

Abstrak

PENGEMBANGAN APLIKASI DIAMOND KEDUNGREJA SEBAGAI MEDIA PENDUKUNG MANAJEMEN TERAPI DIABETES MELLITUS PADA LANSIA DI WILAYAH KERJA PUSKESMAS KEDUNGREJA KABUPATEN CILACAP

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Latar Belakang: Diabetes Mellitus merupakan penyakit kronis yang memerlukan manajemen terapi jangka panjang secara mandiri dan berkelanjutan. Permasalahan pada pasien lansia meliputi rendahnya kepatuhan minum obat, kurangnya pemantauan glukosa darah, kesulitan pengaturan nutrisi dan aktivitas fisik, serta belum tersedianya sistem pengingat dan dokumentasi terapi yang terstruktur. Penelitian ini bertujuan mengembangkan dan mengevaluasi aplikasi Diamond Kedungreja sebagai media pendukung manajemen terapi Diabetes Mellitus.

Metode: Penelitian ini menggunakan metode Research and Development (R&D) dengan model ADDIE. Populasi penelitian ini adalah pakar IT, Ahli Kesehatan, tim Prolanis. Pengambilan sampel dilakukan secara purposive sampling yaitu 2 IT, 2 dokter ahli penyakit, 6 orang karyawan, serta 20 lansia. Aplikasi dikembangkan dengan fitur profil pasien, reminder, monitoring glukosa darah, manajemen nutrisi, aktivitas fisik, edukasi diabetes, dan asesmen manajemen terapi. Validasi dilakukan menggunakan *Content Validity Ratio* (CVR) dan *Content Validity Index* (CVI). Evaluasi penerimaan pengguna menggunakan *Technology Acceptance Model* (TAM), dan efektivitas aplikasi diukur melalui asesmen manajemen terapi.

Hasil: Hasil validasi menunjukkan nilai CVR dan CVI sebesar 1,0 yang menandakan aplikasi sangat valid dan layak digunakan. Evaluasi TAM menunjukkan tingkat penerimaan pengguna yang tinggi dengan nilai rata-rata seluruh konstruk di atas 3,5, khususnya pada aspek kemanfaatan dan kemudahan penggunaan.

Kesimpulan: Aplikasi Diamond Kedungreja terbukti valid, mudah digunakan, dan berpotensi meningkatkan manajemen terapi Diabetes Mellitus pada lansia serta mendukung efektivitas pelayanan kesehatan di fasilitas kesehatan tingkat pertama.

Kata kunci: Diabetes Mellitus, Lansia, Aplikasi Mobile Health, Manajemen Terapi, ADDIE

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Abstract

DEVELOPMENT OF DIAMOND KEDUNGREJA APPLICATION AS A SUPPORTING MEDIUM FOR DIABETES MELLITUS THERAPY MANAGEMENT IN ELDERLY PATIENTS AT KEDUNGREJA PUBLIC HEALTH CENTER, CILACAP REGENCY

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Background: Diabetes Mellitus is a chronic disease that requires long-term, independent, and continuous therapy management. Problems in elderly patients include low medication adherence, lack of blood glucose monitoring, difficulties in nutritional regulation and physical activity, and the unavailability of structured reminder and therapy documentation systems. This study aims to develop and evaluate the Diamond Kedungreja application as a supporting medium for Diabetes Mellitus therapy management.

Methods: This study used the Research and Development (R&D) method with the ADDIE model. The research population consisted of IT experts, health experts, and the Prolanis team. Sampling was conducted using purposive sampling, namely 2 IT experts, 2 specialist physicians, 6 employees, and 20 elderly individuals. The application was developed with features including patient profiles, reminders, blood glucose monitoring, nutrition management, physical activity, diabetes education, and therapy management assessment. Validation was performed using Content Validity Ratio (CVR) and Content Validity Index (CVI). User acceptance evaluation used the Technology Acceptance Model (TAM), and the application's effectiveness was measured through therapy management assessment.

Results: Validation results showed CVR and CVI values of 1.0, indicating that the application is highly valid and suitable for use. TAM evaluation showed a high level of user acceptance with average values for all constructs above 3.5, particularly in the aspects of usefulness and ease of use. Therapy management assessment results showed improvements in several aspects after application use, especially in pharmacological adherence, blood glucose monitoring, and diabetes knowledge.

Conclusion: The Diamond Kedungreja application is proven to be valid, easy to use, and has the potential to improve Diabetes Mellitus therapy management in elderly patients and support the effectiveness of health services at primary health care facilities.

Keywords: Diabetes Mellitus, Elderly, Mobile Health Application, Therapy Management, ADDIE,

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