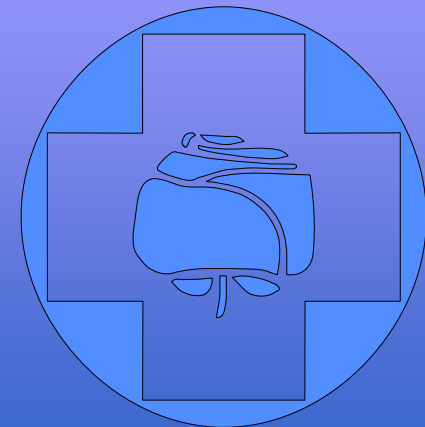


Breastfeeding and prevalence of acute respiratory infections, gastroenterocolitis and otitis media in the first year of life

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Background:

- Breastfeeding is an optimum food for infant nutrition.
- Breast milk contains:
 - specific and non-specific factors with anti-inflammatory action (lactoferrin, lysozymes and secretory IgA antibodies...)
 - oligosaccharides and glycoproteins which influence the composition of the intestinal flora
 - cytokines, growth factors, macrophages, neutrophils, lymphocytes that take part in immune response
 - antibodies against viruses (RSV)

General consensus exists about the beneficial effect of breastfeeding on the infant!

Breastfeeding is stated to lower the probability of infections, allergic diseases and some other pathological conditions (Žižka et al. *Pediatr Allergy Immunol* 2007; Hanson et al. *Pediatr Allergy Immunol* 2001)



Aim:

The purpose of this study was to establish:

1. if prolonged breastfeeding

- decreases the illness rate due to ARI, GE and OM in the first year of life and later**
- has an influence on prevalence of allergic diseases in children**

2. whether the acquisition of a baby-friendly maternity hospital in the Northern Primorska influenced the prevalence in the first year of life.

Materials and methods:

- 838 full-term children, with normal birth weight (between the 10th and 90th P for age) and without congenital anomalies were observed.
- Data about duration of breastfeeding, prevalence of ARI, GE, OM, and allergic diseases, were retrospectively analysed.
- Paediatrician's diagnosis was based on clinical history, manifestations and examination.
- Allergic aetiology of asthma and dermatitis (AD) was confirmed with elevated total and specific IgE concentration and with at least one positive SPT.

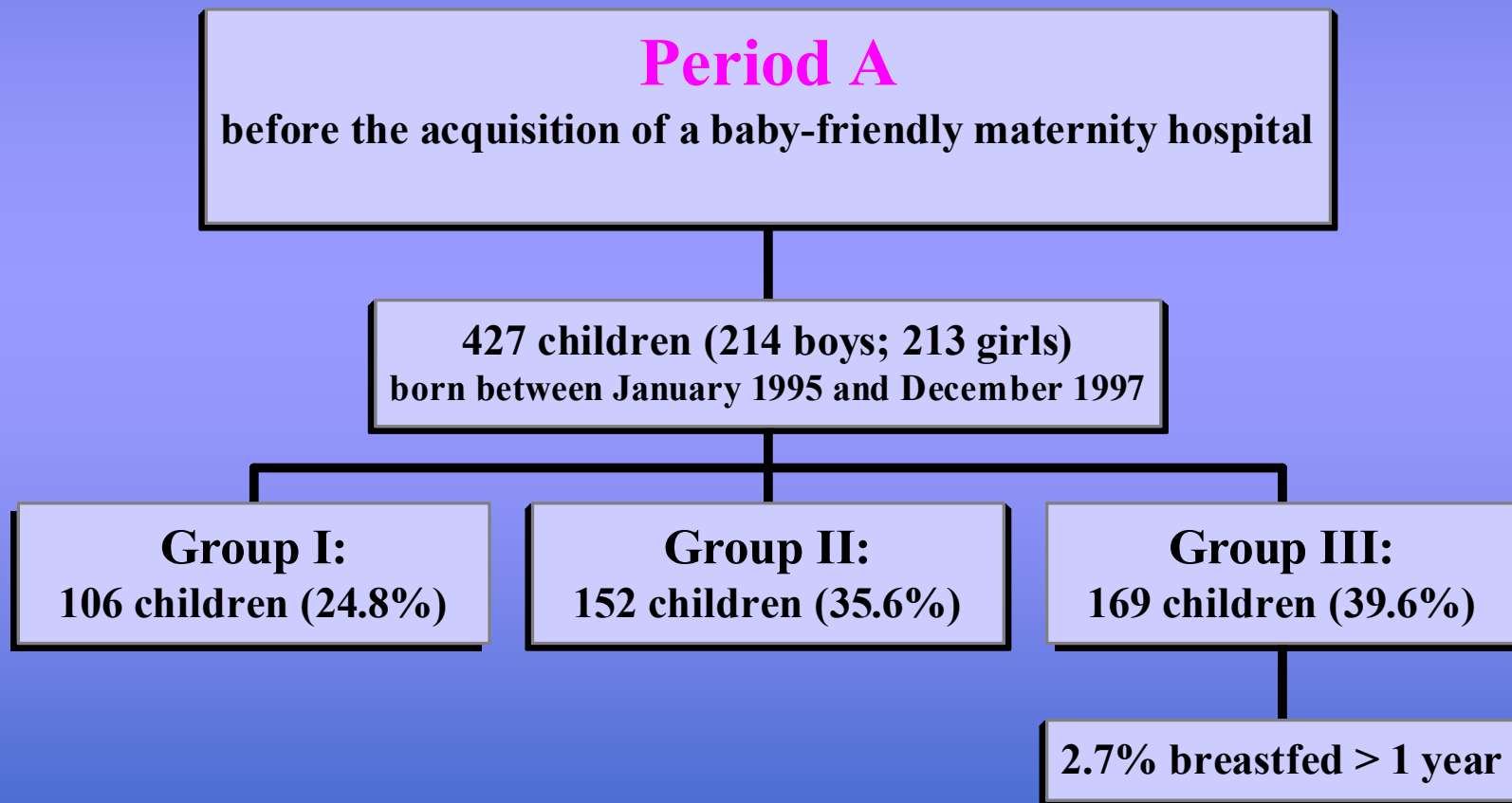
➤ According to the duration of breast feeding they were divided into 3 groups:

