

Breast Milk Quality Improvement Bundle For VLBW Babies

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BACKGROUND

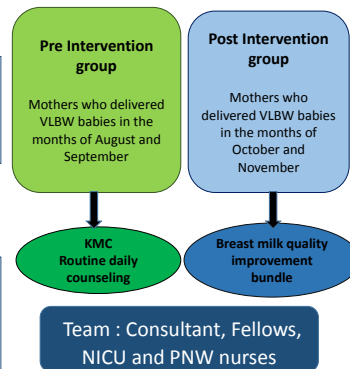
- ❖ The benefits of breastfeeding the LBW extends beyond nutrition.
- ❖ Despite the fact that breast milk is the best nutrition for the VLBW babies, lack of breast milk is still the most common immunodeficiency in the NICU.

"SMART" AIM

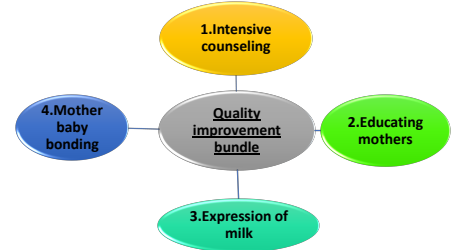
With a "Breast Milk Quality Improvement Bundle", to improve breast milk output in mothers of VLBW babies by 50% on day 7 post delivery over a two month period.

METHODOLOGY

- ❖ Study design – Quality improvement study
- ❖ Setting – St. Johns Medical College Hospital, Bangalore
- ❖ Study duration – 4months, Aug to Nov 2015
- ❖ Ethical approval from the IEC and informed consent from parents taken



Tool - Breast milk QI Bundle



Primary outcome : Quantity of milk expressed on Day 7 post delivery

PDSA Cycles

1. INTENSIVE COUNSELING	2. EDUCATING MOTHERS	3. EXPRESSION OF BREAST MILK	4. MOTHER- BABY BONDING
<ul style="list-style-type: none"> Antenatal screening Postnatal counseling Daily counseling 	<ul style="list-style-type: none"> Power point presentation Video demonstration 	<ul style="list-style-type: none"> Breast pump use Hand expression 	<ul style="list-style-type: none"> KMC NNS

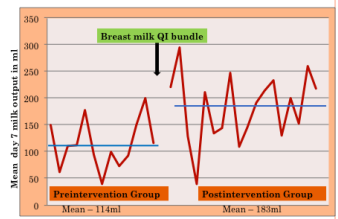
RESULTS

RESULTS

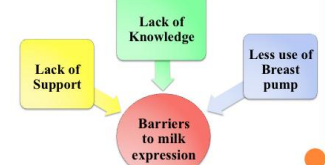
BASELINE CHARACTERISTICS

CHARACTERISTIC	PRE INTERVENTION group (13 mothers)	POST INTERVENTION group (18 mothers)	p VALUE
Mother's age (y) mean ±SD	28.5 ± 3.99	26.7± 4.7	0.28
Primigravida (%)	53	50	1
Caesarean section (%)	92	61	0.09
Birth Weight (g) mean ±SD	1297.8 ±160	1207.7± 201	0.19
Gestation (weeks) mean ±SD	32.5 ± 2.3	31.5 ± 2.7	0.27
Need for Ventilation (%)	53	77	0.12
Need for TPN (%)	69	77	0.68

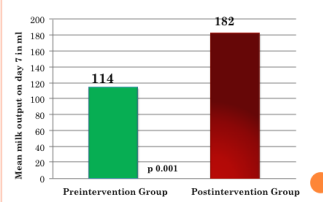
RUN CHART OF DAY 7 MILK OUTPUT



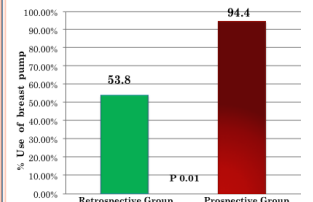
BARRIERS TO IMPROVING BREAST MILK USE IN VLBW INFANTS



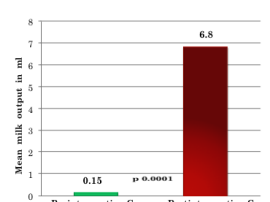
PRIMARY OUTCOME – "MEAN MILK OUTPUT ON DAY 7"



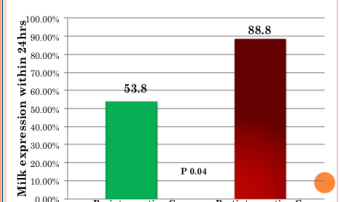
USE OF BREAST PUMP



MEAN MILK OUTPUT ON DAY 1



MILK EXPRESSION WITHIN 24HRS



CONCLUSIONS

- ❖ A series of simple interventions increases milk out in mothers of VLBW babies.
- ❖ These quality improvement initiatives need to be improved, consolidated and sustained.