

**BÁO CÁO HỘI NGHỊ SẢN PHỤ KHOA VIỆT PHÁP 2018**

**PRELIMINARY EVALUATION OF THE RESULTS OF  
EARLY FEEDING LOW BIRTH WEIGHT PRETERM BABY  
AT CENTRE FOR NEONATAL CARE IN NATIONAL  
HOSPITAL OF OBSTETRICS AND GYNECOLOGY 2017**

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# MOTIVATIONS



## COMPLICATIONS



*Respiratory: pneumonia,  
respiratory arrest*

*Brain: bleeding brain,  
brain barrier*

*Metabolic: lower temperature,  
hypoglycaemia, jaundice ...*

*Gastrointestinal:  
poor feeding*

*Cardiovascular:  
the tube artery...*

*Other complications:  
retinal disease, infection*

*Premature infants Mortality contributes to one third neonatal Mortality*

### **Benefits of proper feeding for preterm infants:**

- *Shorten recovery time at birth*
- *Improve nutritional intake*
- *Reduce perinatal time*
- *Stimulates digestive system*
- *Reduce the frequency of cholestasis*
- *Reduced treatment time*

# MOTIVATIONS

R. Kishore Kumar et al (2017)

- Enteral feeding is safe and may be preferred to parenteral nutrition due to the complications associated with the latter
- Early, fast, or continuous enteral feeding yields better outcomes compared to late, slow, or intermittent feeding, respectively
- Preterm infants can be fed while on ventilator or continuous positive airway pressure
- EBM is the first choice for feeding preterm infants due to its beneficial effects on cardiovascular, neurological, bone health, and growth outcomes; the second choice is donor pasteurized human milk
- Standard fortification is effective and safe
- Optimizing weight gain in preterm infants prevents long-term cardiovascular complications

# MOTIVATIONS

## ➤ *Related weight gain:*

- Time to start feeding sooner
- Shorten the duration of parenteral feeding
- Early enteral feeding

Nutritional approach to preterm infants on non invasive ventilation:

Nutrition (2017)

# MOTIVATIONS

## ***At NHOG:***

- Early feeding for low weight preterm infants has been applied at the Center of Neonatal Care from January 2017.
- There isn't any researches on this method in NHOG

**Preliminary evaluation of the results of early feeding  
low birth weight preterm baby at Centre for neonatal Care  
in national Hospital of Obstetrics and Gynecology 2017**



