125 - THE EFFECTS OF THE AQUATIC EXERCISES IN SEA, AS STRATEGY FOR THE IMPROVEMENT OF THE BALANCE IN SENIOR SENILE.

JAUNILSON FRANCISCO DA CRUZ
LEILA WAGNER BORGES
University Veiga of Almeida-Cabo Frio- RJ-Brazil.
jaufcruz@uol.com.br

SUMMARY
The objective of this study was to verify the difference among the balance in seniors submitted to aquatic exercises in sea, with the use of aquatic exercises in swimming pool, as much as the mechanisms proprioceptive for the process of information, with base in measurable processes, when they are considered the presented maladjustments, characteristic of his/her deficiency proprioceptive for the balance. Found in a technician-didactic-pedagogic program that it unchains incentives of functional complementation and quality of life, it intends to interfere in the condition of having destabilized, for a profile of balance body-mind, for an integration of the motive activity with the construction of the knowledge of his/her own body and better adjustment proprioceptive. The process that involves the problem of the mechanisms proprioceptive and of balance in disagreement with the senior's needs-65/75 years, it exhibits an approach between this senior one and the committed individual with this need, in this case, a professional of the area of the human behave, in what concerns to interventions solved defined, for the quantitative of inferences that the process predisposes. There is an estimate possibility that the balance lack in seniors is due to the decrease, or no acquisition of mechanisms movement and specific exercises for the maintenance of the balance during his/her social life, where it will be made a composition of these activities that you/they were presented in swimming pool (Cruz, 2000), for they be presented in sea. The senior is “fragile” in function of his/her muscular without structure no maintained in acceptable levels for the fitness/performance of a safe march, considering to be the middle in that he lives decisive and added difficulty for his/her fall, in function of mechanisms inadequate movement. Like this being, it should be looked for resources through of those mechanisms and/or of environment, to understand the intrinsic phenomena to the process, in the sense of contributing with intervening mensurations, indicating acceptable possibilities and manipulativas, accessible to the socioeconomic differences, in order to minimize the balance lack and to increase the propriocepção in seniors 65/75 years.
Word-keys: Balance - Aquatic Exercises - Senior.

I. INTRODUCTION

As she have been observing has been for the senile senior a constant concern-more commonly in female people-the fact that, with the decrease of activities (of whole and any type), it can happen the possible decrease of his/her balance-common in this age.

The decrease of the balance can happen due to the decrease of the mechanisms movement and/or inadequate invigoration of the musculature of the apparel locomotors. (Cruz, 2005).

Longitudinal and traverse studies have been revealing a series of transformations that you/they happen with the aging process. Among the variables that motivate such transformations, we can mention the related with the intrinsic mechanisms of our organism and the related with extrinsic organic factors. Besides, relative data to studies in the area of human physiology have been indicating a series of factors that you/they can interfere in the aging process, as prevention element. The physical activity can, without a doubt, to be outstanding as one of those elements.

In fact, the gerontological literature (science that studies the problems of the old ones under all their aspects: biological, clinical, historical, economical and social), it is accumulating evidences that senior people, when submitted to programs of physical training, they can, significantly, to improve their organic functions and basic valences.

Sprint, 129 - 2003, he/she tells on Bortz (1980) that supplies data that support, clearly, the results of Robinson's studies (1976). After submitting a group of “fifty-year-old” inactive to a program of physical conditioning, Bortz showed that the group was capable to recover the index of equivalent VO2 to the index shown to the 40 years of age.

Cruz (2003) he/she also brings reports about aquatic physical activities accomplished in swimming pool with significant results in what concerns to the improvement of the propriocepção in senior.

For being one of the most observable characteristics in the senior, the physical inactivity it has been mentioned commonly as a factor that collaborates, significantly, with the aging process. Examining this relationship, we observed that from a lot of formerly this is a preoccupying factor. Barry, (1966) it verified that an appropriate program of physical training interfered, in a beneficial way, in their patients' cardiovascular variations, whose ages varied between 55 and 78 years. One of the most significant results of the study driven by Barry, it was considerable reduction of the systolic sanguine pressure (PSS) of the group (in it measured of 20 mm/Hg). Barry ended, in their studies, that the high level of PSS before the training lost temper with the practice it continues of exercises.

