07 - SWIMMING CLASSES FOR BABIES: THE MOTOR STIMULATION IN LIQUID ENVIRONMENT, FOR SOME BABIES, BETWEEN ZERO MONTHS AND SIX MONTHS OF AGE, WHO SHOWS DIFICULTIES IN RECUPERATING THE NATURAL PROCESS OF MOTOR DEVELOPMENT, CAUSED BY THE LOST OF EPIGLOTTIS'S REFLEX

ROSSANA DE VASCONCELOS PUGLIESE VITO (1)
HERON BERESFORD (2)
(1)Mestranda da Universidade Castelo Branco Rio de Janeiro/ RJ Brasil
Professora da Estilo Escola de Natação Rio de Janeiro/ RJ Brasil
ropugliese@terra.com.br
(2) Docente da Universidade Castelo Branco Rio de Janeiro/ RJ Brasil
Professor Adjunto da Universidade Estadual do Rio de Janeiro Rio de Janeiro/ RJ - Brasil
heronb@terra.com.br

INTRODUCTION:

Baby is a complex being, although being small at the beginning of his life, he carries a kind of "baggage" with him because of his genetic heritage brought from his parents and history of few days after his conception.

The motor development, inside the complex human development, occurs naturally in babies with an intact cerebral cortex, on which the growing and the development will take place in its plenitude, as long as no physical, psychological or social event interfere.

The motor development is the determinant factor to general development, because acquirement of motor skills is situated before thinking acquirement. Fonseca (1998) relates that motor skill is the means through which consciousness is edified and manifested, by the way it should be understood on its associative structure, which plans, elaborates, regulates, controls, executes and integrates because an appropriate development constitutes the way to an appropriate human intellectual development.

On his first's months of life, baby shows his reflexive movements making it the access way to voluntary movement. Around baby reflexes, one is really intriguing, the Swimming Reflex, in which the baby, according to McGraw (1939), when placed on fetal position, into the water, tends to flex arms and legs and mainly the baby is able to do apnea, which occurs owing to epiglottis block, called in the research as Epiglottis Reflex.

The reflex address to phylogenic rapport that exists between Men and water, as the Men evaluated from water to conquest of ground. Men's body is formed essentially of water. He passes nine months immersed in amniotic liquid that is water. "The water, our mother, is wishing to take part on our sacrifices and came to us persecuting its own way and gives us its milk.[…] The sea is maternal, water is a prodigious milk." (BACHELARD, 2002, p. 122 and 124)

On these terms, this research evidences the natural relationship between Men and water and sometimes this relationship is lost at birth. This is caused by the fact that after the birth, the baby has to adapt himself to ground environment, but that doesn't mean to ignore his natural source of life, his origins and essence the water. But, this occurs to some babies, the ones that have contact with liquid environment only during breastfeed and bathing that represents a moment of insecurity for the majority of parents because there is a people's belief that is dangerous for babies be exposed to the water.

Owing to the fact that motor development is the human basis development, it is defended that the idea that water is the most natural environment to provide baby's motor development, given that water is his natural element. Hence, the essence of the problem that has originated this research is the difficulty experienced by some babies since his birth until six months years old, aiming to recuperate in liquid environment the natural process of motor development since he had lost the Epiglottis Reflex.

As the author of this project is a physical education professional, working with baby's swimming classes, we can ask the question: How far can a theoretical and practical fundament be established, about conducts and motor behaviors development in liquid environment, to be especially concerning for babies between zero and six months years old that shows difficulties for recuperating the natural process of motor development caused by the lost of Epiglottis Reflex?

Therefore the present work regarded the hypothesis of Existencial Transubjective Phenomenology is necessary and sufficient to be as a reference for establishing a theoretical and practical fundament about conducts and motor behaviors, with motor stimulation on liquid environment, on human development context.

THE EXISTENCIAL TRANSUBJECTIVE PHENOMENOLOGY:

The basis of this paper is composed by a philosophical study. The aim and the method of philosophy are qualities that add to it a single and specific characteristic knowledge. "[…] it is not a simple verification, nor a description more or less fantasia, nor experimentation" (MONDIN, 1980, p. 8). The philosophical method is a logical justification, it is rational. Considering the specificity of the method, philosophy offers an explanation; very precise, using reason only, to what Greek has named logos.

The essence of philosophical method investigation is assured by logical statement, continuously present on this research, but the statement is relative, what really exists is the correspondence of real. So, as we are working with scientific statement, there should be some criteria, which can establish logical coherence to the work, avoiding contradictions.