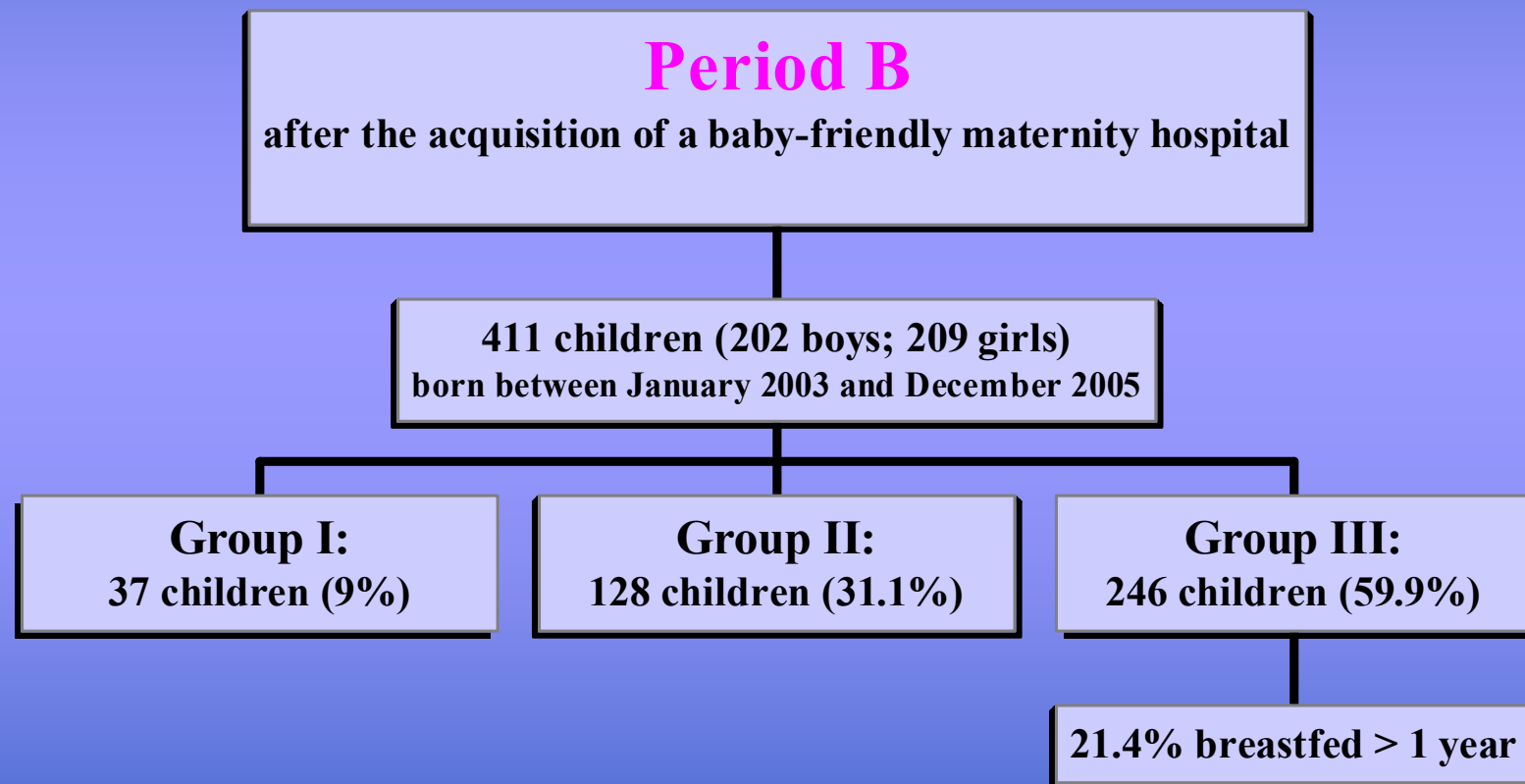
group I - children breastfed for less than one month,

