

**199 - PERCEPTION OF THE LIFE QUALITY OF SWIMMING MÁSTER ATHLETES ABOVE 60 YEARS**

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**INTRODUCTION**

The world is going through a moment in which aging is a new challenge.

"Almost everywhere in the world life expectancy at birth has grown, a fact that surpasses most forecasts, resulting in the very old population growth, including over 100 year olds, producing profound changes in the economical, social, political and health sectors." (CAMARANO, 2004)

In this way, despite being a very heterogeneous group, the old people contingent, people with age equal or greater than sixty years, has grown rapidly, being this the age used by the World Health Organization for developing countries (for developed ones it is 65 years) and also adopted among us by the "Política Nacional do Idoso" and the "Estatuto do Idoso". (DO, 2003)

For the WHO, World Health Organization, by 2025, three fourths of the people over 60 years old will be living in developing countries, and, then, Brazil will move from 16<sup>th</sup> to the 6<sup>th</sup> position among countries with the largest number of old people.

In Brazil there will be at about 15.8 million people over 60 year old, representing 9% of total population (IBGE, 2003). This group will show an increase approximately four times larger when compared to the total population growth in the period between 1980 and 2020, which will represent an evolution of 275% in the number of aged people, while total population will go through a growth of only 67% (CHAIMOWICZ, 1997). According to IBGE the Brazilian Geography and Statistics Institute (2000 Census). Aged are people with 60 years old or more, the same definition as the World Health Organization (WHO).

Aging for some authors means: "Losses of functional autonomies with the passage of the years" (ANDRADE TAVARES, 2003); "The (aging) process starts with birth and goes up to death" (SPIRIDUSO, 2004); "Is the normal biological process of organic cells modifications, physiological functions decline" (DANTAS, 2003).

"One of the many causes of high morbidity and death among the aged population is the low physical aptitude and the lack of functional well being. Besides these, the cardio-vascular capacity, muscular mass, muscular strength and flexibility also suffer declines with the advance of old age and the body lack of use."

Studies suggest that the aging process starts at adult age when the equilibrium between anabolism and catabolism is broken, with predominance of the last.

The cellular activity decline, observed starting from life's third decade, promotes significant modifications in the organs structure and functions. As a consequence it is observed a progressive corrosion of the functional reserves, associated to a larger vulnerability of the organism to metabolic disturbs, to stress and to pathological processes. Despite its universality, the velocity and the intensity of these alterations are modulated by individual factors, such as genetics, associated diseases and sedentary behavior (LIBERMAN, et al 2005).

"The high levels of cardiac diseases among elder people, associated to their life style, mainly sedentary, makes it difficult the identification of cardiovascular alterations due exclusively to the natural aging process. Side by side of the so called sportspeople, competitive or not, we have a number of aged athletes practicing regular physical activities, and of high intensity, classified arbitrarily in three distinct groups:

Group 1 Formed by individuals that were highly competitive athletes during their youth and adult age. When they reached their third age, they maintain a high intensity physical training, but in another sport modality. For instance, professional football ex-athletes that maintain themselves physically actives and competing in other sports modalities, such as swimming, athletics and tennis.

Group 2 Comprised by practitioners of the same sports modality since their youth until their third age, always with regularity and with high intensity. They incorporate the physical activity as a part of their daily routine such as feeding or dressing up. The most common sports activities, among them, are tennis, basketball, football, athletics and cycling.

Group 3 This group is formed by sportspeople that have started physical conditioning programs at their third age, by medical advice, with a therapeutic aim or to improve their health status. The most usual examples in this group include coronary disease, obesity, diabetics, hypertension, etc." (LIBERMAN, et al 2005)

In relation to Swimming we may emphasize two aspects associated to the aging process. The first one refer to thermal regulation, which was highly limited in elder people, causing a more abrupt loss of body heath during the immersion in normal environment temperature water. This limitation was easily overcome with the heated swimming pool technologies. The second aspect, was a centripetal migration of subcutaneous body fat deposits, causing a smaller quantity in their limbs and an increase, proportionally, in the abdominal region, which has a series of biomechanical implications, by increasing the transversal area section offered to the movement in the water (MCARDLE and COLS, 1991).

Swimming is one of the most practiced sports in Brazil, with over 65 thousand registered athletes. This sport was controlled by Confederação Brasileira de Desportos - CBD.

In 1977, CBD was dismantled and in October 21<sup>st</sup> the Confederação Brasileira de Natação CBN was created. CBN stayed active until 1988, when the Confederação Brasileira de Desportos Aquáticos CBDA was founded. In Brazil, masters swimming started in June, 1980, with a competition promoted by FARJ (Federação Aquática do Rio de Janeiro)

ABMN (Associação Brasileira Masters de Natação) was created in December 8th, 1984, and gave birth to the master swimming category in Brazil.