The phenomenology was born among theoretical, political and cultural crisis, on the middle of 1930's.

Edmund Husserl (1859 1938) was the starter of the movement, and gave the old word a new concept; bringing a brand new credibility to philosophy.

Ferrater Mora (1981) says that, according to the philosopher Husserl, phenomenology is the looking theory, the basis of all empiric knowledge. Nowadays, the Husseline meaning of phenomenology is the main one and defines the Husseline Phenomenology as a method, a point of view. The method distinguishes natural intentional acts like an intentional nature and tries to reconsider scientific conscious data. The phenomenological consciousness regards a phenomenon as a data. So, this phenomenology is not empiric or intuitive it is an intentional conscious. On this perspective, intentional conscious is reduced until the essence of the phenomenon be founded. The phenomenology is the study of essences; it is a kind of act to draw back the curtains!

The Existencial Transubjective Phenomenology searches for knowing the life and the world of Being, even before knowing the Being himself. On Ortega Y Gasset's (1947) thought, in a circumstance context and on Merleau Ponty's (1999) thought, in a context of body language, the baby has been interpreted.

After interpretation and comprehension about baby's world and life in a context of circumstances (How is this baby family? How is his temper? How is his day-by-day life? And other questions) and body language (How is this baby behavior?), was made an eidetic reduction of the study, which leaded the present research to the investigation of the following phenomenon: the natural recovering of motor development, considering the lost of Epiglottis Reflex.

THE BABY:

What is being a baby? How is his perception of the world and of himself? The science can only answer these questions by inductions, analogies or deductions, as babies cannot say their feelings or perceptions, because they don't have conscious. Winnicott (1982, p.83) relates: "I have cogitated a way of describing babies as people. […] the baby edifies something out of everything."

Starting from the baby conception, when his development and growing is initiated; he will possess the genetic heritage from his parents and will gain through his life several stimuli that are going to be responsible for his formation.

On this context, a baby born from a desired pregnancy, with a healthy gestation, having a well pre-birth accompaniment, will have a calm and healthy intra uterine development. At the end of the nine months, body proportions are harmonized: the body adapts to uterine strong compression as delivery comes closer, then placenta opens, mucosal large cover falls, delivery starts and from this moment, an adaptation to a breathing life on air is consolidated, the fetus is ready. According to Fonseca (1998):

'The water's exit are going to stay behind, the land conquest is initiated!' The phylogenies are recovered in most part (from ameba to fish the intra uterine development is, in a certain way, the historical recapitulation of specie. It is curious that human development is, at least on its intra uterine evolution, impressively like others life way of development. 'The human fetus is a transformed fish' is it the sense of life unity?) (P.138, we subscript).

After the birth, comes what is called Neonatal Period, in which the necessity of the newborn survive by himself only requires several new demands of his physical system. The Neonatal Period happens between the first and the fourth weeks of baby's life; and it is the transition period of intra uterine life, when fetus is entirely protected by his mother to an independent living. Papalia & Olds (1998) affirm that:

Before birth, his blood circulation, his breathing, the ways of ingesting nutrients, the ways of eliminating dejects and the regulation of temperature was controlled by the mother's body. After the birth, he must develop all these functions alone. And he does it so well that nobody notices. He will not suffer another change like this again (p.131).

Leaving the placenta, a liquid environment, to the ground, a gas environment, the birth phenomenon brings the beginning of the breathing or a breathing adaptation that the newborn has to suffer:

A well succeeded transition of breathing pulmonary system from fetus stage to newborn stage determines how newborn survive. The fetal lung's suffers anatomic, physiologic and biochemical development during the gestation, so that, the air ways (but not the alveolus) are totally developed and the lungs are full of fetal pulmonary liquid. While fetal movements breathings, gas's changes are made by placenta. (MOSS apud OSKI et al, 1992, p. 347).

Considering the vital lacks of the baby, the suckle offers an opportunity to establish the communication between mother and her baby and also gives the baby the necessary nutrient for life, Winnicott (1982, p.103) has an opinion about this: "[…] the principle of baby's emotional development is maintained and consoled by rapports that he might have with the mother, ideally, or another person at the beginning. Who else is going to feel and give what is necessary?"

Nobrega (2002), in a research about nutritional importance of maternal milk, adds that suckle, is more than an good organic development maker, it is a empowering of a maternal liaison, which proposes moments of pleasure to the mother and her baby letting mother knows, day after day better her baby. And curiously, he affirms that the mother's suckle gland has the capacity of adjusting according to baby's necessities, changing its different component's concentration in order to be more adequate to child's characteristics.

