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## ABSTRACT

**Title of Abstract** : Digital Family Empowerment through SIMAMIK to Enhance Family Support and Maternal Happiness in Disaster-Prone Areas

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**Background** : Maternal health in disaster-prone areas is crucial and requires support. The development of digital information systems for maternal health monitoring has been extensively pursued. However, those focused on maternal companions as primary supporters have been limited, particularly in disaster-prone areas. Therefore, it is deemed urgent to develop a digital program to empower families of pregnant and postpartum women through SIMAMIK

**Objective** : This study aims to examine the influence of the SIMAMIK application by maternal companions on the family support felt by mothers, and the happiness of mothers during pregnancy and postpartum in disaster-prone areas

**Research Methods/ Implementation Methods** : The research design used was a time series study, involving a population of all companions of pregnant and postpartum mothers and their companions located within the disaster zone of Mojokerto Regency, with a total population of 16,707. The companions used could be husbands or close family members who accompany the mothers daily. A sample of 108 people was taken using a cluster random sampling system. Data on family support, and maternal well-being were collected through observation and interviews using a questionnaire. The data were then analyzed using Generalized Estimating Equations (GEE) and Generalized Linear Mixed Model (GLMM).

**Results** : The study's results showed a significant change in family support following the use of SIMAMIK ( $p$ -value = 0.001). In the status of maternal happiness, there was a significant difference ( $p$ -value = 0.003). SIMAMIK proved to be the most influential in terms of family support.

**Conclusion/Lesson Learned** : SIMAMIK is effective in increasing family attention to pregnant women, providing more regular health reports, and thus making mothers happier. Organized use of SIMAMIK should be a top priority for health facilitators to support maternal health and screen for pregnancy and postpartum complications, which can prevent maternal death

**Keyword** : disaster zone; digital application; family support; maternal; happiness