

ABSTRAK

Latar belakang. Manajemen diri merupakan kunci dalam pengendalian tekanan darah, namun tidak mudah untuk diterapkan. *mHealth* menjadi pelengkap untuk mendukung manajemen diri pasien hipertensi, Tujuan penelitian ini mengembangkan aplikasi manajemen diri pasien hipertensi berbasis *mHealth* “MaRiTensi” dan menguji keefektifannya dalam meningkatkan pengetahuan, motivasi, efikasi diri, perawatan diri dan pengendalian tekanan darah pasien hipertensi.

Metode. Desain penelitian ini adalah *exploratory sequential mixed methods* menggunakan pendekatan *design thinking*. Tahap pertama *user needs assessment* (kualitatif). Tahap kedua mengembangkan “MaRiTensi” sampai *usability test*. Tahap ketiga uji keefektifan “MaRiTensi dengan metode *Randomized Controlled Trial* (kuantitatif).

Hasil. MaRiTensi dikembangkan berdasarkan 4 tema, 15 kategori dan 58 kode sesuai hasil *user needs assessment*, memfasilitasi delapan menu komprehensif. Hasil skor SUS “MaRiTensi” 74,44, berada pada grade scale B, *good* dan *acceptable*. Hasil uji keefektifan, tidak ada perbedaan data dasar antara kedua kelompok $p\text{-value} > .05$. Terdapat perbedaan persentase selisih evaluasi 1 dengan *pretest* pada variabel perawatan diri ($p\text{-value} .008$, $d: 0.58$), efikasi diri ($p\text{-value} .014$, $d: 0.52$), motivasi ($p\text{-value} .027$, $d: 0.44$), tekanan sistolik ($p\text{-value} .024$, $d: 0.42$) dan tekanan diastolik ($p\text{-value} .006$, $d: 0.54$) dan selisih pada evaluasi 2 dengan *pretest* pada variabel perawatan diri ($p\text{-value} .024$; $d: 0.46$).

Kesimpulan. *Design thinking* dapat diterapkan untuk mengembangkan MaRiTensi secara komprehensif sesuai kebutuhan pasien hipertensi dengan hasil skor SUS 74,44. MaRiTensi berpotensi efektif meningkatkan perawatan diri, efikasi diri, motivasi, menurunkan tekanan darah sistolik, dan diastolik, namun tidak berpengaruh terhadap peningkatan pengetahuan dan pengendalian tekanan darah dibandingkan dengan kelompok kontrol. Diperlukan analisis lebih dalam terkait pemanfaatan MaRiTensi untuk menjamin perbaikan dan keberlanjutan pemanfaatan aplikasi.

Kata kunci: *mHealth*, manajemen diri, hipertensi, RCT, *design thinking*

ABSTRACT

Background. Self-management is the key to controlling blood pressure, but it is not easy to implement. mHealth is a complement to supporting the self-management of hypertensive patients. This research aims to develop the mHealth-based self-management application for hypertensive patients "MaRiTensi" and test its effectiveness in increasing knowledge, motivation, self-efficacy, self-care and controlling blood pressure in hypertensive patients.

Methods. This research design is exploratory sequential mixed methods using a design thinking approach. The first stage is user needs assessment (qualitative). The second stage is developing "MaRiTensi" to usability tests. The third stage tested the effectiveness of "MaRiTensi" using the Randomized Controlled Trial method.

Results. MaRiTensi was developed based on 4 themes, 15 categories and 58 codes according to the results of the user needs assessment, facilitating eight comprehensive menus. The SUS "MaRiTensi" score was 74.44, on the grade scale B, good and acceptable. Results of the effectiveness test, there was no difference in basic data between the two groups, $p\text{-value} > .05$. There is a difference in the value of the difference between evaluation 1 and the pretest on the variables of self-care ($p\text{-value} .008$, $d:0.58$), self-efficacy ($p\text{-value} .014$, $d:0.52$), motivation ($p\text{-value} .027$, $d:0.44$), systolic pressure ($p\text{-value} .024$, $d:0.42$), and diastolic pressure ($p\text{-value} .006$, $d:0.54$) and the difference in evaluation 2 with pretest on the self-care variable ($p\text{-value} .024$; $d:0.46$).

Conclusion. Design thinking can develop MaRiTensi comprehensively according to the needs of hypertensive patients with an SUS score of 74.44. MaRiTensi is effective in increasing self-care, self-efficacy, and motivation and reducing systolic and diastolic blood pressure, but it does not affect increasing knowledge and controlling blood pressure compared to the control group. A deeper analysis is needed regarding using MaRiTensi to ensure improvement and sustainability of the application.

Keywords: *m-Health*, self-management, Hypertension, RCT, *mixed-methods*