Moreover, through suckle the baby will get benefits carried for all of his life. Calvano (2002, p.90) made a research about the immunological system of maternal milk and relates: "The immunological components of maternal milk are formed of antimicrobial, anti-inflammatory and immune-modular factors."

Another fundamental point to this research is the fact that a newborn, neonate and little baby is capable of perception on the contrary of what was considered before, because recent techniques to observe and register baby's reactions to many stimulus are breaking down old suppositions: "The baby's mind is constantly, giving its

firsts steps on physical universe. […] Perceptions are complex schemes of behaviors based on how he reacts to things. The baby is not born with perfect perceptions they develop it." (GESSELL, 2003, page 12)

MOTOR DEVELOPMENT:

The motor development is basic to baby's human development, these are degrees to be win, step by step, new conquests are achieved, where two hands between way through body and mind are, baby is able to form initial cognitive stages.

Philogenically, the specie is regarded as a biological and genetic continuity, it means that: "segment of a line, an ancestral sequence, descendent therefore, from a biological population which is integrated with temporal dimension and with genetic change" (FONSECA, 1998, p. 25). Believing that the Men, originally, came from the water to conquest the ground, therefore it is fundamental to understand water as a natural element of life.

On this perspective, comprehending all the axioms of motor skill ontogenesis, it is noticed that a baby start to know the world from stimulus that are offered to him, through objects and people. Fonseca (1998, p. 145) emphasizes that: "On intra uterine development, the motor skill comes before sensibility; that is why the child stands when seeing an object, because he develops early visual-motor and audio-motor connections."

The first motor behavior of a baby is reflex, from it he learns how to command his movements using a "unscramble" process (GALLAHUE E OZMUN, 2003) so; the movement is now voluntary through reflex advantage.

If the reflex is not used, it disappears. Researches realized by Zelazo (1976) asserts this conclusion regarding advantages took from locomotors reflexes on voluntary reflex:

The reflex disappearance happened because of its non use. Period of reflex inhibition before voluntary ability appears was unnecessary and systematic stimulus of locomotors reflexes can improve an acquirement of voluntary locomotion on baby's movements. (ZELAZO, 1976 apud HAYWOOD E GETCHELL, 2004, page 99 we subscript).

Thus, caused by this non use, baby loses his epiglottis reflex, through which he is capable of, according to McGraw (1939), when he is in fetal position, on water contact, flex and extend arms and legs and also block breathing.

The epiglottis has capacibility to adapt superior larynges orifice, mechanism that can defend inferior breathing ways from alimentary particles. The Epiglottis Reflex makes baby develop the same kind of block avoiding water to pass to breathing ways.

THE MOTOR DEVELOPMENT IN LIQUID ENVIRONMENT:

With Epiglottis Reflex advantage, baby will be naturally capable of dominate contact with liquid environment, developing it in a way that he is protected from swallow water and that also allows him to make movements with his superiors and inferiors members, pleasurably.

The water in a metaphysical perspective, symbolize life and death. Bachelard (2002) was a philosopher and a poet, who has most discussed about water. On his works he refers to water as a milk of life, it is the closest reference of maternal womb.

The water has the capacity to involve whole baby's body, increasing the sensibility sensation that can be achieved with propioception. On this matter some authors gave their contributions, as it is described below:

Le Camus (no date, p.86), says that water allows Men to access an environment of impression and expression which is very rich: "[…] el medio acuatico como mundo de la impression sensorial, como mundo de la impression motriz, o sea como o mundo de la experimentación de la inteligencia práctica." He also adds that water has the capacity of awake and exercise the feelings.

Ahrendt (2002), p.65) referring to concept of early stimulus in the water, he says that: "it is an invitation to future development, because it is a kind of stimulation that evolves motivation, unchain, initiating challenges on new movements […]. Some perceptions discover the instinct and the desire of movement."

Even Peréz (no date, padeje 40) says that: "El niño está condicionado a ser educado hacia el dominio Del médio terrestre, pudiendo desarrollarse de forma más global com la práctica de lãs actividades acuáticas, gracias a la possibilidad que le ofrece este médio de moverse y orientarse en, y con, todos sus sentidos."

Cirigliano (1998) complets saying that:

El recién nacido normal esnaturalment 'incompetente' en varios aspectos y seguirá siendo evolutivamente dependiente durante un par de años; no obstante, desde el principio pondrá en juego su "equipo" de supervivencia y entrará en el circuito comunicacional que realimente la integración paulatina de su viada mental y física a través Del amor y los cuidados Del adulto (p. 28).