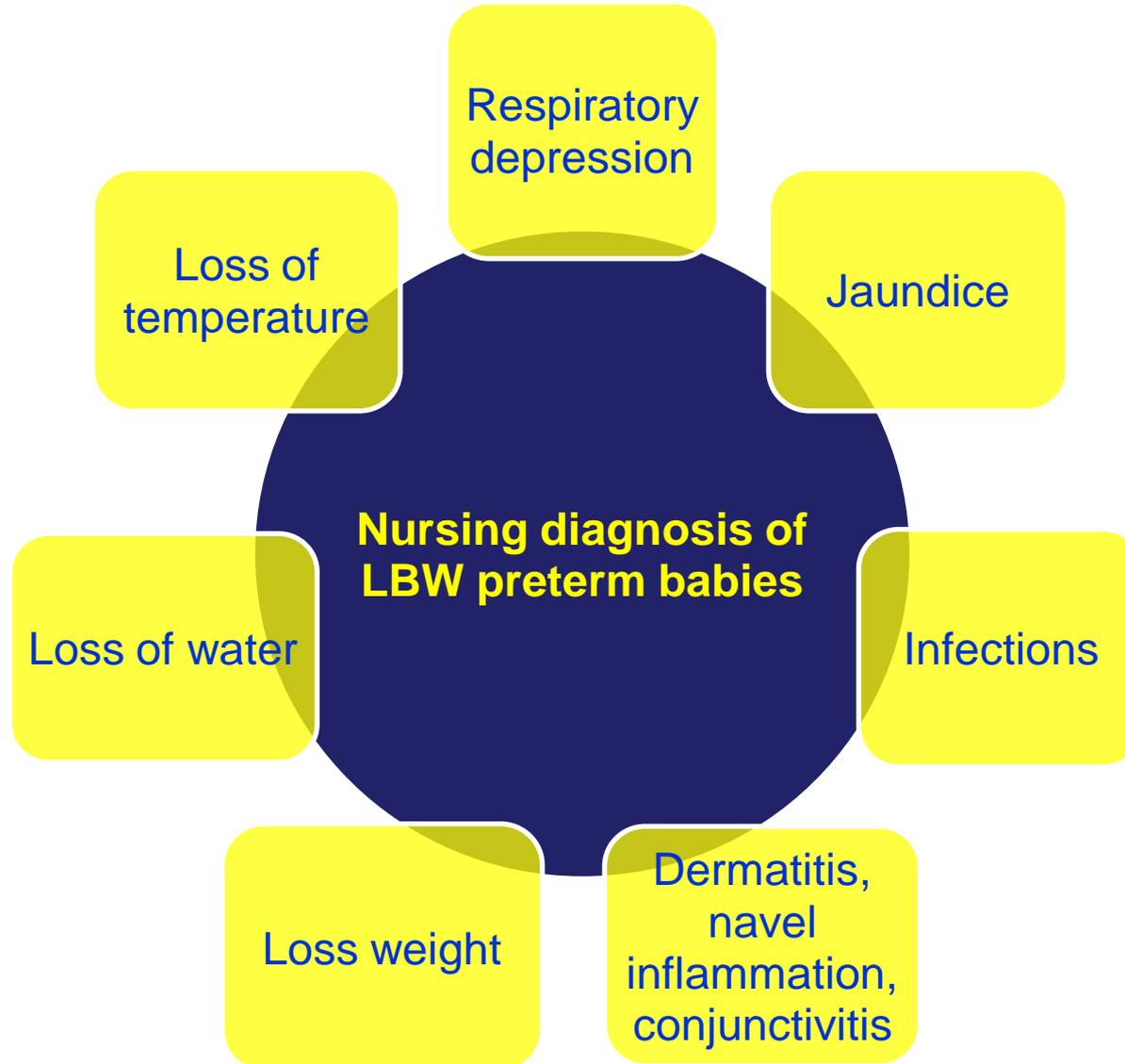


## RESEARCH OBJECTIVE



Preliminary evaluation of the results of early feeding low birth weight preterm baby at Centre for neonatal Care in national Hospital of Obstetrics and Gynecology 2017

