords: Clinical Decision Support System