Maybe the subject more commonly done formulate with relationship á physical activity of senior people is: “can the seniors usually train?” Certainly, the answer of the subject needs to be structured with base in a series of factors others that no the one of the cardiovascular variations. This factors can be considered as being of physiologic nature, as it is the case of vestibular hypersensitivity (which is, usually, demonstrated by the tendency of the senior people to the unbalance) and of the hypotension postural, besides the psychological problems, including desmotivação, fear of heart attack and immediate fatigue (as a result of the deterioration of the cardiovascular system). However, in spite of possible contraindications, when prescribed in an appropriate way, a program of physical exercises can be of fundamental importance for the organic and functional stability of any individual. Consequently, advanced age should not be considered an obstacle his/her á practice. The important, to be observed before the engagement in a program of physical exercises, especially in if taking care of senior people, they are the rules that should orientate the individual's participation in a program of this nature. Basically, the rules are: 01 - before the engagement in the program, the cardiovascular limitations should be clinically, appraised; 02-the exercitação should be primarily, comfortable and pleased; 03 - after the 40 years, the end of the athletic perfection should not be stimulated. Besides these observations, individual and historical differences of health need to be equally, considered, once the reaction between the chronological age and the biological of an individual, it cannot be proportional.

Several studies, related with the engagement of senior people and of middle age in physical works of appropriate intensity, they reveal that such exercises can benefit those individuals' cardiovascular functions, in a quite significant way, through an adaptation.

Improvement in the quality of life has been mentioned commonly as one of the most probable benefits that the physical activity to regulate can provide to an individual. Such a supposition, however, it is based on data originating from of evidences of experimentations laboratories, relating physical exercises and won physiologic of senior people.

The purpose of this work is not to assume that the physical inactivity would lead to a premature aging. The emphasized point is that a sedentary organism can be shown more accessible to illnesses than an active organism. Consequently, the benefits of the physical training are faced more as being of function, conditionally, preventive that it improves the cardiovascular and functional functions and it prevents complications.

Statistics, showing that physical exercises can prolong our life cycle, they are not enough to motivate an individual's

participation in programs of this nature. But it is with that quality that these individuals will age is that it denotes these individuals' need if they engage her/it a program of this type.

The subject of the difficulties proprioceptives and of the difficulties presented by the lack of physical conditioning for execution of the daily activities, it has been prominence for the formulation for a program of physical activities, that he/she gives subsidy to the senior so that these, don't come to have falls, getting better like this, his/her balance (Cruz, 2005).

Being noticed that many senior they suffer enormous consequences with the falls happened in his/her day by day, in function of an instability muscle-to articulate, and thought about a way of improving those individuals' balance, starting from the elaboration of a program of aquatic exercises, in order to minimize the loss of the balance, it is objective of this work to use this program of aquatic exercises in the sea.

II-REVISION OF LITERATURE

The aging constitutes the sum of alterations anatomical, physiologic and emotional that happens gradually along the life, being impossible to know the exact moment in that it begins.

With the age, all of the organs lose, in way gradual, good part of his/her functional capacity. This loss is variable of individual for individual and it depends on factors environmental, genetic and psychic, as well as of the occurrence of chronic diseases. In that way, the senior, face to his/her low functional reservation-mainly concerning the apparels cardiovascular, breathing and central nervous system-, it is more vulnerable to the aggressions of every order that can constitute causes of diseases, with alterations a lot of times in other organs that no the primarily committed.

In spite of the sensibility to the pain to be reduced in the senior, face to his/her somatic weakness and psychic labiality, as well as to the frequent occurrence of the maladjustment in the family atmosphere, most of the times he comes poliqueixoso, pessimist and little communicative. Like this, his/her universe presents own characteristics, that you/they make his/her semiological exploration to present peculiarities. The clinical manifestations of several diseases, basically same in the adults and young, they are uttered in the senior patients in a different way, with insidious symptoms, unspecific and even atypical, a lot of times showing in organs no reached by the primary disease. In this matter, he/she stands out the compromising of the Central Nervous system that it happens in almost all of the diseases. Also the coexistence of more than an affection in about 50% of the senior population he/she does with that the symptoms of the current disease are affected for the preexistent or for drugs used in his/her treatment.