The motor stimulation in liquid environment is made by several exercises which contain balances, jumps, turns, different dislocation position, manipulation of many objects, boby touches, different catches sensibilities, massages, musicality and freedom to body discovery and always allowing the propioception.

CONCLUSION:

The essence of the problem that originated the present research is the difficulty through which some babies' stages, since his birth to six months years old, when he has to recuperate in liquid environment the natural process of motor development caused by the lost of Epiglottis Reflex. We can say that this problem is almost solved if baby is comprehended in the complexity of a Being who has a life, a world and a body. Through that point of view baby can be provided with liquid contact since his first month of life.

The contact with liquid environment becomes necessary, owing to Men phylogenies and due to the Epiglottis's Reflex phenomenon; on this context, one can affirm that this baby needs contact with water to decrease

the birth impact, because the birth implies a change from a liquid environment to a gas one, suddenly. Having its origin on water, being formed of water essentially and passing nine months immersed on water (amniotic liquid) the first contact with water allows a natural arrive in the new world.

On this terms, the healthy baby, and satisfactorily suckled (owing to the protection that milk offers), can take part of motor stimulus process on liquid environment, what we call swimming for babies, together with the mother. She has to participate entering in the swimming pool with her baby to be both guided by a Physical Education professional.

That practice will allow to reduce impact suffered by baby on birth, and will be possible through the Epiglottis Reflex advantage, which will take place in a warm pool (hygienically treated to do so) where the mother and her baby are going to be submitted to maternal ventral situation, together, allowing a natural development on terms of baby's natural human motor development.

Understanding that motor development is human or global development basis, baby will have this basis reinforced and potentially increased.

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CONTATOS:

Rossana de Vasconcelos Pugliese Vito.
Universidade Castelo Branco - Rio de Janeiro/ RJ - Brasil
Rua: Marica, 518/ Praça Seca Jacarepaguá/ Rio de Janeiro RJ - Brasil.
Telefone: (21) 2464- 5223 / (21) 9926- 1244
ropugliese@terra.com.br
Orientador: Heron Beresford heronb@terra.com.br

SWIMMING CLASSES FOR BABIES:

THE MOTOR STIMULATION IN LIQUID ENVIRONMENT, FOR SOME BABIES, BETWEEN ZERO MONTHS AND SIX MONTHS OF AGE, WHO SHOWS DIFICULTIES IN RECUPERATING THE NATURAL PROCESS OF MOTOR DEVELOPMENT, CAUSED BY THE LOST OF EPIGLOTTIS'S REFLEX

ABSTRACT:

The neonate baby is adapting in extra uterine life and he has been born with or has developed a repertoire of reflexes that allows him to live in this new cosmos on his first's months of life. The motor development is the human development basis. It is through the body that Human Being is capable of discover the world that surround him. The reflexes form the first stage of motor development, which can become voluntary movements or be lost according to its use. About baby's reflexes, since his birth to six months years old, it is found the Epiglottis Reflex. This kind of

reflex allows babies to extend and flex legs and arms, and also to block his breathing when he is immersed. Concerning this fact to phylogenies of human motor skills that explains the human has changed from the water to the ground, from the aquatic species to the terrestrial species. This research approachs babies's motor development in liquid environment, trying to decrease impacts suffered by them and to recuperate the natural and sequential process of intra uterine motor development, relating to Existencial Transubjective Phenomenology to explain this phenomenon. KEY WORDS: Phenomenology; Motor Development; Epiglottis Reflex

NATATION POUR LES BÉBÉS:

LA STIMULATION MOTRICE AU MILIEU LIQUIDE, POUR DES BÉBES, PARMI L'ÂGE DE ZÉRO ET SIX MOIS DE VIE, QUI MONTRENT DES DIFFICULTÉS À RÉCUPÉRER LE PROCESSUS NATUREL DE DÉVELOPPEMENT MOTEUR, À CAUSE DE LA PERTE DU RÉFLEXE DE L'ÉPIGLOTTE

RÉSUMÉ:

Le bébé nouveau-né se trouve em adaptation à la vie extra-utérine et naît avec, ou développe au début de sa vie, une suite de réflexes qui le permet vivre dans cette nouvelle ambiance. Le développement moteur est la base pour le développement humain et à travers son corps, l'Être Humain devient capable de découvrir le monde qui l'entoure. Le premier niveau de développement moteur est composé par les réflexes, ceux qui peuvent devenir des mouvements volontaire ou être perdus, à cause du non-usage. En ce qui concerne les réflexes du bébé, parmi l'âge de zero et six mois de vie, il y a le Réflexe de l'Épiglotte qui permet le bébé plier et étendre ses bras et ses jambes et arrêter sa respiration, quand il est immergé. Ce travail s'appuie à la théorie de la Filogénèse de la Motricité Humaine qui affirme que l'homme a évolué de l'eau pour la terre et a passé de l'espèce nageuse à la terrestre. Cet étude montre une recherche sur le développement moteur au milieu liquide des bébés pour les aider à diminuer les impacts soufferts et récupérer naturellement et avec séquence le processus de développement moteur intra-utérin, selon la Phénoménologie Existencielle Transsubjective.

MOTS CLÉS: Phénoménoligie ; Développement Moteur ; Réflexe de l'Épiglotte

NATACIÓN PARA BEBÉS:

LA ESTIMULACIÓN MOTORA EN AMBIENTE LÍQUIDO, PARA ALGUNOS BEBÉS, EN LA EDAD DE ZERO A SEIS MESES DE VIDA, QUE PRESENTEN DIFICULTAD EN RECUPERAR EL NATURAL PROCESO DE DESARROLLO MOTOR A CONSECUENCIA DE LA PÉRDIDA DEL REFLEJO DE LA EPLIGOTIS.

RESUMEN:

El bebé neonato se encuentra en adaptación a la vida extrauterina y nace con, o desarrolla en los primeros meses de vida, un repertorio de reflejos que le permite sobrevivir en este nuevo cosmos. El desarrollo motor es la base para el desarrollo humano. A través de su cuerpo, el Ser Humano es capaz de descubrir el mundo a su alrededor. Los reflejos constituyen la primera etapa de desarrollo motor, los cuales pueden ser transformados en movimientos voluntarios o pérdidos, en consecuencia del desuso. En medio a los reflejos del bebé, en la edad de zero a seis meses de vida, se encontró el Reflejo de la Epiglotis, lo cual permite que el bebé estire y flexione los brazos y piernas y bloqueye la respiración cuando sumergido. Relacionando ese hecho a la filogenia de la motrocidad humana, la cual explica que el Homen evolucionó en el sentido del agua para la tierra, pasando de una especie natatoria a una terrestre, el presente estudio trató del desarrollo motor en ambiente líquido de estos bebés, con el objetivo de reducir los impactos sufridos por ellos, recuperando el natural y secuencial proceso de desarrollo motor intrauterino, procediendo de la Fenomenología Existencial Transubjetiva para explicar tal fenómeno. PALABRA LLAVE: Fenomenología; Desarrollo motor; Reflejo de la epiglotis

NATAÇÃO PARA BEBÊS:

A ESTIMULAÇÃO MOTORA EM MEIO LÍQUIDO, PARA ALGUNS BEBÊS, NA IDADE DE ZERO A SEIS MESES DE VIDA, QUE APRESENTEM DIFICULDADE EM RECUPERAR O NATURAL PROCESSO DE DESENVOLVIMENTO MOTOR, EM FUNÇÃO DA PERDA DO REFLEXO DA EPIGLOTE

RESUMO:

O bebê neonato encontra-se em adaptação à vida extra-uterina e nasce com, ou desenvolve nos primeiros meses de vida, um repertório de reflexos que lhe permite sobreviver neste novo cosmos. O desenvolvimento motor é a base para o desenvolvimento humano. Através do seu corpo, o Ser Humano é capaz de descobrir o mundo à sua volta. Os reflexos formam o primeiro estágio do desenvolvimento motor, os quais podem ser transformados em movimentos voluntários ou perdidos, em função do desuso. Em meio aos reflexos do bebê, na idade de zero a seis meses de vida, encontra-se o Reflexo da Epiglote, o qual permite que o bebê estenda e flexione braços e pernas e bloqueie a respiração, quando imerso. Relacionando tal fato à filogênese da motricidade humana, a qual explica que o Homem evoluiu no sentido da água para a terra, passando de uma espécie natatória a uma terrestre, o presente estudo tratou do desenvolvimento motor em meio líquido, destes bebês, a fim de minimizar os impactos sofridos pelos mesmos, recuperando o natural e seqüencial processo de desenvolvimento motor intra-uterino, partindo da Fenomenologia Existencial Transubjetiva para explicar tal fenômeno.

PALAVRAS CHAVES: Fenomenologia; Desenvolvimento Motor; Reflexo da Epiglote.