# 38 - REVELANT POINTS OF VIEW OF HEALTH PROFESSIONALS ABOUT PRECOCIOUS WEAN AND YOUR INFLUENCE ON THE RESPIRATORY SYSTEM.

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## 1 - Introduction

The breast feeding is a natural proccess of human being feeding, that has been spread on generation by generation on the pass of history.

In these last decades, the precocious wean's proccess has been used often, and it may bring many consequences for the baby, and between them the physopathological alteration of respiratory's system.

The motherly milk has all nutrition characteristics with adequated balancing to provide a healthful growth and development of defense and psychological benefits for the baby, reducing a morbity and infatile mortality (CHAVES & LAMOUNIER,2004). With that, the breast feeding becomes important not only for the children, but also for the family and general society( MARQUES, 2004; VITOLO 2003).

The motherly milk composition has a substance with high amount of lipids, minerals, vitamins, enzymes and immunoglobulins that protects the baby againt ilnesses (CREN, 2006), In it, there are the immunoglobulins IgG, IgA,IgM,IgD and Ige, being IgA the nost abundant. The antibody are formed by two molecules of IgA, which are joined to a component called secretor, that protects the antibody molecules from being degraded by gastric acid and digestive enzymes in stomach and intestine. The children fed by baby's bottle don't have many ways to fight against ingested microorganisms, until they start to produce the IgA secretory naturally - what generally happens in some weeks or months after the birth. The natural milk also has some molecules called mucins which has a great amount of proteins and carbohydtrates and are able to adhere to the bacteria and virus, eliminating them from the baby's organism.

During the breast feeding, the mother produces an IgA molecule secretory which enters in the milk to protect the baby from pathogenes of external environment. After that, the microbe will be captured by M cells contained in milk, transferring the pathogene to the macrophages, which will break it up and present the antigens to the T cells. These last cells will secretor substances that actives lymphocite B, and they will liberate antibodies which will be ingested by the baby ( NEWMAN, 1995).

Despite the advantages offered by breast feeding being known until today, the wean is being spread precociously(ALVES,2006). The OMS recommends that the child be suckled with motherly milk exclusive until six months old and, after that period, be introduced complementary foods, together with morthely milk until 24 months old (WHO,2001; OLIVEIRA, 2005; SÀ, 1998). Based in these infromations, precocious wean is considered as the interruption of suckling before the child reachs six months old.

A child who is precociously weaned, can present nutritional deficiencies with the passing of time, making your organism starts to suffer new phisological adapations. In other words, when the organism can't receive all nutrients, the liver starts to produce glucose from the hepatic and muscular glycogen; consequently, the skeleton muscles starts to atrophy Between them, there are the accessory muscle from breath and diaphragm, because they are catabolized to suply all energetic necessities from the organism. When these muscles atrophy, all gaseous exchanges will also be comitted, recuding the ventilary neurogenic answer to the hypoxia and hypercapnia (WAITTZBERG, 2004). When there is some muscular loss, consequently will be reduction of muscular fibres - specially from type II - and after that the diaphragm's contractility is affected. There alterations takes a reduction of the respitaroty's performance against pulmonary infections.

## 2 - Materials e Methods

For the accomplishment of this work, were evaluated twelve interned children in Centro de Nutrição Infantil de Foz do Iguaçu, with ages between two months and one year and half old, being ten feminine and two masculine.

Were used some instruments as: evaluation fiche, medical handbook contend information and complementary examinations from the interned children, graph of weight-age with Standard reference of National Center or Health Statistics (NCHS); stethoskope from LITTMANN® and digital thermometer MORE FITNESS ®.

### 2.1 - Procedures

Was explained to the mothers and responsibles from the evaluated children about the accomplishment and objective of this research, and all of them has signed by themselves the agreement term, assenting the attainment and register of all data for use for researchment and publication of the results. Later, was made an individual interview in the selection room of Centro de Nutrição Infantil.

All collected data are: internment reason, gestation history, breast feeding time, alimentary complements (in case of wean) and when these were introduced, the reason and age of wean.

From medical handbook there were an weight analysis for entrance of the child in Centro de Nutrição and of the complementary exams like the complete blood work. The data were selected through a descritive statistic analysis.