The difficulty of those patient ones to tell a clinical history needs and to collaborate appropriately during the physical exam it turns difficult the diagnostic evaluation.

In spite of that, the clinical history should be taken of the own patient, to not to be in the cases in that the conscience is in such a committed way that the patient is unable to render information. Hearing difficulty and slowness in the answers, or lack of collaboration, they are obstacles that the doctor should try to overcome. It is important that the information rendered by the patient are complemented by a member of the family, preferably that it lives together with him, with views the an evaluation of his/her behavior in the family atmosphere, of his/her degree of interest to him own and to the family and, finally, his/her way to act front to new situations. It is very common that the senior is marginalized in the family atmosphere, condition that turns him/it afflicted, little communicative and reticent to render information.

Beside the frequent degenerative diseases in the seniors, the one of infectious cause as the pneumonias and the urinary infections are common. The abscesses of the abdominal and pelvic cavity, also frequent, they are important causes of lingering fever. On the other hand, in these patients it is not rare the transformation of a hyperthermia in hypothermia, denouncing an aggravation of the general state.

He still fits to stand out that a good doctor-patient relationship, important in all of the age groups, concerning the senior it is indispensable so that the doctor's intervention can bring real benefits for the patient and his/her family.

Defining Balance

Coordination is the capacity to accomplish movements uniform, necessary and controlled. The coordination is necessary for execution of the perfect motive abilities, how to write, to sew, to dress and to manipulate small objects. The coordination is necessary, also, when accomplishing rude motive maneuvers, how to walk, to run, to jump, to execute the occupational tasks and the basic and instrumental activities of the daily life. The coordinated movements involve the sequence and the synchronization adapted of the synergic and reciprocal muscular activity, and they also demand stability proximal and maintenance of a good posture.

The coordination concept includes the balance, that is the capacity to maintain balanced or the capacity to maintain him/it enters of gravity on the support base. The balance depends on the capacity to maintain a position, of stabilizing during the voluntary activities and of reacting to the external disturbances. In spite of the simplicity of this definition, the capacity to maintain the balance, involves an effective and efficient coordination among multiple sensorial systems, biomechanics and motors. Vestibular dysfunction, visual deficiency or reduced propriocepção can affect the balance.

The treatment of the deficiencies of the balance depends on a detailed exam destined to determine the system that is failing. The oscillation postural is the normal and continuous deviation of the center of gravity of the body on the support base. When the person is capable to maintain the oscillation inside of the limits of the stability, the balance is maintained. When the oscillation crosses those limits, he/she becomes necessary a corrective strategy to avoid the falls.

Balance in a Normal System

The identification of the causes and the prescription of the treatment for the deficiencies of the balance depend on a good understanding of the systems that you/they participate in the control of the balance and in their normal interactions. Those systems provide influx for the central nervous system. The information should be processed and an appropriate motive strategy should be chosen and executed. The model of the system of the motor control defines the stability postural as the capacity to maintain the center of gravity inside of the limits of the stability (that is, limits of the space). Those limits are the space area in which the individual gets to maintain the balance without modifying his/her support base. A certain degree of subsequent and lateral oscillation happens while the balance is being maintained. That oscillation range defines the limits of the stability in the directions previous, subsequent and lateral. The normal anterior-subsequent oscillation in adults and of 12 degrees starting from the most subsequent position for that more previous one. The limits of the lateral stability vary with the separation of the feet and with the height. An adult with medium height and with ten centimeters among the feet can oscillate 16 degrees approximately to and fro. Frequently, those limits of stability are characterized by a cone of stability. While the range of the individual's oscillation stays inside of the limits of the stability, the balance will be maintained. When the center of the gravity is it aligns in the half of the oscillation range, they will easily be able to happen the 12 degrees of anterior-subsequent oscillation and the 16 degrees of lateral oscillation. If the oscillation crosses those limits, some should be adopted strategy to recover the balance. If the center of the individual's gravity adopts an alignment more previous, subsequent or lateral that the center, a smaller oscillation range will be tolerated before losing the balance.

