RATNO AJI WINOTO, 18.240.0100

APLIKASI *MOBILE SMART* POSBINDU PTM (PENYAKIT TIDAK MENULAR) BERBASIS *ANDROID* UNTUK DETEKSI DINI DAN *MONITORING* KESEHATAN MASYARAKAT DI DESA MOJO, di bawah bimbingan:

1. Much. Rifqi Maulana, S.Kom., M.Kom
2. Nur Ika Royanti, S.Kom., M.Kom

405 + xxv halaman / 311 Gambar / 73 Tabel / 3 Lampiran / 18 Pustaka

ABSTRAK

Peningkatan pesat penggunaan internet (62%) dan kepemilikan telepon seluler (90%) di Indonesia menunjukkan potensi teknologi digital untuk layanan kesehatan. Posbindu Penyakit Tidak Menular (PTM) di Desa Mojo berperan penting dalam deteksi dini dan monitoring kesehatan masyarakat. Namun, pelaksanaannya terkendala pengumuman jadwal manual, pencatatan data rentan kesalahan/hilang, data hasil pemeriksaan tidak langsung tersedia, serta keterbatasan penyebaran informasi dan edukasi kesehatan. Penelitian ini bertujuan merancang dan membangun aplikasi mobile Smart Posbindu PTM berbasis Android. Aplikasi ini dikembangkan dengan bahasa pemrograman Dart, framework Flutter, dan Supabase sebagai basis data. Fiturnya mencakup notifikasi jadwal, digitalisasi pencatatan data, penyajian laporan cepat dan akurat, pemantauan riwayat kesehatan, dan informasi edukasi mengenai PTM. Metode pengembangan sistem menggunakan Waterfall yang terstruktur dan bertahap. Pengumpulan data dilakukan melalui wawancara bidan dan kader, observasi langsung Posbindu PTM, serta kuesioner kepada peserta/pasien. Pengujian aplikasi meliputi White Box, Black Box, dan User Acceptance Test. Hasil penelitian menunjukkan aplikasi berhasil dikembangkan, berfungsi baik, dan diterima pengguna. Aplikasi ini memberikan manfaat dalam pengelolaan dan pelaporan data, kemudahan akses informasi, serta dukungan edukasi dan pemantauan kesehatan masyarakat.

Kata Kunci: **Aplikasi Mobile, Posbindu PTM, Deteksi Dini, Monitoring Kesehatan, Android.**

RATNO AJI WINOTO, 18.240.0100

SMART POSBINDU NCD (NON-COMMUNICABLE DISEASE) MOBILE APPLICATION BASED ON ANDROID FOR EARLY DETECTION AND COMMUNITY HEALTH MONITORING IN MOJO VILLAGE, Supervised by:

1. Much. Rifqi Maulana, S.Kom., M.Kom
2. Nur Ika Royanti, S.Kom., M.Kom

405 + xxv pages / 311 Figures / 73 Tables / 3 Appendices / 18 References

ABSTRACT

The rapid increase in internet usage (62%) and mobile phone ownership (90%) in Indonesia highlights digital technology's potential for healthcare. In Mojo Village, Non-Communicable Disease (NCD) Posbindu plays a crucial role in early detection and community health monitoring. However, its implementation is hampered by manual schedule announcements, data recording prone to errors/loss, unavailable immediate examination results, and limited dissemination of health information and education. This research aims to design and build an Android-based Smart NCD Posbindu mobile application. The application is developed with Dart programming language, the Flutter framework, and Supabase as its database. Its features include schedule notifications, digital data recording, quick and accurate report generation, health history monitoring, and health education information regarding NCDs. The system development method used is Waterfall, applied in a structured and phased manner. Data collection was performed through interviews with midwives and cadres, direct observation of NCD Posbindu, and questionnaires to participants/patients. Application testing involved White Box, Black Box, and User Acceptance Test. Research results show the application was successfully developed, functions well, and is accepted by users. This application provides benefits in data management and reporting, easy access to health information, and support for community health education and monitoring.

Keywords: **Mobile Application, NCD Posbindu, Early Detection, Health Monitoring, Android.**