group II - children breastfed between one and six months

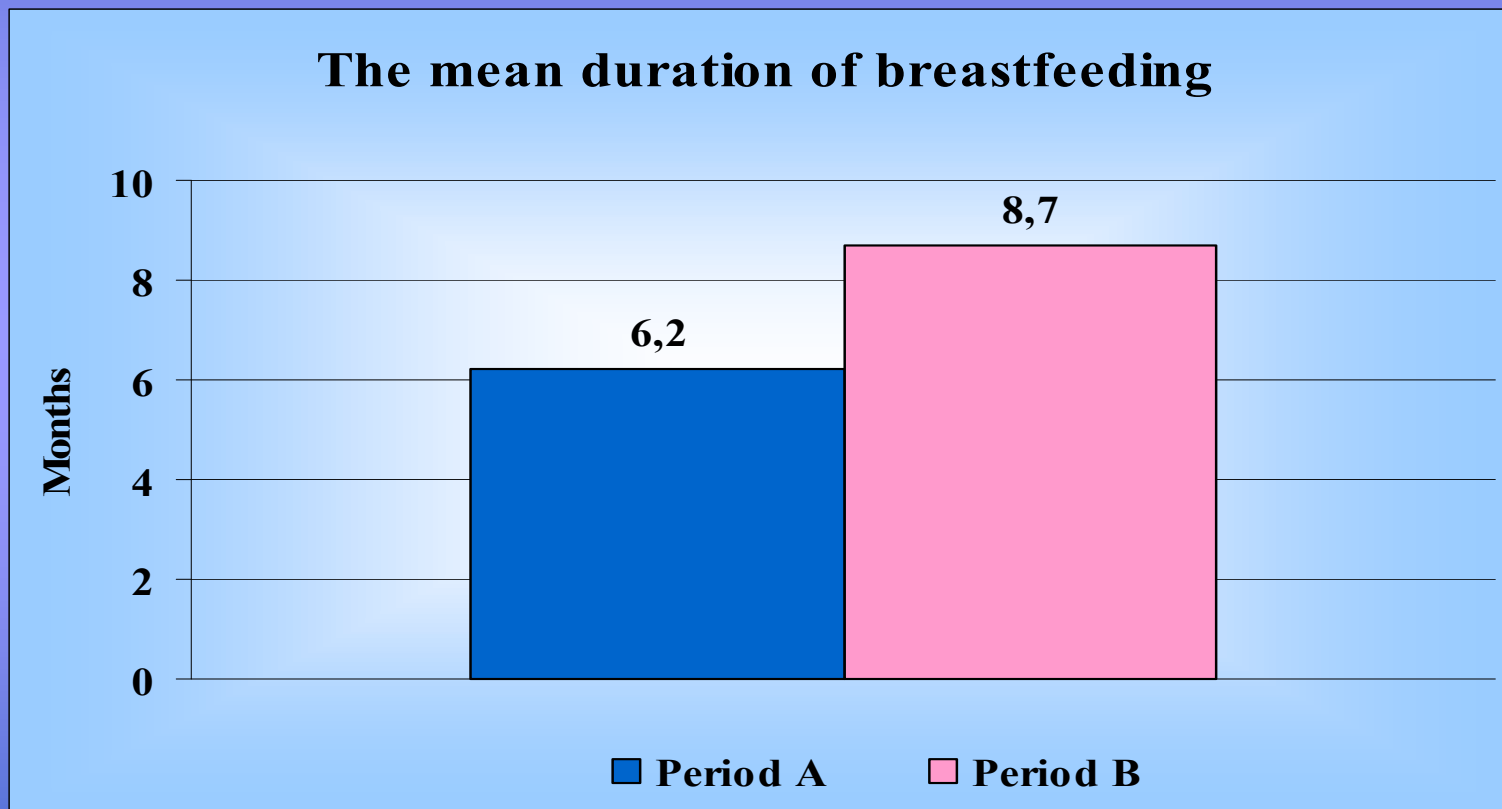
group III - children breastfed for at least seven months.

