

DISERTASI

PENGEMBANGAN MODEL AFRINA (*ANEMIA FREE INTEGRATED NETWORK APPROACH*) DALAM PENCEGAHAN ANEMIA CALON PENGANTIN DI KOTA BENGKULU



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PENGEMBANGAN MODEL AFRINA (*ANEMIA FREE INTEGRATED NETWORK APPROACH*) DALAM PENCEGAHAN ANEMIA CALON PENGANTIN DI KOTA BENGKULU

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ABSTRAK

Anemia pada calon pengantin perempuan masih menjadi masalah kesehatan masyarakat dengan prevalensi tinggi di Indonesia, termasuk Kota Bengkulu. Kondisi ini berdampak serius terhadap kehamilan, risiko stunting, serta kualitas generasi mendatang. Upaya pencegahan yang sudah ada masih bersifat parsial dan kurang terintegrasi lintas sektor, sehingga efektivitasnya belum optimal. Oleh karena itu, diperlukan model integrasi yang mampu menyatukan peran Kementerian Kesehatan, Kementerian Agama, dan Dinas Pemberdayaan Perempuan dalam pencegahan anemia pranikah.

Penelitian menggunakan pendekatan *research and development* berbasis model ADDIE (*analysis, design, development, implementation, evaluation*) dengan *mixed methods*. Tahap kualitatif dilakukan melalui wawancara mendalam dan FGD dengan calon pengantin dan pemangku kepentingan untuk mengidentifikasi determinan pencegahan anemia. Tahap kuantitatif melibatkan 148 responden calon pengantin dengan 15 variabel yang dianalisis menggunakan regresi logistik multivariat. Tahap implementasi menggunakan desain *quasi experiment pretest posttest control group design* pada 74 calon pengantin (37 intervensi, 37 kontrol). Aplikasi dan modul AFRINA divalidasi oleh pakar sebelum uji coba lapangan.

Analisis kualitatif menghasilkan lima tema utama: keterpaparan informasi, pengetahuan, skrining anemia, ketidakpatuhan konsumsi suplementasi zat besi dan kurangnya koordinasi antar lembaga. Analisis kuantitatif menunjukkan tiga faktor signifikan yang berhubungan dengan pencegahan anemia yaitu motivasi, keterpaparan informasi, dan dukungan keluarga. Aplikasi dan modul AFRINA dinilai sangat layak (skor validasi 90%). Implementasi menunjukkan adanya peningkatan signifikan pada kelompok intervensi dibanding kontrol, baik pada motivasi (mean 9.38 vs 1.97; $p=0.000$), dukungan keluarga (mean 8.57 vs 3.84; $p=0.000$), maupun perilaku pencegahan anemia (mean 9.81 vs 2.51; $p=0.000$).

Model AFRINA (*Anemia Free Integrated Network Approach*) terbukti valid, efektif, dan layak diimplementasikan sebagai strategi integratif lintas sektor dalam pencegahan anemia calon pengantin. Model ini menggabungkan edukasi digital, skrining hemoglobin, pemantauan konsumsi tablet tambah darah, serta dukungan keluarga dengan dukungan lintas lembaga. AFRINA berpotensi diadopsi dalam kebijakan daerah untuk mempercepat penurunan anemia dan stunting di Indonesia.

Kata kunci: anemia, calon pengantin, integrasi lintas sektor, AFRINA, motivasi, dukungan keluarga

DEVELOPMENT OF THE AFRINA MODEL (ANEMIA-FREE INTEGRATED NETWORK APPROACH) IN ANEMIA PREVENTION FOR PROSPECTIVE BRIDES IN BENGKULU CITY

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ABSTRACT

Anemia among brides-to-be remains a public health problem with a high prevalence in Indonesia, including Bengkulu City. This condition seriously impacts pregnancy, the risk of stunting, and the quality of future generations. Existing prevention efforts are still partial and lack integration across sectors, resulting in less than optimal effectiveness. Therefore, an integrated model is needed that can unite the roles of the Ministry of Health, the Ministry of Religious Affairs, and the Women's Empowerment Office in preventing premarital anemia.

The study used a research and development approach based on the ADDIE (analysis, design, development, implementation, evaluation) model with mixed methods. The qualitative phase was conducted through in-depth interviews and focus group discussions (FGDs) with brides-to-be and stakeholders to identify determinants of anemia prevention. The quantitative phase involved 148 brides-to-be respondents, with 15 variables analyzed using multivariate logistic regression. The implementation phase used a quasi-experimental pretest-posttest control group design with 74 brides-to-be (37 intervention, 37 control). The AFRINA application and modules were validated by experts prior to field trials.

Qualitative analysis yielded five main themes: information exposure, knowledge, anemia screening, non-compliance with iron supplementation, and lack of coordination between agencies. Quantitative analysis revealed three significant factors associated with anemia prevention: motivation, information exposure, and family support. The AFRINA application and module were deemed highly feasible (validation score 90%). Implementation demonstrated significant improvements in the intervention group compared to the control group, both in motivation (mean 9.38 vs. 1.97; $p=0.000$), family support (mean 8.57 vs. 3.84; $p=0.000$), and anemia prevention behavior (mean 9.81 vs. 2.51; $p=0.000$).

The AFRINA (Anemia Free Integrated Network Approach) model has been proven valid, effective, and feasible to implement as an integrative cross-sectoral strategy for preventing anemia in prospective brides and grooms. This model combines digital education, hemoglobin screening, monitoring iron supplement consumption, and family support with cross-agency support. AFRINA has the potential to be adopted in regional policies to accelerate the reduction of anemia and stunting in Indonesia.

Keywords: anemia, prospective brides, cross-sector integration, AFRINA, motivation, family support