# BACKGROUND

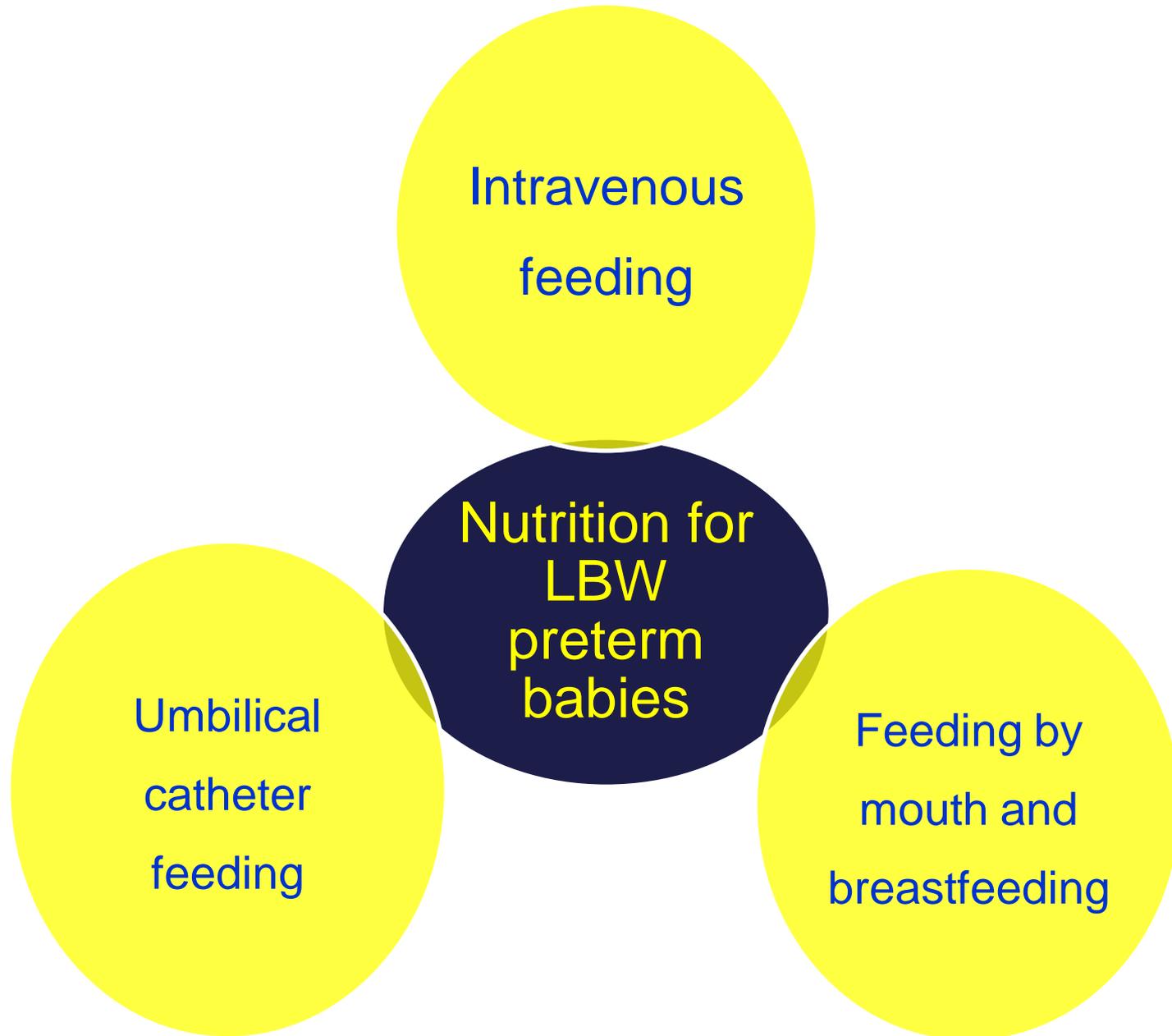


# BACKGROUND

## *The role of nutrition*

- Increasingly important and contributing to the success of medical treatment in general and care for preterm babies in particular.
- Reasonable nutrition, science will help premature babies quickly catch up to growth momentum to grow like full-term babies.
- However, the practice of comprehensive nutrition measures has not been properly addressed

# Nutrition for low birth weight preterm baby



# BACKGROUND

- 124 LBW preterm babies (<32w, BW <1500g) in NICU (1/2015 - 6/2016)
- 36,5% slow growth after birth
- Need optimal nutrition

Sumru Kavurt & Kıymet Celik, The Journal of Maternal-Fetal & Neonatal Medicine 2017

# BACKGROUND

- **AAP and ESPGHAN:** nutritional support is optimal for preterm infants to achieve near normal developmental at gestational age.
- **Intestinal nutrition for optimum growth in preterm infants (Myo-Jing Kim, 2016):** Achieving the best growth for preterm infants requires "positive nutrition" and adequate intestinal nutrition. Minimal intestinal nutrition should be started as soon as possible after birth, and progress in feeding should be based on the clinical course of each newborn.

# RESEARCH METHODS



# OBJECTIVES, DESIGNS, TIMES, PLACES

- **Objectives:**

- **Selection criteria:**

- Preterm babies at the Neonatal Care and Treatment Center
- Weight  $\leq$  1000gram
- No defects, deformities, pathology (intestinal obstruction, ...)
- Be fed according to the procedure for preterm infants, light weight to eat early in Center for neonatal care.

- **Exclusion criteria:** The child does not meet at least one of the selection criteria.

# OBJECTIVES, DESIGNS, TIMES, PLACE

- **Study design:** Non-control interventions
- **Time:** January to December 2017
- **Place:** Neonatal Center for Immunization and Neonatal Care
- **Sample size:** Sample all full-term preterm<sup>(1- $\frac{\alpha}{2}$ )</sup> birth weight babies at the Neonatal Care and Treatment Center from January to September 2017. So we have a sample size of 452 children.