Registered in the association, we had at about 7.300 practitioners of this modality of sport, with at about 3.000 active athletes in the competitions, effectively.

"To get old is a fact. But how? Each person in his own way, with his life story and future perspectives.

They discovered the recipe for living well, looking for happiness, health, well being, contributing in this way to the improvement of their life quality.

Despite all analysis that sociologists make of the problems of old age, this group of Master swimmers, seem to have developed their own recipe of well living". (PAVEL, 1992).

"Programs for the third age have increasingly been accepted and exposed among societies around the world. They include manual works, chorals, classes, lectures, excursions, as well as physical activity programs adapted for this group.

Physical exercises, as a fundamental part of these third age programs, may promote the social integration among the

aged, as, after all, this type of actions are, in general, group activities. To be part of a group gives to the aged, a social and physical identity, so that he develops commitments with this group, living with the trust feeling, being stimulated to compete, having the opportunity to develop strong friendship, to be a colleague and to find support among the equals.

The ancient societies already stated that the elder people, as an individual integrated into the community, owner of a unique experience and an object of admiration by the young, adjusts to modern life and, in this way, benefits his society and collects benefits for himself" (LIBERMAN, et al 2005).

The integration of this aged depends basically on programs shaped to his physical, social and psychological needs. This kind of programs, adapted and completely planned for old people, have appeared in Brazil and in the world. Society should offer to the elder people adequate material and social conditions and transform this age group into the age of realizations and of the pleasure to live.

The aging process is being reconsidered, new concepts, new ways to face it and to live it are arising.

The specialized physical activity, by means of its many programs, may bring a number of benefits for the aged people health and life quality (LIBERMAN, et al 2005).

### **MATERIAL AND METHOD**

This present work is of a Descriptive kind, where there was no interference on the study object nor manipulation of the variable studied with the subjects (Thomas and Nelson, 2002).

The study subjects were chosen in an intentional way. They were twenty eight athletes, Master Swimmers from sports clubs situated in the neighborhoods of Laranjeiras, Icaraí and Gávea, in the Rio de Janeiro State.

The subjects were from both sexes, female and male, age over 60 years, all practitioners of daily physical activities, and participants of swimming competitions in the State, National and International levels in the Masters category.

In this study, the data gathering and the subject evaluation, was done through the application of this instrument, in which they signed the authorization for the application of the questionnaires: The Who-Old (Annex C) and the instrument elaborated only for the work (Appendix A) for the data gathering:

The data treatment was done in a way to show mathematically through graphs and tables prepared from the information (results) obtained with the use of the instruments (questionnaires or tests).

After the mathematical analysis, graphs and tables were prepared to allow the discussion of the results obtained.

### **ANALYSIS AND DISCUSSION**

After the questions in the ho-old questionnaire were answered, we verified the following results:

Legend: 1 Sensory Function; 2 Autonomy; 3 Past, Present and Future Activities; 4 Social Participation; 5 Death and Dying; 6 Intimacy; 7 TOTAL SCORE

Figure: Result of the answers to the Who-old questionnaire.

With the passing of the years, the old people limitations have the tendency to increase, compromising their proficiency in the daily life activities (AVD). These restrictions make daily routine more difficult, maybe compromising the autonomy and to arrive to a dependency that will interfere directly in their life.

It was verified in the part of Autonomy, that it represents a percentage bellow expectations, considering that, being master swimmers, the athletes should have demonstrated more autonomy.

With respect to the question about Death, the result was also low. In effect the majority has a fear of death, and they do not relate well with the idea of it.

After responding to the who-old questionnaire, the twenty eight master swimming athletes within the over 60 year old age group, it was observed that, in relation to sensory functioning, at about 17.25% are above the established average, demonstrating an excellent function of this important organism area.

In relation to past, present and future activities, the results stayed in the expected average, 15.25% of the old people have a constant and calm relation in their activities.

The results for social participation, 15.75% of the aged people interviewed have a very active social participation.

In the intimacy, the result was the expected one, 17% of the interviewed athletes are very well, and very happy in their relationships.

In the autonomy item, the result was a surprise, around 11.68% of the interviewed demonstrated low autonomy in their daily questions in their lives.

And in the question referred to the death and dying part, at about 14.86%, the result was also bellow average.

After responding the questions do the validated questionnaire, we verified the following results:

Being questioned if before practicing swimming, they did practice regular physical activities, at about 58% answered yes, while 40% said that they did not practice any activity.

With respect to the weekly regularity of this practice, 29% practiced more than three times per week, 23% at about three times per week, 8% two times and 4% only once.