Contributions of the Sensorial Systems for the Balance

Three sensorial systems contribute to the maintenance of the erect posture: look, college entrance exam and somatossensorial (that is, proprioceptivies). They are considered the triad of the control postural. The system model suggests the existence of interactions among the individual, the environment and the functional task, with a circular net of subsystems interacting to maintain stability and to produce the movement. Any one of those systems can dominate, and all of them depend on

the context. No only sense gets to determine the position of the center of gravity of the body directly; he/she will have the originating from feedback to be integrated each system. The systems look and somatossensorial gather the originating from information the environment (for instance, position in relation to the other objects, stability of the surface) and the vestibular system provides a reference interns, supplying information to the about of the head's information in the space.

Other authors, Susan J. Hall (2005) it describes the balance starting from a center of gravity or the center of mass of a body is the point around of which the weight of a weight is equally balanced, independently in the way as the body is positioned. In the analyses of the movements, the displacement of the center of gravity works as index of the total corporal movement. Of a kinetic perspective, the location of the center of the mass determines the way for the which the body answers the external forces.

When a body is in rest, that is, is not nor if translated nor turning, it is said that is in a balance state. The gymnast executing a cross in the stopped rings supplies an appropriate example to illustrate some of the characteristics of a body in balance. The body of the gymnast suffers the action of three external forces-F1 and F2 (the forces exercised on their hands by the rings and that you/they act with an angle x with the horizontal) and P (his/her weight or the force of the gravity), (Hay, 1981).

III-METHODOLOGY

The sample of the study consisted of 12 subjects, both male one, with age between 65 and 75 years. The subjects were chosen among the Project: "ONDINAS, THIRD AGE", not could present any other type of compromising of the physical and mental health, and not owing, still, to be making use of substances psicotrópicas or psychoactive. In the intention of reaching that objective a detailed questionnaire was applied to identify and to exclude of the experiment any subject that can contaminate futures results. The subjects signed a consent declaration in which was described, in details, the experimental condition.

The place for the execution of the aquatic treatment was the Beach of the Fort-Cable Cold-RJ, where, the seniors executed the following aquatic exercises:

Exercises pré-treatment: to walk in a ribbon crape, straight line, stuck to the soil, with 05 meters of execution.

Exercises:

I - to walk supported by the hands; II - to have been supporting in just one of the hands; III - to walk without support in the hands; IV - to be stopped on top of the ribbon by 2 minutes; V - walk of backs on the ribbon, VI - he/she went to walk with just one of the feet.

Data collection

For the use of the mensuration of the aquatic exercises, the following exercises were used:

Statistical treatment: front walk, to walk with the right side of the body, to walk with the left side of the body, walk of backs, front walk, elevating the knees up to 90th, coast walk, elevating the knees.

These exercises were made in the following corporal levels:

to walk with water until the height of the shoulders, to walk with water until the height of the xiphoid process, to walk with water until the height of the umbilical scar, to walk with water until the height of the larger trocanters, to walk with the water until the height of the articulations of the knees, to walk with the water until the height of the maléolos.

The place for the mensuration of the aquatic exercises (Eaq), it was at the Beach of the Fort, Cable Cold-RJ, in front of the monument of the Fort, in the schedule understood between 07h30min hr and 09h00min hr. The garment was: it hitches up for the men and swimsuit for the women.

The total time of accomplishment of the exercises, and of each series of exercises it was measured. This way, it was possible to verify if there was or it doesn't get better progressive among the series of exercises. The number of times in that the movement didn't happen was computed, specifically, in each exercise and in his/her total. Being like this, the progressive improvement of the motor gesture and the decrease of the number of times in that the exercise didn't happen, they could be dear. In the present experiment, the subjects executed the aquatic exercises for thirty (30) minutes, resting at the end of each exercise with the execution of 10 minutes of prolongation, two (02) times a week, for 12 weeks. Same not getting to execute the exercise extolled in the moment, he/she happened for the following exercise.

OBS: the distance traveled during the walk was of five (05) meters.

In all of the executed exercises, the aid of the hands was used, when the most committed leg didn't get to execute the motive task.

In the experiment, the behavioral variable was analyzed: time and the traveled distance, without the individual left the ribbon stuck to the soil.