Two periods were compared:

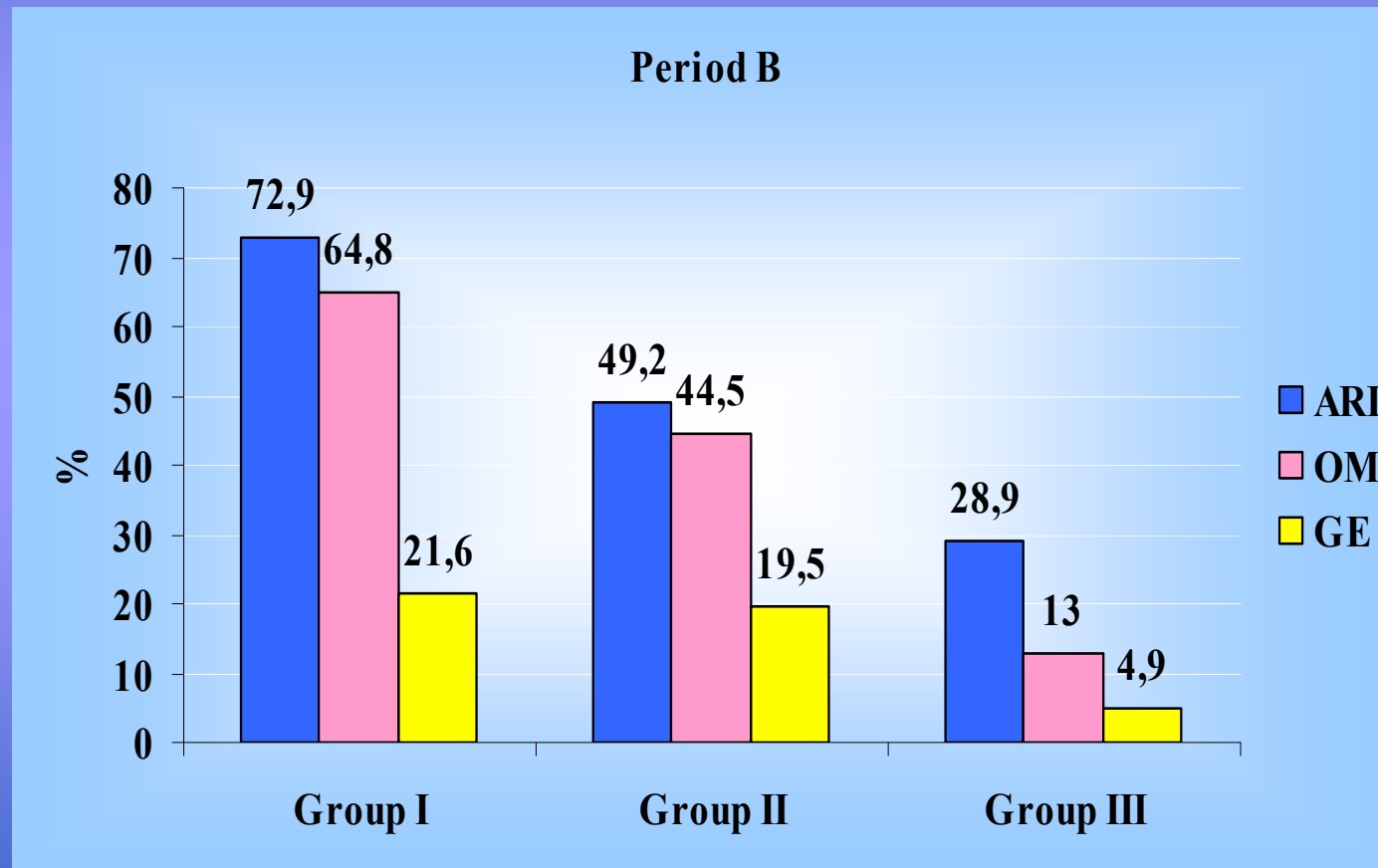




