

INTRODUCTION

The benefits of breastfeeding are well established. Among infants, it increases IQ scores, it reduces infections and illnesses, SIDS, asthma, atopic allergies, pediatric cancers, childhood obesity. Among mothers, breastfeeding aids in postpartum weight loss and infant-mother bonding. It reduces diabetes, metabolic and cardiovascular risk as well as risk of reproductive cancers.

Given these benefits, the World Health Organization recommends exclusive breastfeeding for the first six months. However, according to the US Department of Health and Human Services, the prevalence of exclusive breastfeeding at 6 months in the United States was only 13.3% in 2010. Breastfeeding duration and exclusivity is disproportionately low in women of low socioeconomic status patients.

OBJECTIVES

There is much interest in the effectiveness of breastfeeding promotion interventions on breastfeeding rates in early infancy. This study looks at the one hospital that started implementing “10 steps” of the Baby Friendly Hospital Initiative (BFHI) over the last 7 years and the change in breastfeeding rates as each intervention was adopted.

To aim of this investigation was to compare various interventions: Health provider education, Lactation consultant coverage, or patient access to formula and pacifiers created the most significant impact on breastfeeding rates in the Central Valley patient population.

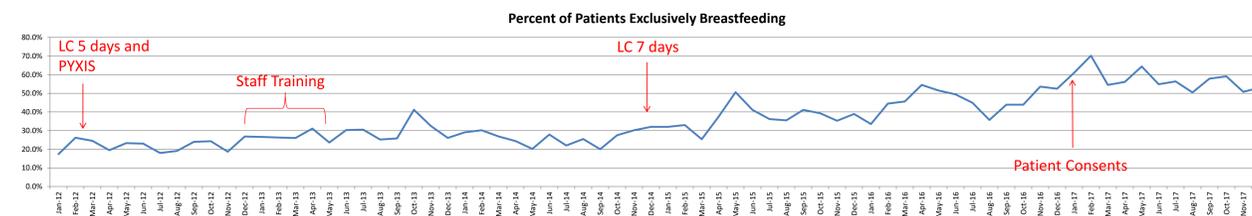
Based on 24 hour nature of patient needs, we expected that the staff wide education would result in the largest impact on patient's exclusive breastfeeding rates. In theory, it would allow for 24 hour patient motivation, education and assistance. We expected that limiting access and increasing lactation consultant coverage (still <24 hours) would show a lesser impact.

MATERIALS AND METHODS

There is much interest in the effectiveness of breastfeeding promotion interventions on breastfeeding rates in early infancy. This study looks at the one hospital that started implementing “10 steps” of the Baby Friendly Hospital Initiative (BFHI) over the last 7 years and the change in breastfeeding rates as each intervention was adopted.

To aim of this investigation was to compare various interventions: Health provider education, Lactation consultant coverage, or patient access to formula and pacifiers created the most significant impact on breastfeeding rates in the Central Valley patient population.

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RESULTS

Variable	Model Estimate	Odds Ratio	95% CI	p-value
LC 5 days and PYXIS	0.2512	1.2855	(0.9329, 1.7712)	0.1246
Staff Training	0.5920	1.8075	(1.320, 2.4676)	0.0002*
LC 7 days	1.2709	3.5640	(2.6144, 4.85840)	0.0000*
Patient Consents	1.7958	6.0241	(4.3910, 8.2647)	0.0000*

Examining the confidence interval and p-value, our results indicate that the addition of adding a lactation consultant to 5 days per week as well as by moving formula to the PYXIS, no significant change was made in exclusive breastfeeding rates. All other interventions resulted in a significant increase in breastfeeding rates.

Further looking at the Odds Ratio, for every 1.8 patients where staff received breastfeeding education that breastfeed exclusively, only 1 patient breastfeed exclusively that did not receive the benefit of these procedures. For every 3.6 patients once LC became available 7 days/week that breastfeed exclusively, only 1 patient breastfeed exclusively that did not receive the benefit of these procedures. For every 6.0241 patients that received Patient Education that breastfeed exclusively, only 1 patient breastfeed exclusively that did not receive the benefit of all new procedures implemented.

CONCLUSIONS

All interventions resulted in increased rates of exclusive breastfeeding, the data demonstrated a higher impact on percent of mothers who were able to exclusively breastfeed with increased LC availability relative to all other interventions.

Conversely, all interventions were cumulative so it is not possible to isolate one intervention from another. Thus, having received the benefit of the prior interventions could theoretically lead to higher or lower responses to subsequent interventions.

While the statistical analysis proved challenging, it might be concluded that multidisciplinary interventions provide the greatest benefit to the patient and newborn.

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