

Impact of Health Spoken Tutorials, IIT-B on Effective Breastfeeding Practices on Prevention & Treatment of Undernutrition at 3 Months: Preliminary Findings of a Case-Control Study from Dept of Health, Govt of Banaskantha, Gujarat, India



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BACKGROUND

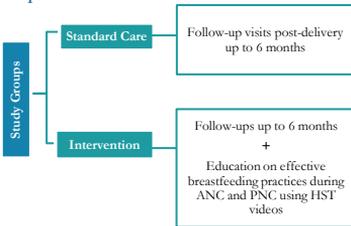
Breastfeeding is the most important source of nutrition in infants and young children, even if exclusive, can be sub-optimal if the technical skills & practices are not appropriate resulting in poor milk transfer to the baby. In this context, community based interventions that involve training mothers & caregivers on skills can be an important approach to prevent weight faltering.

OBJECTIVE

To evaluate the impact of a nutrition education intervention (counselling on effective breastfeeding practices) using Health Spoken Tutorials (HST, developed at IIT Bombay) during ANC/PNC period & systematic growth monitoring on the nutritional status of an infant at three months of age.

METHODOLOGY

- **Research Design:** Experimental (case-control)
- **Sampling:** The research was conducted within the existing public health infrastructure of Health Department of Government of Banaskantha district, Gujarat, India. 20 PHCs were selected for each study group. Both intervention PHCs and Non-intervention PHCs were from 2 different regions of Banaskantha, Gujrat, India
- **Data Collection:** Web based application (kobo)
- **Study respondents:** Pregnant women in the last trimester of pregnancy.
- **Scope of Intervention:**



RESULTS

The mean weight gain (gm/day) at 3 months was higher in the intervention group (32.2 ± 5.7) as compared to the standard care group (28.2 ± 7) and the difference was observed to be **statistically significant** ($p < 0.001$). 89.6% achieved weight gain of more than 25 gm/day in intervention group compared to 65.9% in standard care.

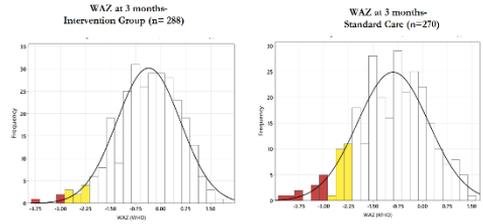


Figure: WAZ distribution at 3 months

Underweight prevalence in standard care group was **nearly 3 times** that of the intervention group at 3 months.

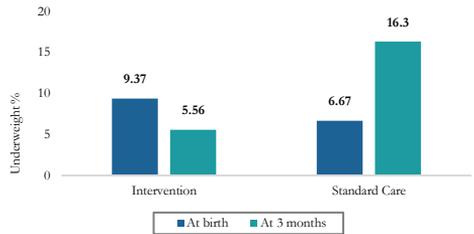


Figure: Underweight Prevalence at birth and at 3 months

CONCLUSION

Preliminary analysis of data at 3 months suggests that there was a significant impact of counselling on effective breastfeeding practices using HST during the ANC/PNC period in reducing and preventing undernutrition among babies at 3 months.

FUTURE SCOPE FOR PUBLIC HEALTH

This is likely the first experimental study that examines the impact of education on effective breastfeeding practices such as cross cradle hold on nutritional outcomes.

Paper suggest a pathway by which existing government programs can reduce undernutrition and prevent growth faltering at an early stage

In the context of Covid-19 where nutrition program delivery has become constrained, there is also a greater need for low cost community interventions that adopt dynamic counselling methodologies to carry out impactful behavior change. The Health Spoken Tutorials has potential for uptake by various countries

