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**Community based intervention and nutritional status among children under five years of age in Dang, Nepal****Rajan Paudel**

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**Background:** Undernutrition is high prevalent in Nepal which interferes with physical and mental development among children. This study aimed to identify the effect of community-based nutritional intervention to reduce undernutrition among children under five.

**Methods:** The study design included a quasi-experimental, time series. The minimum sample size to identify the factors associated with undernutrition was 426 and to determine the effect of intervention was 75. Logistic regression was used to identify the factors of undernutrition. Repeated measures ANOVA and random-effects panel data regression was applied to evaluate the effect of the intervention and exposure time.

**Results:** This study found that female children, illiterate or non-formally educated women, mother's occupation other than housewife, food insufficiency from own land, ANC, PNC and place of delivery were significantly associated with childhood undernutrition among children. The mean Z-scores of weight for age and weight for height were increasing till the intervention ended, however height for age mean Z-score was still negative ( $<-2SD$ ). On an average, in every one month of nutritional intervention leads to an improvement in WAZ by 0.49 units (Coef. 0.49, 95% CI: 0.47-0.50), WHZ by 0.41 units (Coef. 0.41, 95% CI: 0.38-0.44) and HAZ by 0.31 units (Coef. 0.31, 95% CI: 0.29-0.33) adjusting the important socio-demographic and health related variables.

**Conclusion:** Community-based intervention utilizing local resources was found effective to reduce undernutrition among children, that is why local government should think to scale up such interventions in other areas.

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