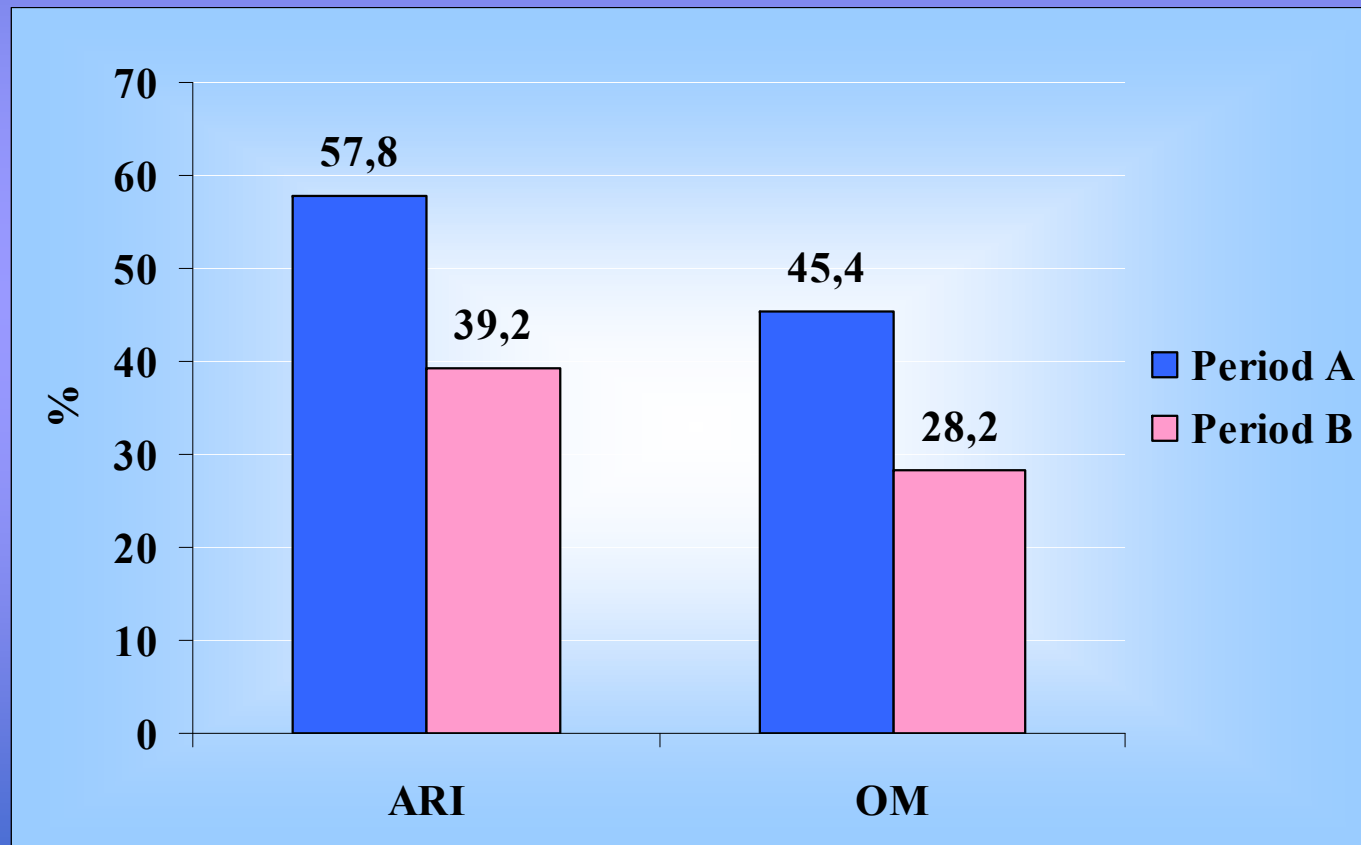
Results:



