

**23 - PHYSICAL THERAPY PULMONARY SERVICE FOR CHILDREN IN MUNICIPAL UNITS OF HEALTH**

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**INTRODUCTION**

Infant respiratory diseases are characterized by compromising one or more portions of the child's respiratory tract, which is caused by different factors, such as virus, bacterias, allergenics, traumas and chemical and physical agents. In developed and under development countries, it is estimated that 25% to 33% of the total of deaths observed in the first five years of life may be caused by acute respiratory infections. The acute diseases of inferior air ways are the main reasons of maintenance of the high rates of mortality in the first five years of life (BENICIO et al., 2000; PRIETSCH et al., 2002; VAZQUEZ et al., 1999).

The great social - economic inequality that occurs in Brazil, particularly in the northeastern region, reflect in the important role that infectious diseases represent as causes of diseases and death in children, specially those with less than 5 years of age. Among the risk factors, some others may be evidenced, such as: environmental conditions (seasonality, agglomeration, atmospheric pollution, domestic pollution and smoking), that are highlights in the cause chain effect of these diseases (PRIETSCH et al., 2002; VAZQUEZ et al., 1999).

The respiratory physical therapy is the area in physical therapy that uses kinesiological and mechanical resources in the treatment of patients, with the goal of promoting prevention, cure and rehabilitation from the pneumopathies. In the same way, it acts with the objective of mobilizing secretions caused by the incorrect humidification of gases, presence of secretion viscosity, hypoxemia and limited mobility, or even immobility (PAPA; TRIMER, 2000; SEPÚLVEDA; GASTALDI; CARVALHO, 1994).

The role of the physical therapist in the intervention alongside these patients is to make a bronchial disobstruction, promoting respiratory reeducation, through relaxation and posture exercises and the use of an inhaler, besides producing respiratory movements through ventilatory maneuvers and patterns that favor the diaphragmatic mechanics. The respiratory physical therapy can act in prevention and in the treatment of pneumopathies, using different techniques and therapeutic procedures in ambulatory, hospital or intensive therapy levels. These techniques have the goal of establishing or reestablishing a functional respiratory pattern, reducing the energetic waste during respiration and capacitating the individual in realizing different activities of daily life without promoting harsh upheavals and negative repercussions in their organism (MORIYAMA; GUIMARÃES; JULIANI, 1999; WILD et al., 2005).

The Brazilian Constitution states that "health is a fundamental right of the human being, and it is the public power's duty (Union, States, Federal District and Cities) to ensure this right, through social and economic policies that aim the reduction of risks of falling ill and dying, as well as the universal and equal access to actions and services of promotion, protection and recuperation of health". The Constitution foresees in it's Article 196, the universal and equal access to health actions and services, with regionalization and hierarchy, participation in the community and integral services, with priority to preventive activities, without prejudice of assistance services. In the same way, the Child and Adolescent's Statute affirms that the "duty of the family, society and the State is to ensure the child and adolescent, with absolute priority, the right to life, health, food, education, leisure, professionalization, culture, dignity, respect, liberty and community and family experience, besides keeping them safe from all types of negligence, discrimination, exploration, violence, cruelty and oppression" (CONSTITUIÇÃO FEDERAL BRASILEIRA, 1988; ESTATUTO DA CRIANÇA E DO ADOLESCENTE, 1990).

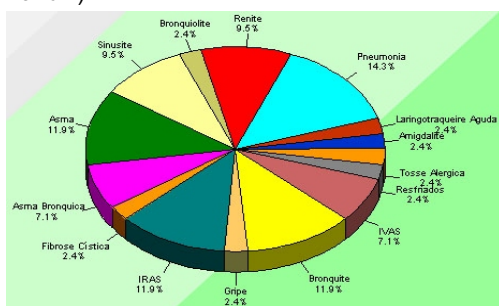
This project had the following goals: collect demographic data about the population of children attended in the basic health care system of Natal; get to know the necessity of services in the area of respiratory physical therapy for the community; and, ratify the benefits generated to the population (community) with the implantation of a service of this nature.

**METHODOLOGY**

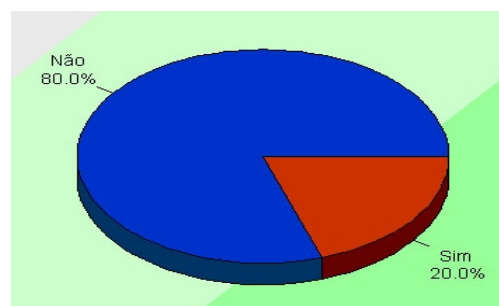
This research is characterized as being descriptive, a survey research, seen that the goal is to generate data about a specific theme. In the research of data generation, the researcher attempts to determine present practices or opinions of a specific population (THOMAS; NELSON, 2006; LISBOA; ABREU; CARVALHO, 2005). The Health Units of the South and East Districts of Natal were evaluated, the surveys were directed specifically the pediatric doctors. The purpose was to verify the existence of needy children with respiratory problems and the necessity of physical therapy service to attend them.

