Improving Breastfeeding Initiation and Exclusivity in the Hospital Arco Iris of La Paz, Bolivia through Nursing Staff Training
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Starting in June of this year I spent six weeks in La Paz, Bolivia.
The primary focus of my work was training 24 nurses from the Hospital Arco Iris and a resource nurse to continue the training.
I used the World Health Organization’s Lactation Counseling Training Course. I separated it into 6 two hour sessions.
1. Increase the number of infants who breastfeed within one hour of birth.
2. Increase the number of infants that only received breast milk in the first four months of life.
3. Increase lactation knowledge and the ability to assist breastfeeding mothers in the nurses of the Hospital Arco Iris.
“Hospital Arco Iris (HAI) is a 100 bed non-profit teaching hospital located in Mira Flores in La Paz, Bolivia. Ninety percent of these patients are impoverished and half of these consultations and hospitalizations are provided at no cost or for a very low fee”. (Broyles, 2013)

I went to Bolivia under the direction of HOPE worldwide who is in a consultative status with the HAI.
The Hospital Arco Iris La Paz, Bolivia
HOSPITAL ARCO IRIS: VIEW OUT FRONT ENTERANCE
Breastfeeding counseling: A Training Course

Document type: Training

Topic: Counseling

Author: WHO / UNICEF

Date published: January 1993

Available in English, French, Spanish and Russian

http://www.ennonline.net/resources/297
In El Alto, a city on the outskirts of La Paz, Bolivia, a PAHO/WHO study found that
  - only 60.7% infants were breastfed during the first hour of life
  - only 39.5% were exclusively breastfed up to four to five months of age (Bartos, 2009)
BOLIVIA

- Bolivia has the highest infant mortality rate in South America. It is the second poorest country in the Western Hemisphere (Haiti is the poorest).
- There is a high percentage of indigenous people whose first language is Quechua.
- Registered nurses earn $150.00 per month.
THE RATIONALE FOR THESE GOALS

- A study by Edmond et al done in Sub Sahara, Africa (2006) demonstrated 22.3 percent drop in all cause infant mortality when babies are put to the breast within one hour of birth.
- Babies that are exclusively breast fed for the first four months of life have lower risks of intestinal illness, respiratory illness, and malnutrition. Heining (2011)
- Hospital based nursing lactation education does improve lactation services and improved breastfeeding rates. Zakarija-Grkovic (2010)
CLASSES OF NURSES
NICU AND DR. LEON AND LICENCIAD ANNA
HOW WAS EFFECTIVE WAS THIS PROJECT?

Used two measurements:

1. Maternal Surveys done at three days up to 6 months post partum.
2. Pre and post tests on the first day of the nurses in the Lactation Training and at the end of the last day.
LICENCIADA NINFA ASSISTING A MOTHER
THE STATUS OF LACTATION AT THE HOSPITAL ARCO IRIS DURING IMPLEMENTATION

76 surveys done during the 6 weeks I was there:
Average time to first breast feeding: 3.2 hours
  For vaginal delivery: 1.89
  For cesarean delivery: 4.8 hours
To breast within one hour: 38%
Exclusivity: Only 40% of total were exclusively breastfeed
  At 2 weeks: 46% were exclusively breast fed
    54% had artificial milk
At 4 months: No exclusivity, All had artificial milk
At 6 months: No exclusivity All had artificial milk
NURSES KNOWLEDGE: PRE AND POST TEST

- **Pretest** average score: 67.2 %
- **Post test** average score: 77 %
- Improved scores by 9.8 %
- Unfortunately only 7 of 24 attended all 6 classes.
At the 3 week mark I discovered other barriers to breastfeeding besides nursing knowledge of breastfeeding. To discuss these system barriers, I set up meetings with the nursing director and each of the department heads.

- The Director of Nursing
- The Pediatric Department Head
- The OB/GYN Department Head
- The Hospital Director

I discussed the following barriers and their solutions.
BARRIERS TO BREASTFEEDING

1. Mother’s were not educated or supported for breastfeeding prior to delivery or after.

2. The hospital pharmacy sold formula.

3. Infants born by c-section were separated from their mothers. This was on average 3 to 4 hours recovery time from epidural anesthesia. Because of a 50% c-section rate, half of the infants did not have a chance to breastfeed within the first hour of life.

4. During the Lactation Classes, the nurses complained to me that it was difficult for them to teach demand and supply of breast milk if the doctor did not do the same.
5. C-section patients were not being offered pain medication routinely. This made it difficult to move and difficult to breastfeed.

6. There was a significant number of readmissions to the NICU for phototherapy at 3 to 5 days of life. Babies and mothers were separated which led to lower milk supply and formula given to the babies.

7. Limited visiting hours in the NICU for mothers to breastfeed their babies.
DISCUSSIONS WITH EACH OF THE DOCTORS

- I had a promises from them to:
  + Sell breast pumps instead of formula.
  + Help mothers put babies to the breast in the recovery room.
  + Lactation teaching in the prenatal clinics and on the units at least by TV.
  + Pain medication offered to mothers on a routine basis.
  + Measure bilirubin levels at 24 hours of life while lower and still in patient.
  + Open up visiting hours in the NICU.
  + Encourage physicians to teach the importance of exclusive breast-feeding and to write fewer prescriptions for formula.
POST PROJECT OUTCOMES

76 surveys done from June 24 to July 29, 2013: In black (post project 52 maternal surveys done August to 11/4/2013) in red!

+ Average time to first breast feeding: 3.2 hours
  × (2.19 post project)
+ To breast within one hour for total: 38%
  × (30% post project)
+ For vaginal delivery: 1.89 hours
  × (1.81 hours post project)
+ For cesarean delivery: 4.8 hours
  × (2.6 hours post project)
POST PROJECT OUTCOMES

Exclusivity:

- Only 40% of total were exclusively breastfeed
  - (47% post project)
- At 2 weeks: 46% were exclusively breast fed
  - (47% exclusively post project)
- At 4 months: No exclusivity, All had artificial milk
  - (30% exclusive post project)
- At 6 months: No exclusivity All had artificial milk
  - (None exclusive)

- Side note: C- Section Rate dropped from 50% to 38% post project
FINAL MEETING WITH NURSES AND HOSPITAL DIRECTOR
DR ANDRES BARTOS AT THE HOSPITAL
MATERNA Y INFANTILE