Asked how many hours they practiced swimming, 39% stay more than two hours swimming, 38% at about 2 hours and 30% swim 1 hour per day.

Each athlete was asked if they had an improvement in their life quality, after initiating swimming, 94% answered yes and at about 3% said no.

About 100% of the interviewed declared important, for their life quality, the regular practice of physical activity.

Asked if the athlete had perceived any difference in their disposition after having initiated master swimming practice, about 88% answered yes, but 3% affirmed that did not feel any modification and at about 8% said that there was no alteration.

More or less 80% of the interviewed athletes practice their activity in the morning period, 10% by lunch time, and at about 8% at night.

Asked if the practicing athletes felt alterations, physically, after starting their practice, at about 88% affirmed that they have, 7% were indifferent, and about 3% did not feel any modification.

More or less 63% started to sleep better, but at about 30% did not feel any remarkable alteration.

Life quality, with at about 58%, was the incentive to start the practice of master swimming activity. About 37% remarked that the motive was health.

Asked which were their preferred swimming style, about 70% answered crawl style, 38% breaststroke, 40% backstroke, and 38% butterfly.

More or less 93% of the interviewed people participate in competitions and 3% do not, these practice only for the physical activity.

Also about 93% participated in the State circuit 50 meters pool, 88% in the State circuit 25 meters pool, and 33% in the

open water marathons.

About 38% have already participated in some World master swimming championship and 58% did not.

Asked where they prefer to swim, 90% answered that the swimming pool is the better option and about 18% love to swim in the sea.

About 48% of the interviewed also practice other physical activity during the week end, in this case they go out for a walk, about 32% do not do anything, 10% practice volleyball and 4% practice jogging.

Asked if they pretend to stop swimming some day, 98% said no, that they will keep swimming forever.

### CONCLUSION AND RECOMMENDATIONS

With this study, we may assume, from its results, that the practice of a daily physical activity, in master swimming, with active athletes over 60 years old, improves the life quality of each one of the practitioners.

Other factors showed improvements in their general functioning, such as the answers in the sensorial area part.

The aged people relationship, from the answers to the past, present and future experience part, demonstrate tranquility and satisfaction, when relating their experiences to the group.

In the social participation part, fundamental for the relationship among aged people, we observed the increase in the self respect for the master swim practitioners, including when they are preparing for the competitions.

Despite the autonomy variable result having demonstrated a lack of sufficiency of the athletes outside the water, the athletes, in the water, demonstrated total independence.

As well as the autonomy part answers, the result for the death part item appointed that the athlete group remained under the expected values.

About the death part answers, they have shown to be depressives, not dealing well with the dying idea, on the contrary, they want to live and very much.

Due to the benefits derived from physical activity, in the case of master swimming, the researched group was unanimous in saying that they will continue to practice this activity.

Physical activity causes bodily modifications, also altering the image that aged people have of themselves, and, due to this, there is an improvement in the self respect and affectivity. The aged people perception of this physical aptitude, of this body, his overall well being, brings an important factor for a psychological improvement. He turns to be more self reliable, starts to believe in the possibility of doing new things, to live experiences not before realized by lack of trust in himself and in his body.

Giving the importance of the present work, and because we have not exhausted all the related information about master swimming practice advantages, we recommend that other studies about this topic be implemented.

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### PERCEPTION OF THE LIFE QUALITY OF SWIMMING M STER ATHLETES ABOVE 60 YEARS

#### ABSTRACT

In accordance with the World Health Organization, the world population keeps moving towards aging and is going to surpass 9 billion people by 2050, following the estimates and projections from the World Population Situation 2006 revision. Brazil will have at about 15.8 million people over 60 years old, in accordance with IBGE. The aim and the relevance of this study are to observe if the master swim activity, for over 60 years old athletes, contributes toward a better life quality for the practitioners and competitors. This work is of a descriptive format and there was no interference on the study object. Twenty eight master athletes, all over 60 years old, from both sexes, active swimmers and participants in State, National and International competitions, long and short pools, were selected for this study. We verified, in the results, that with respect to sensory functioning, past, present and future activities, social participation and in its intimacy, all reached a positive return with the practice of swimming, being more than 60% satisfied. On the other hand, with respect to the result referred to autonomy, at about 44% of the answers appointed to the low level of autonomy in the daily life activities of old athletes.. Therefore, with this study, we may suppose, from its results, that the habit of daily physical activity, with master swimmer athletes, actives over 60 years old, increases the self esteem and life quality for each one of its practitioners.