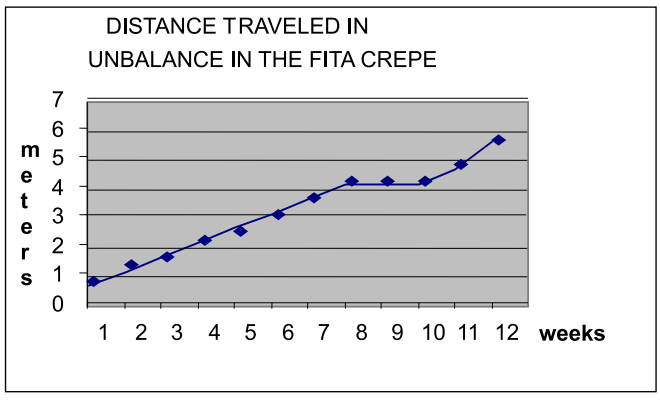
In the behavioral variables, she opted for a variance analysis (one-way) with the intention of identifying the differences among the 02 series of exercises.

The data of the exercises were measured in two different moments: before and after the beginning of the task (aquatic exercises). In order to evaluate the execution of the aquatic exercises (Eaq) it produces significant alterations in the balance implement, a was used Test-T pareated, for each series of Eaq.

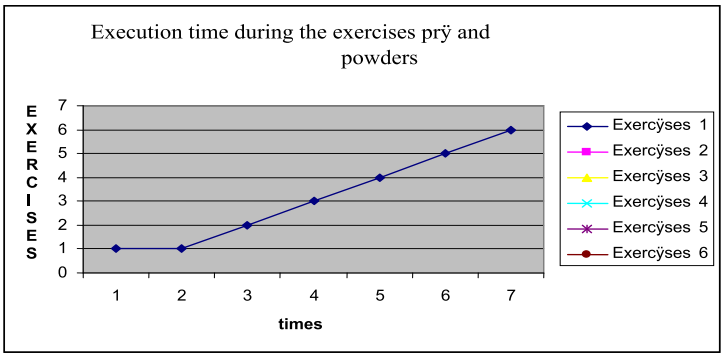
IV-PRESENTATION RESULTED DOS

The results described to proceed were analyzed by the behavioral variable, being gone back to the characterization of the performance.

The graph 01 describes the variation of the distance executed without the subjects came out from the ribbon crape stuck to the soil in each one of the 12 weeks. Statistical analyses demonstrated a significant difference between the 04 initial weeks and Thursday, Friday, seventh and eighth following weeks. Especially, the graph had indicated a difference between the first four weeks and the 04 following weeks, with increase of the unbalance, and a difference among Thursday, Friday, seventh and eighth weeks and the ninth, decimal, where there was a stabilized in the existent balance in the seventh and the tenth week. Differences were detected among the decimal, eleventh and the twelfth week, where the unbalance returned and in levels a little higher in relation to the previous weeks (the 04 initial weeks). This way, it was evidenced, essentially, a modification between the first 04 weeks and the 04 following weeks, and among the decimal, eleventh and the twelfth week.



In this context, the illustration 2 expressed a relationship among the decrease of the execution time for each aquatic exercise, in relation to some standard movements related to the march, inside of each series of exercises. Results statisticians demonstrated a significant difference among the exercises of Monday, the third, Wednesday, Thursday and Friday of the exercises. Being like this, the main difference happened between the second exercise and the others, marking the importance in the first series of exercises for the beginning of the incentives neuro proprioceptives.



V - CONCLUSIONS AND RECOMMENDATIONS

Eaq with emphasis for the increase of the balance in senior senile it is an attempt of promoting an improvement in the performance and facilitation in the movements of use of these individuals' daily activities. To reach this goal precisely, individuals have to overcome two different phases. Like this, two action roads explain efficient learning: implicit and explicit. Implicit knowledge is related the as the individuals will execute the task, and explicit knowledge is the individual's understanding on the one that needs be done (instruction expresses). The results of the present research didn't show any difference in the balance in the beginning of the aquatic exercises, what implicates that the participants initially abstracted cognitive cortical activities indeed, not showing difficulties in the understanding of the cognitive aspects of the task of execution of Eaq. This way, the explicit knowledge of the task went strong enough to produce cognitive changes in the in these individuals, to the point of they get significant difference in the execution of the aquatic exercises, they put, without promoting an improvement in those individuals' balance. However, in the articulations of MMII, the statistical analyses demonstrated significant difference among the two conditions for you analyze them pré and powders of Eaq confirming the decrease of the balance in senior senile-65 to 75 years.

