

MODEL INTERVENSI BEHAVIOR DIGITAL SISTEM TERINTEGRASI INFORMASI DAN KOMUNIKASI KESEHATAN IBU HAMIL (SITIKOM) DALAM PENGENDALIAN RESIKO GESTASIONAL DIABETES MILETUS DI KEDIRI

Siti Komariyah^{1*}, Ratna Wardani² Joko Prasetyo

^{1,2,3} Universitas Strada Indonesia

Article Info	ABSTRAK
Article History: Received 21/08/2026 Revised - Accepted 02/09/2026 Keywords: <i>Diabetes Melitus Gestasional</i> <i>SITIKOM</i> <i>Social Cognitive Theory</i> <i>Information Motivation</i> <i>Behavioral Skills</i> <i>Digital Intervention</i>	Diabetes melitus gestasional (DMG) merupakan komplikasi kehamilan dengan prevalensi yang terus meningkat dan berdampak pada kesehatan ibu dan janin. Pencegahan DMG memerlukan perubahan perilaku yang dipengaruhi oleh faktor psikososial dan keterampilan perilaku. Namun, intervensi digital yang mengintegrasikan teori perubahan perilaku untuk pencegahan DMG masih terbatas. Penelitian ini bertujuan untuk mengembangkan dan mengevaluasi model intervensi digital SITIKOM berbasis integrasi Social Cognitive Theory (SCT) dan Information-Motivation-Behavioral Skills (IMB) untuk pengendalian risiko DMG. Penelitian terdiri atas tiga tahap. Tahap I menggunakan desain cross-sectional pada 400 ibu hamil trimester II di Kota dan Kabupaten Kediri. Tahap II merupakan pengembangan aplikasi SITIKOM. Tahap III menggunakan Randomized Controlled Trial (RCT) pada 400 ibu hamil trimester III yang dibagi menjadi kelompok intervensi (n=200) dan kelompok kontrol (n=200). Pengambilan sampel menggunakan purposive sampling. Analisis data menggunakan Structural Equation Modeling (SEM), paired t-test, dan independent t-test. Self-regulation berpengaruh signifikan terhadap self-efficacy ($\beta=5,65$; $p<0,001$). Self-efficacy, social support, information, dan motivation berpengaruh signifikan terhadap behavioral skills, yang selanjutnya berpengaruh terhadap perilaku pencegahan DMG ($\beta=-1,16$; $p=0,028$). Intervensi SITIKOM secara signifikan meningkatkan social support, self-regulation, self-efficacy, information, motivation, behavioral skills, serta perilaku pencegahan DMG ($p<0,05$). SITIKOM efektif dalam memperkuat faktor psikososial dan perilaku pencegahan DMG pada ibu hamil. Integrasi SCT dan IMB dalam satu intervensi digital menjadi kebaruan penelitian dengan menghubungkan faktor psikososial, keterampilan perilaku, dan tindakan pencegahan. SITIKOM berpotensi mendukung ibu hamil dalam membangun perilaku sehat, membantu tenaga kesehatan dalam edukasi dan pemantauan, serta memperkuat program promotif-preventif Puskesmas dan Dinas Kesehatan. Pengembangan selanjutnya diarahkan pada integrasi sistem informasi kesehatan dan implementasinya secara lebih luas.
	ABSTRACT <i>Gestational diabetes mellitus (GDM) is a pregnancy complication with an increasing prevalence and significant impacts on maternal and fetal health. GDM prevention requires behavioral changes influenced by psychosocial factors and behavioral skills. However, digital interventions integrating behavioral change theories for GDM prevention remain limited. This study aimed to develop and</i>

evaluate the SITIKOM digital intervention model based on the integration of Social Cognitive Theory (SCT) and Information Motivation Behavioral Skills (IMB) to support GDM risk prevention. This study consisted of three stages. Stage I employed a cross-sectional design involving 400 second-trimester pregnant women in Kediri City and the Regency. Stage II focused on developing the SITIKOM application. Stage III involved a randomized controlled trial (RCT) with 400 third-trimester pregnant women, divided into intervention (n=200) and control (n=200) groups. Participants were selected using purposive sampling methods. Data were analyzed using Structural Equation Modeling (SEM), paired t-tests, and independent t-tests. Self-regulation significantly influenced self-efficacy ($\beta=5.65$; $p<0.001$). Self-efficacy, social support, information, and motivation significantly influenced behavioral skills, which subsequently influenced GDM preventive behaviors ($\beta=-1.16$; $p=0.028$). The SITIKOM intervention significantly improved social support, self-regulation, self-efficacy, information, motivation, behavioral skills, and GDM preventive behavior ($p<0.05$). SITIKOM effectively strengthened psychosocial factors and preventive behaviors related to GDM in pregnant women. Integrating SCT and IMB into a single digital intervention is the novelty of this study, linking psychosocial factors, behavioral skills, and preventive actions. SITIKOM has the potential to support pregnant women in adopting healthy behaviors, assist healthcare providers in education and behavioral monitoring, and strengthen promotive and preventive programs at primary health care centers and health offices. Further development should focus on integrating health information systems and broader implementation.

**Corresponding Author: sitikomariyah.dh@gmail.com*