**PERCEPTION DE LA QUALITÉ DE VIE DES ATHLÈTES MÁSTER DE NATATION AU-DESSUS DE 60 ANS****RESUMÉ:**

D'après l'Organisation Mondiale de la Santé, la population mondiale tent a vieillir et devra surpasser les 9 milliards d'habitants par l'année 2050, suivant les projections et estimations de la Situation de la Population Mondiale revision 2006. Le Brésil aura autour de 15.8 millions d'habitants au dessus de soixante ans, d'après l'IBGE. L'objectif et l'importance de cette étude est d'observer si l'activité des maîtres nageurs, pour les athlètes au-dessus de 60 ans, contribue pour une meilleure qualité de vie. Ce travail est seulement descriptif, n'ayant eu aucune interference sur l'object étudié. Vingt-huit maître nageurs, tous agés au dessus de 60 ans, des deux sexes, nageurs actifs et participants de championnats Regionaux, National et International, ont été choisis pour cette étude. Les resultats ont constaté en rapport a fonctionnement sensoriel, aux activités passés, presentes et futures, participation social et posture intime, tous ont obtenu un retour positif avec la natation, etant plus de 60% satisfaits. D'un autre côté, les relations autonomie et décès, ont été au dessous de l'attendu. Alors, d'après cette étude, nous pouvons supposer, par les résultats, que l'habitude d'une activité physique jour a jour, de maître nageurs actifs au dessus de 60 ans, augmente leur auto-estime et leur qualité de vie.

**OPINIÓN DE LA CALIDAD DE LA VIDA DE LOS ATLETAS DE LA NATACIÓN MÁSTER CON MÁS DE 60 AÑOS****RESUMEN:**

Según la Organización Mundial de Salud, la población Mundial sigue caminando para el envejecimiento e irá ultrapasar los nueve billones de personas hasta 2050, de acuerdo con las estimativas y proyecciones de la revisión de 2006 de la Situación de la Población Mundial. En Brasil existirán cerca de 15,8 millones de personas con más de 60 años, según el IBGE. (Instituto Brasileño...). El objetivo y relevancia de este estudio fueron observar si la práctica de natación máster, para atletas con más de 60 años, contribuye para una mejor cualidad de vida de sus practicantes competidores. El tipo de estudio es descriptivo donde no haya interferencia en objeto de estudio. Fueron seleccionados veintiocho atletas máster de natación todos con más de 60 años, de ambos los sexos, practicantes activos y participantes de competiciones Estaduales, Nacionales e Internacionales, de piscina corta y larga. Verificamos en los resultados que en relación al funcionamiento sensorio, actividades pasadas, presente y futuras, participación social y en la intimidad, todos obtuvieron un retorno positivo de la práctica de la natación, estando más de 60% satisfechos. Sin embargo, en relación a la autonomía y de la muerte, los resultados fueron menores de lo esperado, apuntando la poca autonomía y las actividades de la vida diaria de los atletas ancianos. Por lo tanto, con este estudio se puede suponer a partir de los resultados obtenidos, que la práctica de la actividad física diaria, e el área de la natación máster, con atletas activos con más de 60 años, mejora de la cualidad de vida de cada uno de sus practicantes.

**PERCEPÇÃO DA QUALIDADE DE VIDA DOS ATLETAS MÁSTER DE NATAÇÃO ACIMA DE 60 ANOS****RESUMO**

Segundo a Organização Mundial da Saúde, a população Mundial continua caminhando para o envelhecimento e irá ultrapassar nove bilhões de pessoas até 2050, de acordo com as estimativas e projeções da revisão de 2006 da Situação da População Mundial. No Brasil existirão cerca de 15,8 milhões de pessoas acima de 60 anos, segundo o IBGE. O objetivo e relevância deste estudo foram observar se a prática de natação máster, para atletas acima de 60 anos, contribui para uma melhor qualidade de vida de seus praticantes competidores. O tipo do estudo é descritivo onde não houve interferência no objeto de estudo. Foram selecionados vinte e oito atletas máster de natação todos acima de 60 anos, de ambos os sexos, praticantes ativos e participantes de competições Estaduais, Nacionais e Internacionais, de piscina curta e longa. Verificamos nos resultados que em relação ao funcionamento sensorio, atividades passadas, presente e futuras, participação social e na intimidade, todos obtiveram um retorno positivo da prática da natação, estando mais de 60% satisfeitos. No entanto, em relação às autonomia e da morte, os resultados foram abaixo do esperado, apontando a pouca autonomia nas atividades da vida diária dos atletas idosos. Portanto, com este estudo pode se supor a partir dos os resultados obtidos, que a prática da atividade física diária, na área da natação máster, com atletas ativos acima de 60 anos, melhora da qualidade de vida de cada um de seus praticantes.