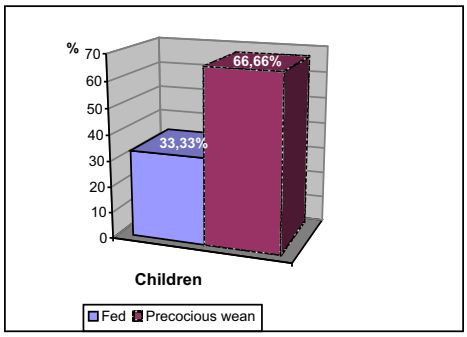
The children availation was made individually in the selection room, where were checked: respiratory frequence, cardiac frequence and finally the pulmonary auscultation.

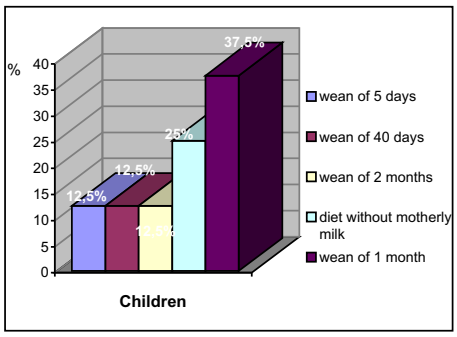
## 3 - Results

During the accomplishment of this work, were verified that between the twelve evaluated children, 66,66% has precocious wean (graph 1) and two of them have never had any motherly

milk in your feeding. The wean was submitted in a five days - two months old period (graph 2), where 37,5% have stopped suckling in the first month old, 12,5% with two months, 12,5% with five days, 12,5% with fourty days and 25% didn't have the motherly milk in the diet.

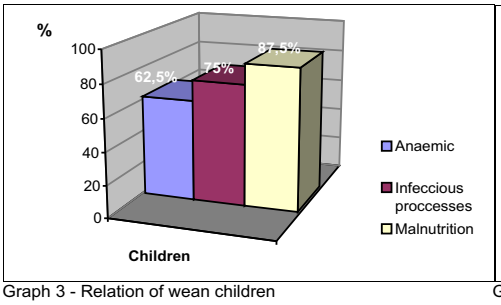
During the interview, the mothers had alleged two reasons that took them to suspend the suckling, where 87,5% was the fact that the baby couldn't suck the nipple and 12,5% because the motherly milk was "too weak".



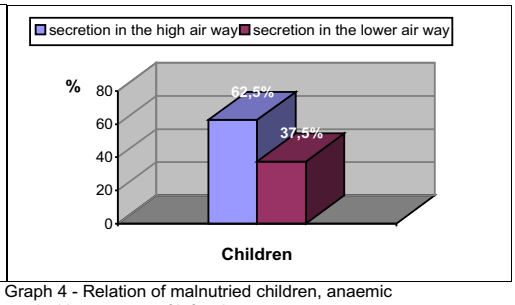




About the complementary feeding, 25% of the babies were fed with integral cow milk during one month old and 75% with artificial milk.

In the nutricional state evaluation, 87,5% of the children submitted to wean were considered unfed. For the diagnosis of the nutricional riot was analyzed the percentile, which is made from the relation between the expected weight for the baby's age. Most of these children presented a value below 3. About the blood work verification, 62,5% of he children are anaemic, since the hemoglobin is below the normal value for the age. To justify the presence of an infeccious problem, was observed that the blood work of 75% of the children shows some alterations.




Graph 3 - Relation of wean children




Graph 4 - Relation of malnutried children, anaemic and with presence of infeccious proccess

The graph 3 shows the relation between unfed children, anaemic and infeccious proccess.

During the respiratory avaliation, we verified that 62,5% of the children with tachypneia 62,5% showed yellow colored secration thick in some high air ways and 37,5% showed presence of wheezing during the pulmonary auscultation.

**4 - Discussion**

During the accomplishment of this work, we observed that 66,66% of the mothers didn't know how important is the breast feeding, and that was explained with the reasons told by them during the interview. Autors as Ushimura et al (2001) stand out that between the reasons that takes the child to precocious wean there are: unfamiliarity of the mothers with the advantages and benefits of beast feeding, lack of previous experience, adolescent mothers, failure on the suckling practice presenting technical difficulties on the act of suckling, and use of bottle-feeding and pacifiers.