# The method of data collection

- **SL Collection Tool:** Evaluation of nursing performance of preterm infants weighed by early feeding method at Neonatal Care and Treatment Center
- **Data analysis:**
  - Input: Data was encoded and entered using Epidata 3.1 software,
  - Analyzed by SPSS 16.0 software

# RESEARCH VARIABLE

## Variable group:

### ➤ General Information:

- Demographic characteristics of the mother
- neonatal characteristics: gestational age, weight, sex, method of delivery, early feeding

### ➤ Information on feeding efficiency of preterm infants by early feeding method:

- Die in hospital: die within the first 24 hours, live within 25h-72h, live 3-7 days, live 8-14 days, live 15-30 day, live 31-45 days, live 46-60 days, live more than 60 days.
- Live well and have good reflexes, can be discharged : living and discharge.

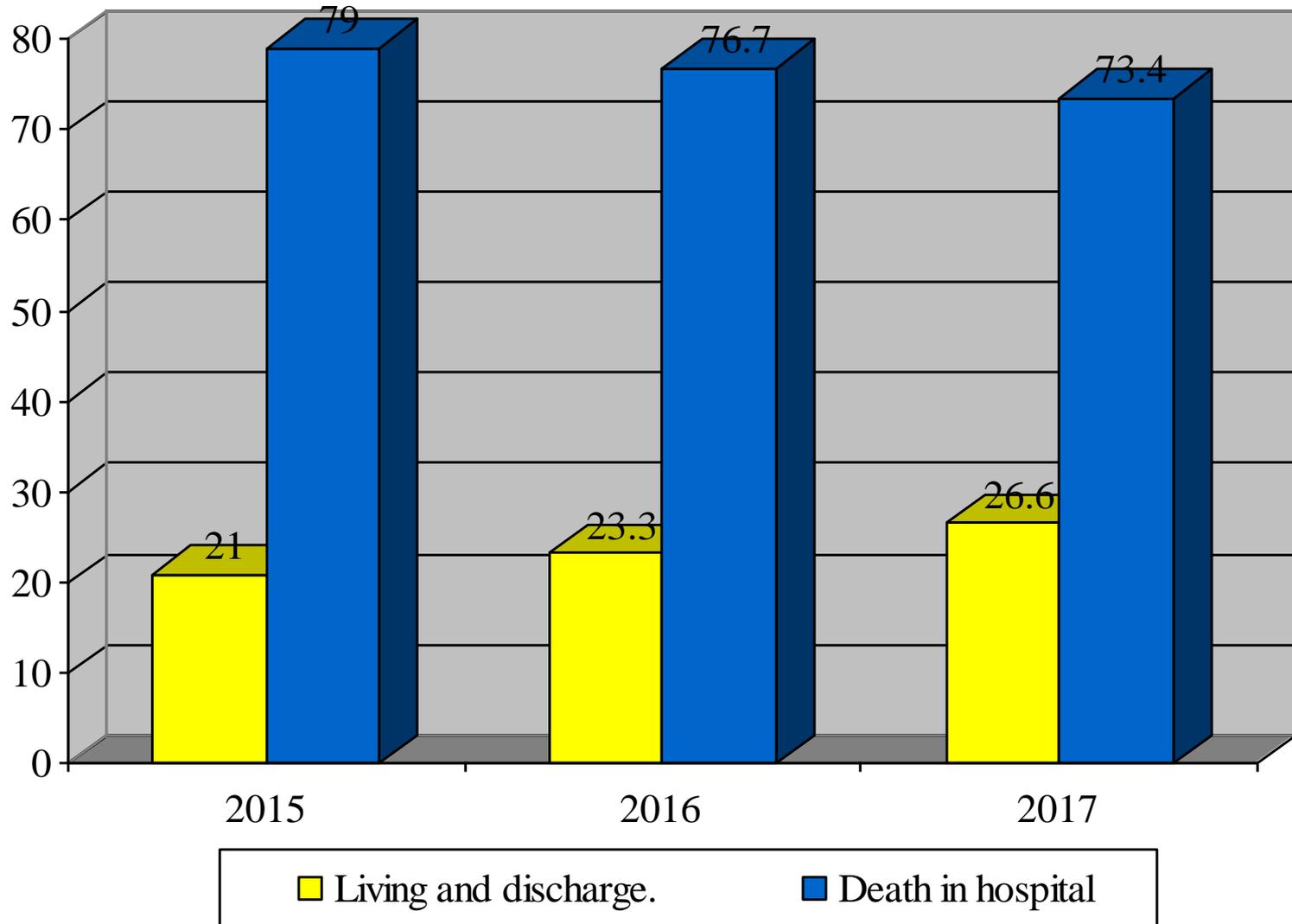
# RESULTS & DISCUSSION



## Table 1. General information of LBW preterm babies

<b>Informations</b>	<b>Frequency</b>	<b>Rate (%)</b>	