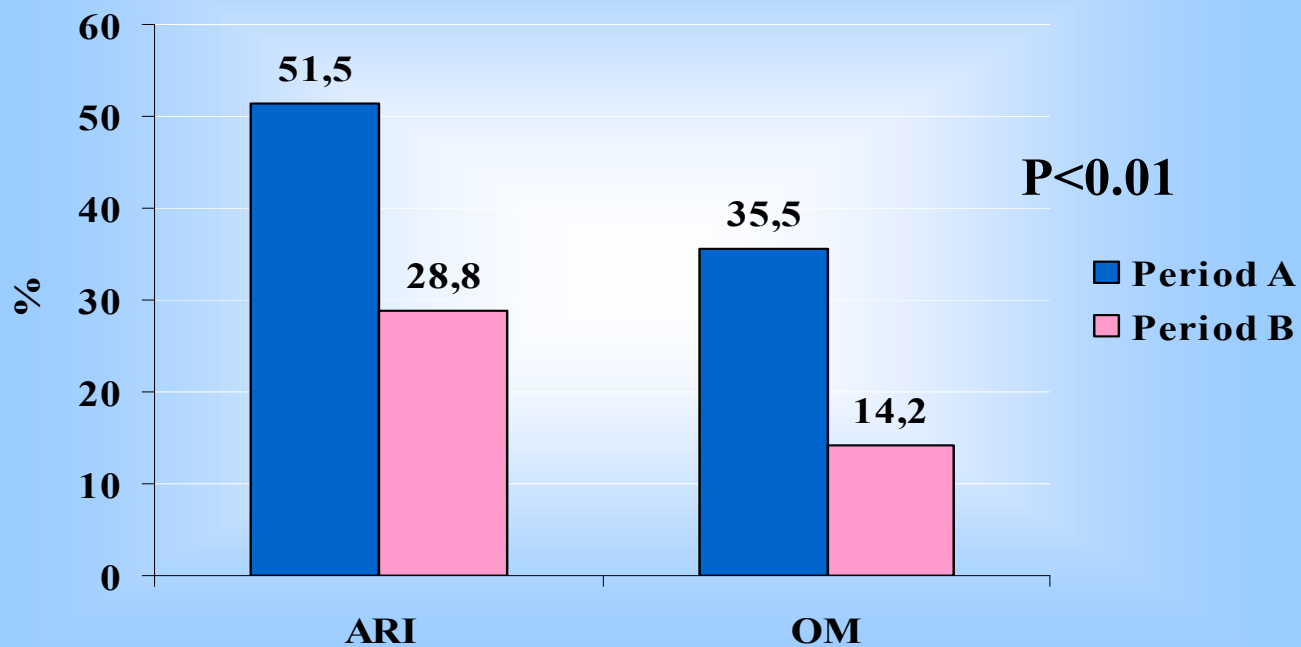
Prevalence of ARI, OM and GE in the first year:



Significant decrease in ARI and OM prevalence in period B was observed ($P < 0.0001$)