These discoveries accentuate the importance of studies in areas of aquatic activities as experimental model as backdrop so that other researchers if “they engage” in that research type, creating new studies and/or strategies that can serve as justification for the presented study, strengthening like this the research here ended and the one of futures friends, even to try to understand the reason of the balance not to have gotten an improvement, but, the opposite when accomplished in sea, once other citations tell us the opposite.

BIBLIOGRAPHICAL REFERENCES

BEST-MARTINI, E., BOTENHAGEN-DIGENOVA, K.A. Exercise for Frail Elders. Human Kinetics, United States of America. 2003. Exercise for Older Adults: ACE's (American Council on Exercise) Guide for fitness professionals. Human Kinetics, United States of America. 1998.
BURT, A. Neuroanatomia. Rio de Janeiro: Guanabara Koogan, 1995.
CRUZ, Jaunilson Francisco da. Atividades aquáticas como estratégia para a melhoria do equilíbrio em paralisados cerebrais SPRINT nº 129 nov./dez. 2003.
CRUZ, Jaunilson Francisco da. The Use of Hidrocinesioterapia as Strategy for the Earning of Muscular Force in Sequels of Poliomyelits. FIEP BULLETIN Volume 75 Special Edition ARTICLE-I - Page 95 of 98, 2005.
CRUZ, Jaunilson Francisco da. O Uso dos Exercícios Aquáticos com Estratégia para Minimizar a Queda em Idosos a partir da Melhoria do Equilíbrio FIEP BULLEIN Volume 75 Special Edition - Page 165/número 249 pôster 2005.
EKMAN, L. Neuroscience: fundamentals for rehabilitation. W.B. Saunders Company: Philadelphia, PA. 1998.
FLECK, J.S., KRAEMER, W.J. Fundamentos do Treinamento de Força Muscular. Editora Artmed, 2ª Edição, São Paulo. 1997.
FLINCHUN, Betty M. Desenvolvimento motor da criança. Rio de Janeiro, Interamericana, 1981.
FONSECA, Vitor da, Aprender a aprender: a educabilidade cognitiva / Victor da Fonseca Porto Alegre: Artmed, 1998.
GUILLARME, J. J. Educação e reeducação psicomotoras. Porto Alegre, Artes Médicas, 1983.
HAY, James G. Biomecânica e Técnicas Desportivas segunda edição Rio de Janeiro Ed. Interamérica, 1981.
KADLECK, V. e GLAT, R. A criança e suas deficiências: métodos e técnicas de atuação psicopedagógica. Rio de Janeiro, Agir, 1984.
LAPIERRE, A. Education Psicomotriz. Barcelona, Científico médica 1977.
PERRY, Jacquelin Análise de Marcha, v.1: marcha normal São Paulo Ed. Manole 2005.
PICQ e VAYER, P. Education Psicomotriz y retrazo mental. Ba.
ROSADAS, S. C. Atividade física adaptada e jogos esportivos para deficiente. Eu posso. Vocês duvidam? Livraria Atheneu Rio de Janeiro, São Paulo, 1989.
SCHMIDT, R; WRISBERG, C. Aprendizagem e performance motora: Uma abordagem da aprendizagem baseada no problema. 2. ed. Porto Alegre, 2001.
SILVA, T. M., Educação Física Especial. In: Revista Técnica de Educação Física e Desporto, Sprint, Rio de Janeiro, ano X, nº 55, Jul. / Ago., pág. 19 22 1991.
SKINNER, Alison T. e THOMSON Ann M. Suffield. Exercícios na Água, 3ª ed., São Paulo, Manole, 1985.
SUSAN J. Hall, Biomecânica Básica quarta edição Rio de Janeiro Ed. Guanabara Koogan 2005.
jaufcruz@uol.com.br ; lu_ballet@hotmail.com ; mauromaeco@uva.br