<b>Sex</b>	male	251	55,6
	female	201	44,4
<b>Baby order</b>	1st baby	222	49,2
	Un from 2nd baby	230	50,8
<b>Pregnancy week</b>	21 - 25 weeks	143	31,6
	25 weeks 1 day - 28 weeks	174	38,5
	28 weeks 1 day - 32 weeks	109	24,1
	32 weeks 1 day - 35 weeks	19	4,2
	over 35 weeks	7	1,6
<b>Birth weight (gram)</b>	< 500	9	2,0
	500-700	259	57,3
	701-900	107	23,7
	901-1000	77	17,0
<b>Way give birth</b>	Normal Birth	317	60,1
	Caesarean	135	29,9

# Chart 1. Survival rate of stage discharge 2015-2017



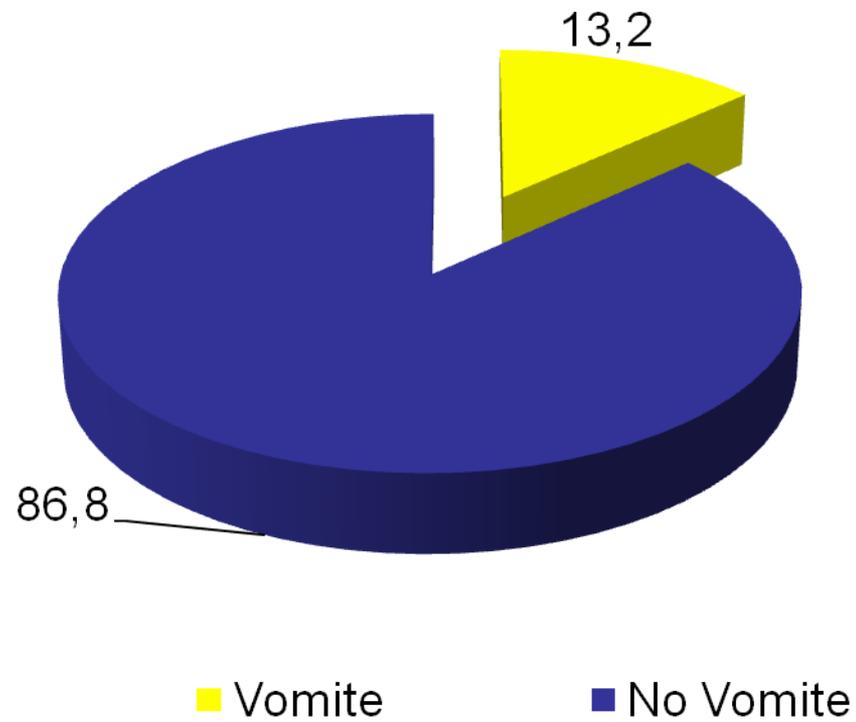
## Table 2. Results by child weight

Birth weight	Total	Live ≤ 24h	Live 25-72h	Live 73h-7 days	Live 8 - 14 days	Live 15- 30 days	Live 31- 45 days	Live 46- 60 days	Live over 60 days	Live and discharge
<500g	9 (2,0%)	9	0	0	0	0	0	0	0	0 (0%)
500-700g	259 (57,3%)	157	7	2	15	14	0	0	0	64 (24,7%)
701-900g	107 (23,7%)	8	2	0	30	35	0	0	0	32 (29,9%)
901-1000g	77 (17,0%)	7	0	0	18	28	0	0	0	24 (31,2%)
Tổng	452 (100%)	181	9	2	63	77	0	0	0	120 (26,6%)

