

INTISARI

Stunting merupakan salah satu permasalahan gizi utama pada balita yang memerlukan pendataan akurat dan penanganan terintegrasi. Di Posyandu Desa Bentak, pencatatan tumbuh kembang anak serta penentuan prioritas intervensi gizi masih menghadapi kendala efisiensi akibat proses pencatatan dan kalkulasi yang belum terdigitalisasi secara optimal. Penelitian ini bertujuan untuk merancang dan membangun Sistem Monitoring Pertumbuhan Anak dan Pendukung Keputusan Risiko *Stunting* berbasis web untuk membantu operasional pendataan dan pengambilan keputusan medis di lapangan. Pengembangan sistem menerapkan metodologi *Agile Scrum* berbasis *framework Laravel* dengan pembatasan hak akses (*Role-Based Access Control*) untuk Bidan Desa, Kader Posyandu, dan Orang Tua Balita. Sistem mengintegrasikan metode kalkulasi *Z-Score* WHO untuk status gizi antropometri (usia, berat badan, tinggi badan) dan *Simple Additive Weighting* (SAW) untuk pemeringkatan prioritas anak. Hasil penelitian menunjukkan bahwa sistem berhasil menyediakan portal publik menggunakan kode unik bagi Orang Tua Balita untuk memantau riwayat dan grafik perkembangan anak secara interaktif. Pengujian fungsionalitas menggunakan *Blackbox Testing* menunjukkan seluruh fungsi berjalan secara valid (100% *Pass*), sedangkan pengujian *System Usability Scale* (SUS) menghasilkan skor 80,22 dengan kategori *Adjective Rating Good*.

Kata kunci: *Stunting*, *Z-Score* WHO, *Simple Additive Weighting* (SAW), *Agile Scrum*, *System Usability Scale* (SUS)

ABSTRACT

Stunting is a major nutritional issue among children under five that requires accurate data collection and integrated management. At the Bentak Village Posyandu (Integrated Health Post), the recording of child growth and development, as well as the prioritization of nutritional interventions, faces efficiency challenges due to recording and calculation processes that have not been optimally digitized. This study aims to design and develop a web-based Child Growth Monitoring and Stunting Risk Decision Support System to assist with data collection operations and medical decision-making in the field. System development utilized the Agile Scrum methodology based on the Laravel framework, incorporating Role-Based Access Control (RBAC) for village midwives, Posyandu volunteers, and parents of children under five. The system integrates the WHO Z-Score calculation method for anthropometric nutritional status (age, weight, height) and the Simple Additive Weighting (SAW) method for ranking children based on intervention priority. The results demonstrate that the system successfully provides a public portal accessible via unique codes—allowing parents to interactively monitor their child's growth history and charts. Functionality testing using Black-Box Testing confirmed that all functions operated correctly (100% pass rate), while System Usability Scale (SUS) testing yielded a score of 80.22, falling into the "Good" adjective rating category.

Keywords: Stunting, WHO Z-Score, Simple Additive Weighting (SAW), Agile Scrum, System Usability Scale (SUS)