THE EFFECTS OF THE AQUATIC EXERCISES IN SEA, AS STRATEGY FOR THE IMPROVEMENT OF THE BALANCE IN SENIOR SENILE

SUMMARY

The objective of this study was to verify the difference among the balance in seniors submitted to aquatic exercises in sea, with the use of aquatic exercises in swimming pool, as much as the mechanisms proprioceptive for the process of information, with base in measurable processes, when they are considered the presented maladjustments, characteristic of his/her deficiency proprioceptive for the balance. Found in a technician-didactic-pedagogic program that it unchains incentives of functional complementation and quality of life, it intends to interfere in the condition of having destabilized, for a profile of balance body-mind, for an integration of the motive activity with the construction of the knowledge of his/her own body and better adjustment proprioceptive. The process that involves the problem of the mechanisms proprioceptive and of balance in disagreement with the

senior's needs-65/75 years, it exhibits an approach between this senior one and the committed individual with this need, in this case, a professional of the area of the human behave, in what concerns to interventions solved defined, for the quantitative of inferences that the process predisposes. There is an estimate possibility that the balance lack in seniors is due to the decrease, or no acquisition of mechanisms movement and specific exercises for the maintenance of the balance during his/her social life, where it will be made a composition of these activities that you/they were presented in swimming pool (Cruz, 2000), for they be presented in sea. The senior is "fragile" in function of his/her muscular without structure no maintained in acceptable levels for the fitness/performance of a safe march, considering to be the middle in that he lives decisive and added difficulty for his/her fall, in function of mechanisms inadequate movement. Like this being, it should be looked for resources through of those mechanisms and/or of environment, to understand the intrinsic phenomena to the process, in the sense of contributing with intervening mensurations, indicating acceptable possibilities and manipulativas, accessible to the socioeconomic differences, in order to minimize the balance lack and to increase the propriocepção in seniors 65/75 years.
Word-keys: Balance - Aquatic Exercises - Senior.

RÉSUMÉ
L'objectif de cette étude était vérifier la différence parmi la balance dans les aînés soumis aux exercices aquatiques dans mer, avec l'usage d'exercices aquatiques dans piscine, autant que le proprioceptive des mécanismes pour le processus d'information, avec base dans les processus mesurables, quand ils sont considérés les mauvais réglages présentés, caractéristique de son proprioceptive du manque pour la balance. Trouvez dans un programme technicien-didactique pédagogique qu'il déchaîne des motivations de complémentation utilitaire et qualité de vie, il projette de perturber dans la condition d'ayant déstabilisé, pour un profil de balance corps-esprit, pour une intégration de l'activité du motif avec la construction de la connaissance de son propre corps et meilleur proprioceptive de l'ajustement. Le processus qui implique le problème du proprioceptive des mécanismes et de balance en désaccord avec les besoins de l'aîné 65/75 années, il expose une approche entre cet aîné et l'individu s'engagé avec ce besoin, dans ce cas, un professionnel de la région de l'être humain se comporte, dans quelles inquiétudes à interventions résolues défini, pour le quantitatif de déductions que le processus prédispose. Il y a une possibilité de l'évaluation que le manque de la balance dans les aînés est dû à la baisse, ou aucune acquisition de mouvement des mécanismes et exercices spécifiques pour l'entretien de la balance pendant sa vie sociale où il sera fait une composition de ces activités que les you/they ont été présentés dans piscine (Cruz, 2000), car ils soient présentés dans mer. L'aîné est "fragile" dans fonction de son musclé sans structure aucun a maintenu dans les niveaux acceptables pour le fitness/performance d'une marche sûre, en considérant pour être le milieu dans cela il vit décisif et a ajouté la difficulté pour sa chute, dans fonction de mécanismes mouvement inadéquat. Comme cette existence, il devrait être cherché des ressources à travers de ces mécanismes et/ou d'environnement, comprendre les phénomènes intrinsèques au processus, dans le sens de contribuer avec les mesures survenues, qui indique des possibilités acceptables et des manipulativas, accessible aux différences socio-économiques dans ordre minimiser le manque de la balance et augmenter le propriocepção dans les aînés 65/75 années.
Word-Keys: Balance - Exercices Aquatiques - Aîné.