About the feeding complements, we can see that two children had never been fed with motherly milk, because they fed only with integral cow milk. The integral milk contains na protein called casein being of hard diggestion in the baby's digestive system, fact that may cause instetinal microhemorrhages, and also, this milk can bring anaemia, once that the cow's milk iron is not absorved in a efficient way as the motherly milk (CREN, 2006). The intolerance for the cow's milk on the babies can show symptoms as diarrhea, vomits, abdominal dehydration and pain and déficit in the growth (MOTTA, 2001).

In the nutricional state evaluation, 87,5% of the children were cosidered as unfed. The child who has the weight less ore qual to the percentiles 3 and 10, in accordance with their age and weight, can present nutricional riots, since the percentile 3 is a separation line (SBAM, 2006; OPS 2006; NCHS 2000).

The obtein the anaemia diagnosys, were used values in according to the children's age (Table 1). Zorzero(2006) says in his study that children fed with artificial milk and cow milk have more risks to get anaemia, because they have a little percentage of iron in it's composition.

**TABLE 1-** RELATION OF NORMAL LEVELS OF HEMOGLOBINA IN ACCORDING TO THE CHILD'S AGE.

| Age | Hemoglobin (g/dl) |
|---|---|
| Just-been Born | 14 a 20 |
| On week old | 15 a 23 |
| Until 6 months old | 11 a 14,6 |
| From 6 months to 18 years old | 12 a 16 |

**SOURCE:** http://www.labes.com.br, 2006.

In relation to the presence of infeccious proccesses, we obsersed that the children don't have just a secration in the high air ways, but also some presented in the lower air ways. In a study made by Wright( 1998), was presented that the maternal suckling diminished the ricks taxes for infeccious respiratory's illnesses as pneumoniae, illnesses in the high air ways, bronchopnemoniae e bronchiolitis. Newman (1995) complements that these children are vulnerable do infeccious illnesses because, since they didn't use any motherly milk, they got not much ways to fight against ingested microorganisms, until they start to make the immunoglobulins IgA by their own, which can take from two weeks to months after the birth. This fact doesn't happen on suckled children, because they are receiving the immunoglobulins of the motherly milk.

**5- Conclusion**

With the results we got during this work, we can clonclude that the abandonment of motherly milk can take the baby to infantile malnutrition, recuding your imunity and causing the instalation of infeccious proccesses, specially in the respiratory's system. But these problems can br avoided or reduced through guides and indicated cares by a specialized team, with focus on

prevetion and health promotion.

We understand that, even with presentention of this work, it's necessary the realization of new researchs about this subject, since it is inclunding and scarce in literature.

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**REVELANT POINTS OF VIEW OF HEALTH PROFESSIONALS ABOUT PRECOCIOUS WEAN AND YOUR INFLUENCE ON THE RESPIRATORY SYSTEM.**

**ABSTRACT**

The precocious wean of breast feeding is that way considered when there is an introduction or replacement of other kinds of food in the baby's diet, before six months old. The interruption of motherly milk in that period may modify the metabolism, causing a reduction of infantile malnutrition and reduction of the respiratory's system defense, which results the instalation of infectious processes on it. The main subject of this work is make an analysis of precocious wean influence on the respiratory's system. Were evaluated twelve interned children in Centro de Nutrição Infantil of Foz do Iguaçu, between 2 months and one year and half years old. The results indicates that 66,6% of the children had precocious wean, being 87,5% of them malnutrited and 62,5% anaemic; 62,5% shows secretion in the higher air way and 37,5% in the lower. With these statistics, we can conclude that precocious wean can bring infantile malnutrition, anaemic and problems with the respiratory's system, and they may be avoided or reduced by guides and constant education of a specialist team, with focus on prevention and publicity of health.

**Key-words**: precocious wean, motherly milk, respiratory's system

**POINTS DE VUE IMPORTANTS DES PROFESSIONNELS DE LA SANTÉ RELATIFS À L'ARRÊT PRÉCOCE DE L'ALLAITEMENT MATERNEL ET À SES INFLUENCES SUR LE SYSTÈME RESPIRATOIRE**