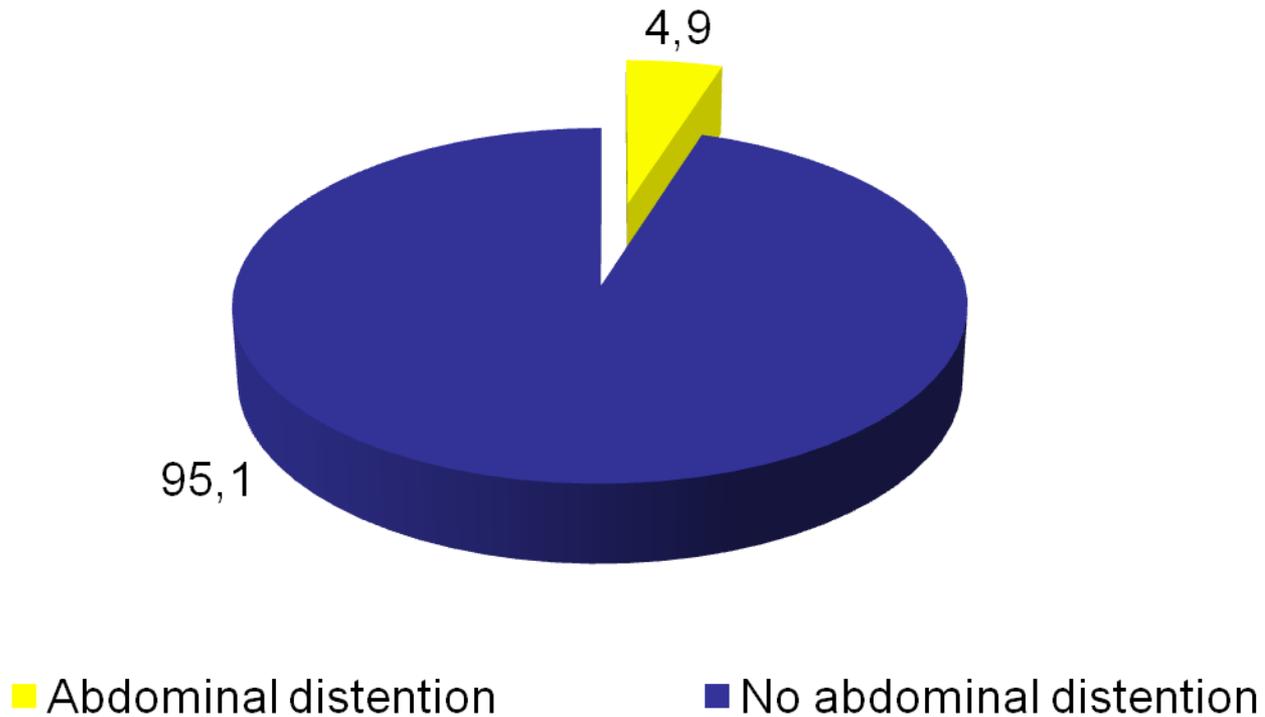
### Table 3. Results based on gestational age of the child

Living time	21 - 25 weeks	25 weeks 1 day - 28 weeks	28 weeks 1 day - 32 weeks	32 weeks 1 day – 35 weeks	over 35 weeks
≤ 24h	113	55	6	0	7
25-72h	0	9	0	0	0
73h-7 days	0	0	2	0	0
8-14 days	2	18	43	0	0
15-30 days	12	21	30	14	0
31-45 days	0	0	0	0	0
46-60 days	0	0	0	0	0
> 60 days	0	0	0	0	0
living and discharge.	4	43	47	23	3
<b>Total</b>	<b>131</b>	<b>146</b>	<b>128</b>	<b>37</b>	<b>10</b>

## Chart 2. Rate of vomiting



# Chart 3. Rate of abdominal distention



# CONCLUSIONS

- The rate of hospital discharge was 26.6%
- Children are raised on good weight, have good reflex feeding, get to mother, accounting for 24.7%
- Children weighing 500-700g, 701-900g, 901-1000g increased survival rate, 24.7% respectively; 29.9%; 31.2%; the rate of vomiting is 13.2%
- The rate of pedophilia is 4.9%

# RECOMMENDATIONS



## ➤ For infant's family

- Encourage the mother to have a diet, drink, sleep, reasonable rest to have milk for children to eat early.

## ➤ For NHOG

- Continue to implement this method in the Center for neonatal care
- Transfer this method to lower-level hospitals, reduce the load for top-level hospitals, thus raising the effectiveness of treatment and feeding of preterm and low-birth-weight infants at provincial and district levels.
- Continue to research more particularly about this method

***Thank you very much!***