**RESULTS**

According to the presented data, it was verified that in 60% of the health care units, there is a total of approximately 1120 children attended per month, with an average of 224 children a week. In general, the respiratory pathologies with the biggest incidence in the Health Units researched were: 14,3% pneumonia cases, the IRAS, asthma and bronchitis were 11,9%; and, the rhinitis and sinusitis were 9,5% of the cases. It was verified that of the children evaluated daily in the Health Units, 60% did not receive physical therapy treatment and that in 80% of the units, there is not a physical therapy professional to treat the children (See graphs 1 and 2).

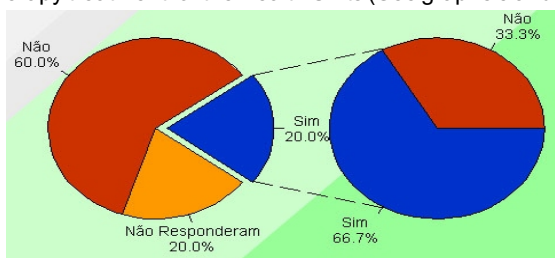


Graph 1-Pathologies of greater incidence

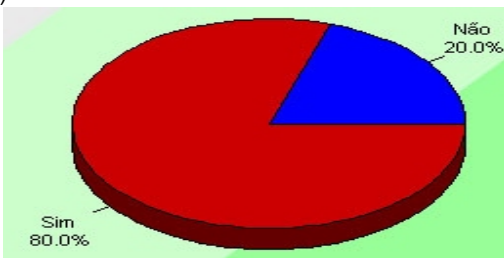


Graph 2-Existence of Physical Therapist

The results showed that 100% of the interviewees affirm that there is a need for physical therapy treatment for the children. On the other hand, 60% said that there is no physical therapy service that has an accord with the Health Unit. With these results, 80% of the interviewees believed it was necessary for there to be a place (with or without accord) where there could be physical therapy treatment for the Health Units (See graphs 3 and 4).

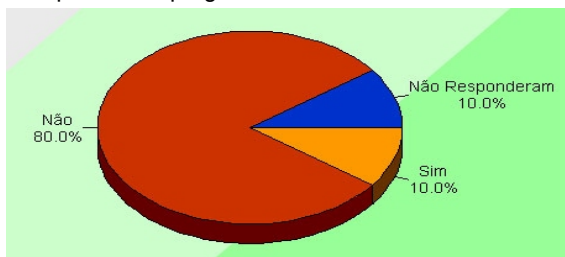


Graph 3-Existence of a service

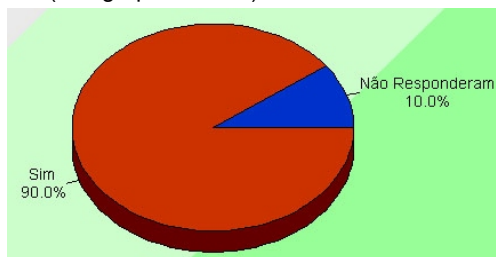


Graph 4-Necessity of a service

The participants were investigated about the importance, existence and necessity of a physical therapy prevention program for the care of children with acute and chronic respiratory problems. 100% of the interviewees considered important the existence of a program of prevention for children with acute and chronic respiratory problems in the Health Unit or according institution. 80% responded that there doesn't exist this kind of program or institution in the Units and 90% affirmed that there does exist a need of a prevention program in the health units or in an institution (See graphs 5 and 6).

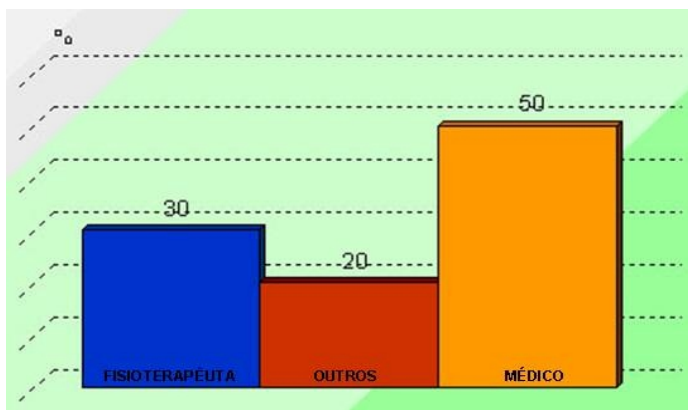


Graph 5-Existence of a service



Graph 6-Necessity of a service

When questioned about what kind of professionals should compose a team o prevention and treatment of children with acute and chronic respiratory problems in the health units, the most cited professional was the pediatrician, with 50% of indication, followed by the physical therapist with 30% of the indications and other professionals in the health area with 20% (See graph 7).



