

Susiloretni. The Effectiveness of Multilevel Promotion of Exclusive Breastfeeding in Rural Java

Abstract

Breastfeeding, in contrast to exclusive breastfeeding (EBF), is a very common behavior in Java culture, as it is suitable to the religion of Islam. Although the government of Indonesia provides regulations and programs, the duration of EBF tends to decrease. Therefore, we developed a multilevel promotional study that involved all social levels that play a role in exclusive breastfeeding behaviors.

We performed a quasi-experiment of the multilevel promotion of exclusive breastfeeding (MP-EBF) in rural Java by enrolling 81 pregnant mothers in an intervention group and 82 pregnant mothers in a control group. Multilevel promotion was conducted using a comprehensive approach at the individual, family, village, and sub district levels. The program was implemented over a 3 month period, and follow-up was measured at 2, 4, and 6 months after birth. Kaplan-Meier method was used to describe trend and pattern of EBF duration. The intervention effectiveness was performed by Cox proportional-hazards model as well as exclusive breastfeeding risk factors.

The result shows that multilevel promotion was effective for improving the duration of EBF. The mothers who were involved in this program were more likely to prolong the duration of EBF than mothers in the control group (HR 2.98, 95% CI: 1.91, 4.66), with a median duration of EBF of 18 weeks vs. 1 week, respectively. The prevalence of EBF in the intervention group compared to the control group at 1 week and 2, 4, and 6 months were 75.3% vs. 28.0%, 64.2% vs. 14.6%, 50.6% vs. 8.5%, and 37.0% vs. 3.7%, respectively. Multivariate survival analyses (Cox model) indicated that maternal knowledge, received free sample milk formula, paternal attitudes, and midwives knowledge were associated with EBF cessation at 8 weeks. Moreover, maternal age, maternal knowledge and attitudes, received free sample milk formula, number of midwife's visits, paternal attitudes, and midwives attitudes, VHW's age and attitudes, Muslim scholar's knowledge and attitudes, head of village knowledge were correlated to EBF cessation at 16 weeks. Furthermore, maternal knowledge, attitudes, and practice, maternal age, paternal knowledge, grandmother's education, Muslim scholar's and head village's knowledge, age of head village were associated to EBF cessation at 24 weeks.

A comprehensive and culturally suitable multilevel promotion can lead to an improvement in the duration of EBF. This program can be applied to utilize local resources and to empower the local government and community

Keywords: effectiveness, multilevel promotion, quasi experiment, exclusive breastfeeding, cessation.