Prevalence of ARI and OM in group III

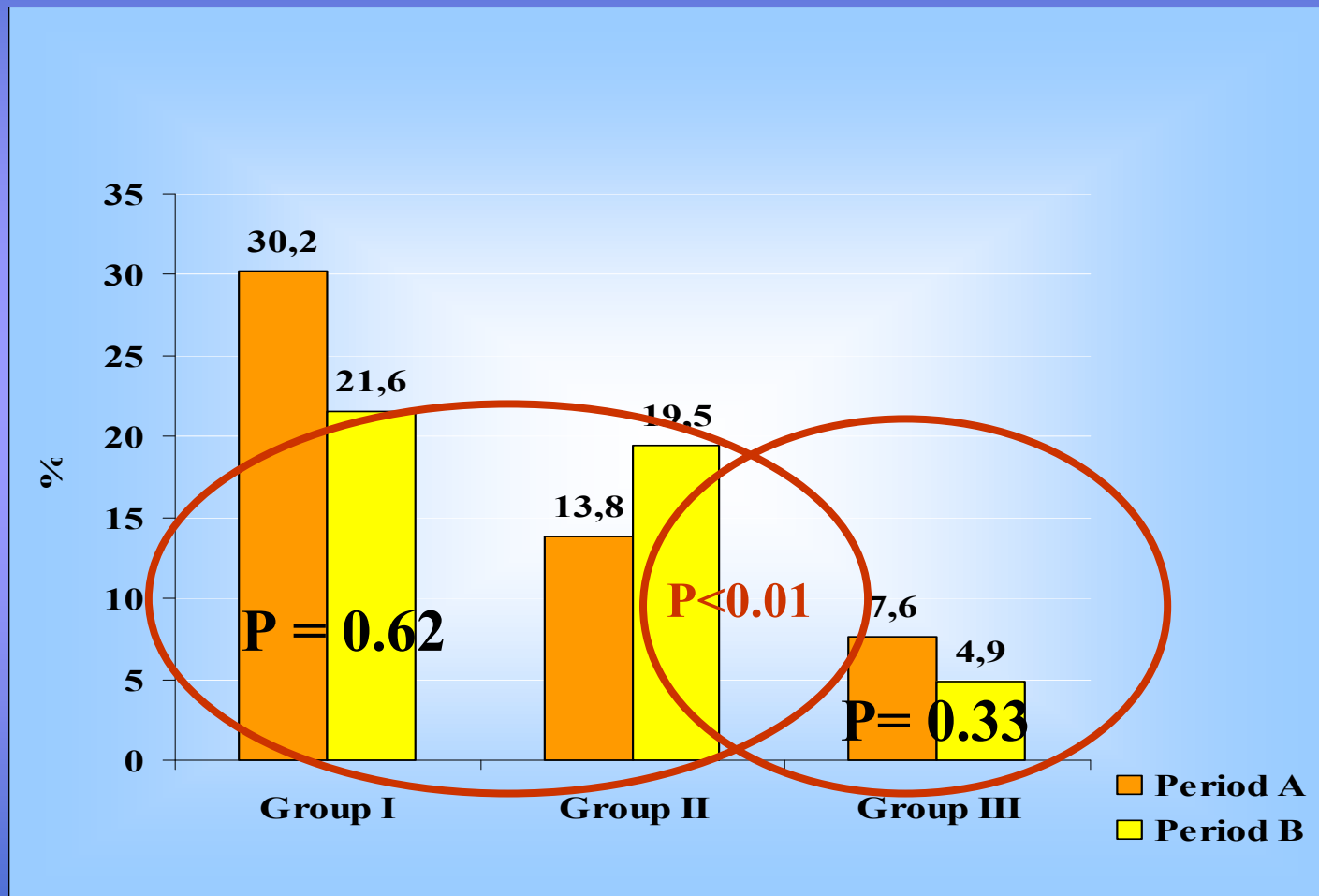


	GROUP III	
	Mean breastfeeding (months)	Breastfed >1year (%)
Period A	9,8	2,7
Period B	13,7	21,4

Maribor, 2.10.2009

ESSOP 2009

Prevalence of GE in the first year:

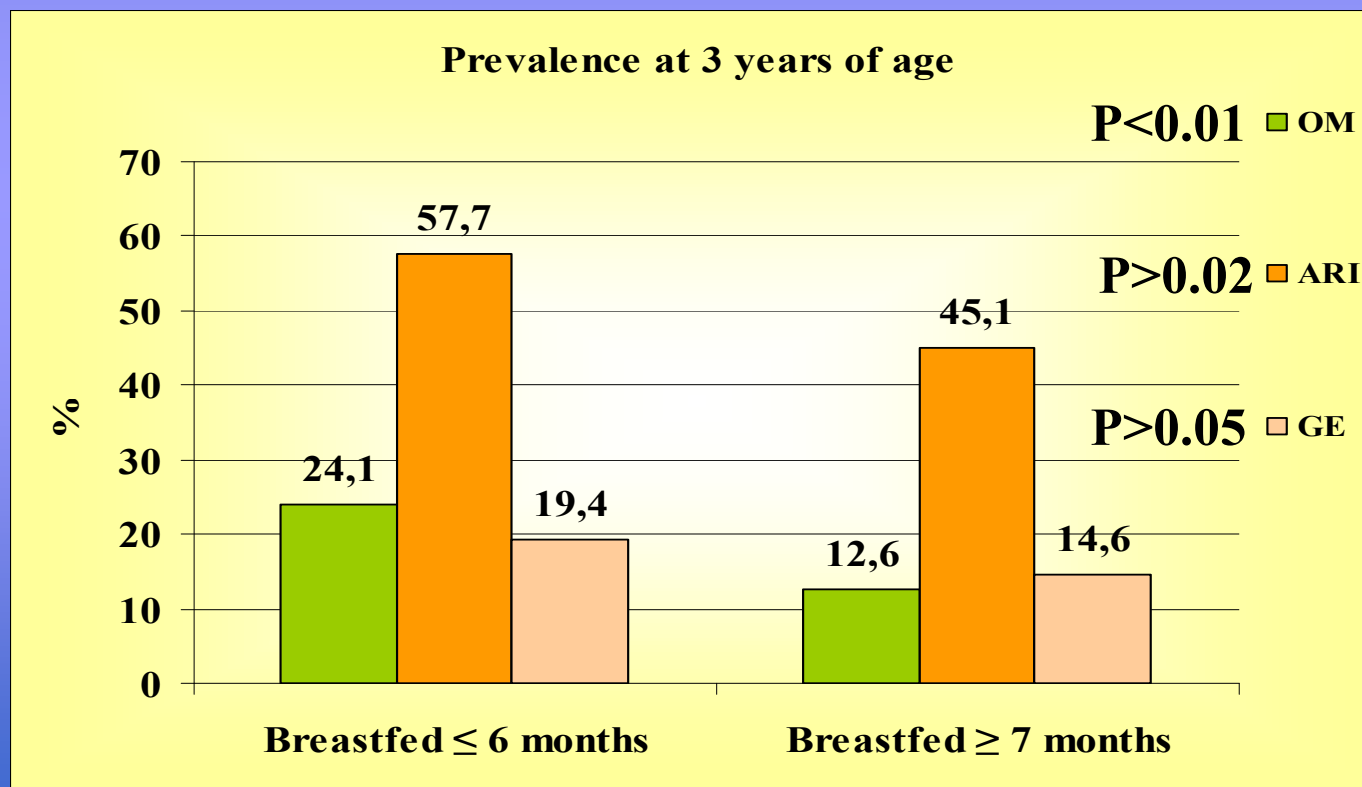


Average number of illness episodes per child:

	Group I		Group II		Group III	
	Period A	Period B	Period A	Period B	Period A	Period B
ARI	3.0	1.6	2.2	1.2	1.6	0.5
OM	2.1	1.1	1.8	0.6	1.4	0.2
GE	1.8	0.3	1.4	0.3	1.2	0.1

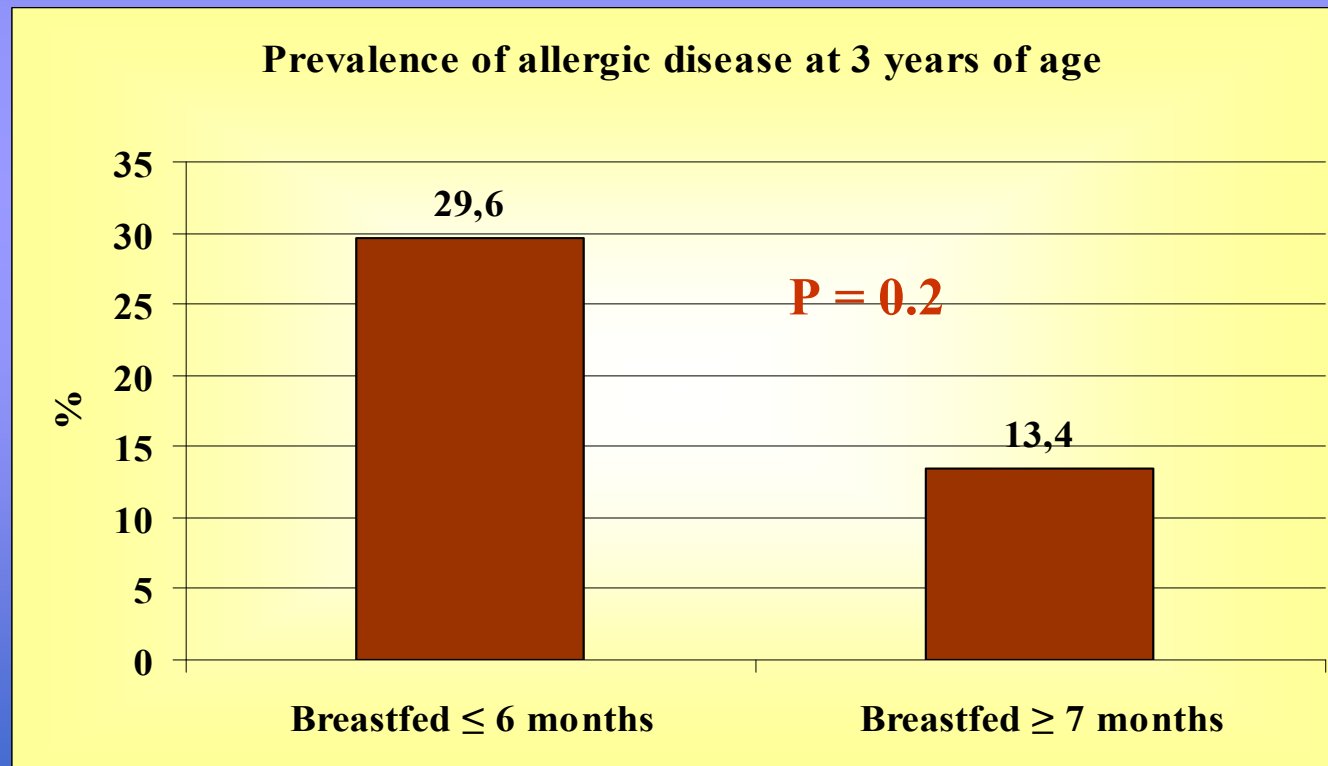
Protecting effect of breast feeding later in childhood:

- depends upon duration of breast feeding and
- the quantity of breast milk consumed by the child



Exclusive breastfeeding for 4-6 months decreases incidence of asthma and AD in children at a high risk:

- by its immunomodulatory action through intestinal flora,
- with passage of cytokines and other intact proteins through the intestinal wall ...



Conclusions

- Prolonged breastfeeding protects the child against ARI, OM and GE in the first year of life
- Against OM the child is protected also after the cessation of breastfeeding
- It decreases the likelihood of the development of ARI and of allergic diseases later in childhood
- The protective effect of breastfeeding against GE is only present during the period of breastfeeding
- The promotion of breastfeeding and the acquisition of a baby-friendly maternity hospital have advantageously influenced the decrease in the prevalence of all three diseases.



Thank you for your attention!