Graph 7- Professional in multidisciplinary team

Other results showed that in 30% of the cases, the accompaniment after attendance is of weekly effect. In 30% of the cases there is no accompaniment. Finally, when asked about material and medication support, 50% of the interviewees answered that there is no program of prevention for the gratuitous supplying of "bombs" or medication for the children with acute and chronic respiratory problems in the health units.

**CONCLUSIONS**

According to the answers obtained in the survey applied in the Health Units, it is possible to observe the actual necessity of the implementation of a respiratory physical therapy program for children with acute and chronic respiratory problems, because 90% of the interviewees affirmed that the necessity of a problem like this does exist.

It was also observed that 100% of the interviewees considered important for there to exist a prevention program for children with acute and chronic respiratory problems in the Health Units or Institution, and that there is a necessity of a place for physical therapy services that can reach the necessities of the Health Units, as well as the necessity of a physical therapist to attend the children. To be able to compose a multidiscipline team for services, it was verified that among other health care professional such as doctors, psychologists, nurses, etc., the physical therapist was voted second more important professional, with the largest number of indications, which clearly demonstrates the importance of this professional in the treatment of pathologies of the respiratory system.

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#### **PHYSICAL THERAPY PULMONARY SERVICE FOR CHILDREN IN MUNICIPAL UNITS OF HEALTH. ABSTRACT**

The acute diseases of the respiratory system are the main reasons of maintenance of the high mortality rates among children in their first five years of life. Among the risk factors, the environmental conditions can be evidenced (seasons, people gatherings, atmospheric pollution, domestic pollution and tobacco use), which play an important role in the causal chain of those diseases. The Child's and Adolescent's Statute reaffirms the "duty of the family, of the society and of the State in assuring the child and the adolescent, with absolute priority, the right to the life, to health, to feeding, to education, to leisure, to get a profession, to culture, to dignity, to respect, to freedom and the family and community coexistence, besides putting them safe of every negligence way, discrimination, exploration, violence, cruelty and oppression". This is a descriptive research of the survey type, and had the purpose of verifying the existence of poor children with respiratory problems and the need of a respiratory Physiotherapy service. Evaluations were performed in Health Units of the South and East Districts of the city of Natal in the state of Rio Grande do Norte. There are approximately 1120 children receiving medical assistance per month, with an average of 224 children a week. The pathologies with the largest incidence were the pneumonias and the IRAS, and in 80% of the health units physiotherapy services do not exist. The majority of the interviewees reinforced the idea that it is necessary to have a preventive service with a physiotherapist in the health team in the units of community service. There was a need of implementing a respiratory physiotherapy program for children with acute and chronic respiratory problems, because 90% of the interviewees reaffirmed the importance of this kind of program for the community.

KEY WORDS: Respiratory Physical Therapy; Poor Community; Health Units

#### **SERVICE DE KINÉSIOTHÉRAPIE RESPIRATOIRE RÉSERVÉ AUX ENFANTS DANS LES UNITÉS DE SANTÉ DES MUNICIPALITÉS.**

##### **RESUME**

Les maladies aiguës des voies aériennes inférieures sont les causes principales de la persistance des taux élevés de morbimortalité dans les cinq premières années de vie. Parmi les facteurs de risque, nous remarquons les conditions environnementales (saisonnalité, agglomération, pollution atmosphérique, pollution ménagère et tabagisme) qui jouent un rôle important dans la chaîne causale de ces maladies. Le Statut de l'Enfant et de l'Adolescent réaffirme le « devoir de la famille, de la société et de l'Etat d'assurer à l'enfant et à l'adolescent, en envisageant cela comme une priorité absolue, le droit à la vie, à la santé, à l'alimentation, à l'éducation, au loisir, à la formation professionnelle, à la culture, à la dignité, au respect, à la liberté et à la convivialité familiale et communautaire. On pourrait y ajouter le rôle de les sauvegarder de toutes les formes de négligence, discrimination, exploitation, violence, cruauté et oppression ». Cette enquête est d'ordre descriptive, du type recherche d'aperçu, ayant comme but vérifier l'existence d'enfants défavorisés porteurs de troubles respiratoires et qui ont besoin d'un service de kinésiothérapie respiratoire pour les assister. Les Unités de Santé réservées aux communautés défavorisées des districts du sud et de l'est, appartenant à la municipalité de Natal, état du Rio Grande do Norte. En somme, il y a approximativement 1120 enfants par mois qui ont été consultés, une moyenne de 224 enfants par semaine. Les pathologies qui ont la plus grande quantité d'incidence sont les pneumonies et les IRAS, et en 80% de ces unités de santé on a constaté l'inexistence d'un service de kinésiothérapie. La totalité des personnes interviewées ont renforcé l'idée de la nécessité d'un service de prévention avec la présence d'un kinésiothérapeute dans l'équipe de santé et à l'intérieur des unités de santé réservées à la communauté. On a observé aussi le besoin d'implantation d'un programme de kinésiothérapie respiratoire pour les enfants porteurs de troubles respiratoires aigus et chroniques, car 90% des interviewés ont réaffirmé l'importance de ce service pour la communauté.