EL RESUMEN
El objetivo de este estudio era verificar la diferencia entre el equilibrio en las personas mayor sometido a los ejercicios acuáticos en mar, con el uso de ejercicios acuáticos en la piscina que nada, tanto como el proprioceptive de los mecanismos para el proceso de información, con la base en los procesos mensurables, cuando ellos son considerados los desequilibrios presentados, la característica de proprioceptive de deficiencia de his/her para el equilibrio. Encuentre en un programa técnico-didáctico-pedagógico que desencadena incentivos de complementación funcional y calidad de vida, piensa interferir en la condición de haber desestabilizado, para un perfil de cuerpo-mente de equilibrio, para una integración de la actividad del motivo con la construcción del conocimiento de his/her el propio cuerpo y el proprioceptive de ajuste bueno. El proceso que involucra el problema del proprioceptive de los mecanismos y de equilibrio en la discordancia con la persona mayor necesidad-65/75 años, exhibe un acercamiento entre este mayor y el individuo aprisionado por auto del juez con esta necesidad, en este caso, un profesional del área del humano se comporta, en qué preocupaciones a intervenciones resueltas definido, para el cuantitativo de inferencias que el proceso predispone. Hay una posibilidad de la estimación que la falta de equilibrio en las personas mayor es debida a la disminución, o ninguna adquisición de movimiento de los mecanismos y los ejercicios específicos para el mantenimiento del equilibrio durante el his/her vida social dónde se hará a una composición de estas actividades que se presentaron los you/they en la piscina que nada (Cruz, 2000), porque ellos se presenten en el mar. La persona mayor es "frágil" en la función de his/her muscular sin la estructura ningún mantuvo en los niveles aceptables para el fitness/performance de una marcha segura, mientras considerando ser el medio en eso que él vive firme y agregó la dificultad por el his/her caígase, en la función de mecanismos el movimiento inadecuado. Este ser debe parecerse para los recursos a través de de esos mecanismos y/o de ambiente, entender los fenómenos intrínsecos al proceso, en el sentido de contribuir con las mediciones intermedias, que indica posibilidades aceptables y manipulativas, accesible a las diferencias socio-económicas en el orden minimizar la falta de equilibrio y aumentar el propriocepção en las personas mayor 65/75 años.
Los palabra-llave: el Balance - los Ejercicios Acuáticos - Mayor.

OS EFEITOS DOS EXERCÍCIOS AQUÁTICOS EM MAR, COMO ESTRATÉGIA PARA A MELHORIA DO EQUILIBRIO EM IDOSOS SENIS.

RESUMO
O objetivo deste estudo foi verificar a diferença entre o equilíbrio em idosos submetidos a exercícios aquáticos em mar, com o uso de exercícios aquáticos em piscina, tanto quanto os mecanismos proprioceptivos para o processo de informações, com base em processos mensuráveis, quando se consideram os desajustes apresentados, característicos de sua deficiência proprioceptiva para o equilíbrio. Alicerçado em um programa técnico-didático-pedagógico que desencadeia estímulos de complementação funcional e qualidade de vida, pretende-se interferir na condição de desestabilizado, para um perfil de equilíbrio corpo-mente, para uma integração da atividade motriz com a construção do conhecimento de seu próprio corpo e melhor ajuste proprioceptivo. O processo que envolve o problema dos mecanismos proprioceptivos e de equilíbrio em desacordo com as necessidades do idoso 65/75 anos, exibe uma aproximação entre este idoso e o indivíduo comprometido com esta necessidade, neste caso, um profissional da área da motricidade humana, no que concerne a intervenções solucionáveis definidas, para o quantitativo de inferências que o processo predispõe. Há uma possibilidade de estimativa de que a falta de equilíbrio em idosos é devido à diminuição, ou não aquisição de mecanismos proprioceptivos e exercícios específicos para a manutenção do equilíbrio durante a sua vida social, onde será feita uma composição destas atividades que foram apresentados em piscina (Cruz, 2000), para serem apresentadas em mar. O idoso é "frágil" em função de sua desestrutura muscular não mantida em níveis aceitáveis para o desempenho/performance de uma marcha segura, considerando ser o meio em que vive determinante e agravante para a sua queda, em função de mecanismos proprioceptivos inadequados. Assim sendo, deve-se buscar recursos através desses mecanismos e/ou de ambiência, para se entender os fenômenos intrínsecos ao processo, no sentido de contribuir com mensurações intervenientes, indicando possibilidades aceitáveis e manipulativas, acessíveis às diferenças sócio-econômicas, a fim de minimizar a falta de equilíbrio e aumentar a propriocepção em idosos 65/75 anos.
Palavras-chaves: Equilíbrio Exercícios Aquáticos Idoso.