**RÉSUMÉ**

On considère que l'arrêt précoce de l'allaitement maternel survient lorsqu'il y a introduction ou substitution d'un autre aliment dans le régime alimentaire du nourrisson avant l'âge de six mois. Le sevrage maternel, dans cette période, peut causer des altérations dans le métabolisme, mener à une dénutrition infantile, diminuer la défense immunologique et provoquer des altérations dans le système respiratoire, entraînant chez le nourrisson l'apparition et l'installation de processus infectieux. L'objectif principal de cette étude est l'analyse des influences du sevrage précoce sur le système respiratoire. Elle porte sur douze enfants hospitalisés au Centre de Nutrition Infantile de la ville de Foz do Iguaçu, enfants âgés de deux mois à un an et demi. Les résultats observés sont les suivants : huit enfants du groupe qui ont été sevrés et parmi eux sept enfants (87,5%) ont présenté des signes de dénutrition, cinq enfants (62,5 %) de l'anémie; cinq enfants (62,5 %) des infections respiratoires des voies supérieures et trois enfants (37,5 %) des voies inférieures. Grâce à cette étude il est possible de conclure que le sevrage peut entraîner la dénutrition, l'anémie et l'infection du système respiratoire. Toutes ces complications pourraient être évitées ou leur effets, du moins atténués, par la mise en place d'une équipe multidisciplinaire chargée d'aider et d'éduquer les personnes en

se focalisant sur la prévention et l'information sanitaires.

**Mots clefs :** sevrage précoce, lait maternel, système respiratoire

**LOS ASPECTOS RELEVANTES PARA PROFESIONALES DE LA SALUD EN EL DESTETE PRECOZ DEL AMAMANTAMIENTO MATERNAL Y SU INFLUENCIA EN EL SISTEMA RESPIRATORIO**

**RESUMEN**

El destete precoz del amamantamiento maternal se considera así, cuando se tiene la introducción o substitución de cualquier alimento en la dieta del lactante, antes de los seis meses de edad. La interrupción de la leche maternal en este período, puede causar alteraciones en el metabolismo, provocando desnutrición infantil, reducción de defensas inmunológicas y alteraciones en el sistema respiratorio, ocasionando la instalación de procesos infecciosos en el mismo. Teniendo como objetivo principal del trabajo, analizar las influencias del destete precoz en el sistema respiratorio, fueron evaluados doce infantes internados en el centro de nutrición infantil de la ciudad de Foz de Iguazú, entre la faja ectária de dos meses a un año y medio de edad. En los resultados analizados verificamos que 66.6% de los infantes fueron sometidos al destete precoz, siendo de estos 87,5% desnutridos, 62,5 % anémicos; 62,5 % presentaron infecciones en vías aéreas superiores y 37,5 %, infecciones en vías aéreas inferiores. Con este estudio fue posible concluir que el destete precoz del amamantamiento maternal puede llevar a desnutrición, anemia y comprometimiento del sistema respiratorio, estas complicaciones pueden ser prevenidas o disminuidas por medio de orientaciones y de la educación permanente de un equipo multidisciplinar,enfocando la prevención y la promoción de la salud.

**Palabra-llaves:** destete precoz, leche maternal, sistema respiratorio.

**ASPECTOS RELEVANTES AOS PROFISSIONAIS DA SAÚDE SOBRE O DESMAME PRECOCE DO ALEITAMENTO MATERNO E SUA INFLUÊNCIA NO SISTEMA RESPIRATÓRIO**

**RESUMO**

O desmame precoce do aleitamento materno é assim considerado, quando há introdução ou substituição de qualquer outro alimento na dieta do lactente, antes do seis meses de idade. A interrupção do leite materno neste período pode causar alterações no metabolismo, levar a desnutrição infantil, diminuição da defesa imunológica e alterações no sistema respiratório, acarretando a instalação de processos infecciosos no mesmo. Tendo como objetivo principal deste trabalho, analisar as influências do desmame precoce no sistema respiratório, foram avaliadas doze crianças internadas no Centro de Nutrição Infantil da cidade de Foz do Iguaçu, entre a faixa etária de dois meses a um ano e meio de idade.Nos resultados analisados, verificamos que 66.6% das crianças foram submetidas ao desmame precoce, sendo destas 87,5% desnutridas, 62,5 % anêmicas; 62,5 % apresentam infecção em vias aéreas superiores e 37,5 %, infecção em vias aéreas inferiores. Através deste estudo foi possível concluir que o desmame precoce do aleitamento materno pode levar a desnutrição, anemia e comprometimento do sistema respiratório, podendo essas complicações serem evitadas ou diminuídas por meio de orientações e educação permanente de uma equipe multidisciplinar,enfocando a prevenção e promoção da saúde.

**Palavras-chaves:** desmame precoce, leite materno, sistema respiratório.