MOTS-CLÉ: kinésiothérapie respiratoire; communautés défavorisée; service public.

#### **SERVICIOS DE KINESIOLOGIA RESPIRATORIA PARA CHICOS EN UNIDADES MUNICIPALES DE LA SALUD. RESUMEN**

Las enfermedades agudas de las vías aéreas bajas son los principales motivos de la manutención de altas tasas de morbimortalidad en los cinco primeros años de la vida. Dentre los factores de riesgo, se puede evidenciar las condiciones ambientales, sazonalidad, aglomeración, polución atmosférica, polución doméstica y el tabaquismo que se presenta mas

destacado en la cadeia causal de las doenzas. El Estatuto de los chicos y los adolescentes reafirma el “dever de la familia, de la sociedad y del Estado en asegurar a los niños y adolescentes, con absoluta prioridad, derecho a la vida, a la salud, a la alimentación, a la educación, a la diversión, a la profesionalización, a la cultura, dignidad, al respecto, a la libertad y convivencia, familiar y comunitária, tambien de poner los chicos y adolescentes livres de todas las formas de negligencia y discriminación, exploración, violencia, crueldad y opresión”. Esta investigación es descriptiva, del tipo levantamiento de datos (survey research) y con el objetivo de verificar la existencia de chicos carentes con problemas respiratórios y la necesidad de un servizo de kinesiologia respiratória que asista a ellos. Fueron evaluadas las unidades de la salud de los districtos sul y leste de la ciudad de Natal, Rio Grande del Norte. Hay cerca de 1120 chicos por el mes, com una media de 224 chicos por la semana. Las patologias con el mayor numero de incidencias fueron las neumonias y las IRAs y en 80% de los puestos de atendimientos no existe servizo de kinesiologia. La totalidad de los entrevistados reforza la idéia de que es necesario un servizo de prevencion con el kinesiologo en un equipo de salud, en las unidades de la asistencia comunitária. Se percibió la necesidad de la implantación de un programa de kinesiologia respiratória para los chicos con problemas respiratórios agudos y cronicos, pues 90% de los entrevistados reafirmaron su importancia para la comunidad.

PALAVRAS-LLAVE: Kinesiologia Respiratória; Comunidad Carente; Unidades de la Salud.

#### **SERVIÇO DE FISIOTERAPIA RESPIRATÓRIA PARA CRIANÇAS EM UNIDADES MUNICIPAIS DE SAÚDE RESUMO**

As doenzas agudas das vias aéreas inferiores são os principais motivos de manutenção das altas taxas de morbimortalidade nos cinco primeiros anos de vida. Dentre os fatores de risco, podem-se evidenciar as condições ambientais (sazonalidade, aglomeração, poluição atmosférica, poluição doméstica e tabagismo), que apresentam papel de destaque na cadeia causal dessas doenzas. O Estatuto da Criança e do Adolescente reafirma o “dever da família, da sociedade e do Estado em assegurar à criança e ao adolescente, com absoluta prioridade, o direito à vida, à saúde, à alimentação, à educação, ao lazer, à profissionalização, à cultura, à dignidade, ao respeito, à liberdade e à convivência familiar e comunitária, além de colocá-los a salvo de toda forma de negligência, discriminação, exploração, violência, crueldade e opressão”. Essa pesquisa é caracterizada como sendo descriptiva, do tipo levantamento de dados (survey research), e o propósito foi verificar a existência de crianças carentes com problemas respiratórios e a necessidade de um serviço de Fisioterapia respiratória para atendê-las. Foram avaliadas as Unidades de Saúde dos Distritos Sul e Leste do município de Natal no estado do Rio Grande do Norte. Existe um total de atendimentos de aproximadamente 1120 crianças por mês, com uma média de 224 crianças por semana. As patologias com o maior números de incidência foram as pneumonias e as IRAS, e em 80% dos postos não existe o serviço de fisioterapia. A totalidade dos entrevistados reforçou a idéia de que é necessário um serviço de prevenção com o fisioterapeuta na equipe de saúde, nas unidades de atendimento comunitário. Percebeu-se necessidade da implantação de um programa de fisioterapia respiratória para crianças com problemas respiratórios agudos e crônicos, pois 90% dos entrevistados reafirmaram sua importância para a comunidade.

PALAVRAS CHAVES: Fisioterapia Respiratória; Comunidade Carente; Unidades de Saúde.