

Physical inactivity in Italian Society

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Abstract

Today's society is characterized by interpersonal networks increasingly complex and globalized; by rapidity of the daily changes, dictated by new technologies; from productivity and trade continuously changing and growing. All this creates an educational and formative distance between generations with the consequent neglect of adults towards children. The latter appear to be, unknowingly, victims of consumerism and technology, no longer practice movement, physical activity or sport. The society, therefore, perhaps because responsible for all this, wonders about problems regarding these behaviors since, the result is physical inactivity, laziness, lack of exercise, overweight and obesity. These elements compounded by unavoidable and related pathological complications.

Keywords: *Sedentary lifestyle, obesity, education, physical activity.*

1. Society, physical activity and lifestyle

Human sciences, at a time, like this fact of epochal changes, suggest a careful reflection and new about today's society with the changes, - irreversible -, of everyday life, of thinking, of coexistence among peoples and ways of perceiving reality and the world.

Therefore, contemporary society seems to be characterized by a network of relationships, extended progressively to the whole planet; from stress and the depth of the development of the ways of everyday life with firsts for the entire human family; global changes, as anthropological as ecological, generated by the interaction between evolutionary factors of a social cultural, economic, technological, of a high magnitude (Kumar 2000) [1].

In the last fifty years, the world making the GDP increased by about five times; domestic and international trade, as reported by M. Wolf, increased by tens times [2].

This data delivery, to the observers, the measure of strength of the relationship between the countries. This interconnection, called "economic globalization", has reached every corner of the world and progressively also models the ways of life and consumption of individuals and different social realities. The datum are staggering enough to consider new streams of international relations intense enough to have reduced the traditional political institutions function with consequences, sometimes, bad for social stability. The latter has been replaced by obvious changes; individuals and communities, therefore, live a high degree of uncertainty present in all patterns of

life. It's for this social speed and cultural changes, which have distorted the ancient customs of life, religious beliefs, cultural and political opinions, also because of growing economic inequalities [3].

This is the panorama in which it develops the transformation of style of life for every humans.

The life in town, a symbol of economic and social growth, because of the frenzy with which human beings conduct their lives, minimizes opportunities to weave interpersonal relationships and the ability to carry out physical activity or sports activities not only in contact with nature, but simply outdoors. Humans, in this condition, necessarily have to give up living in an appropriate manner in accordance with the needs and rhythms of reformulating personal life, hurriedly, their relationships with the environment, things and people.

The towns, at least in the collective imagination, have always been considered aggregating because space in general represents the territory and the relational environment par excellence. In the relational space, then, in addition to being outside and deal with otherness, it's can practice physical activity also not necessarily conventional, planned and organized. Relationality should be the main concern of civil life, although the expansion of some cities has worsened in epochal manner the quality and the territory used to relational exchange and physical practice.

This change has transformed even the aggregation sense, becoming an involution of physical activity, precisely because of production and work which is followed by the consumption of more or less superfluous goods. The physical or sports activities, according to this view, fits exactly into that category.

In modern society the increase in overweight and obese individuals is growing. Physical inactivity is likely to become the central problem of social and global public health which the whole human family must be answered taking responsibility.

In according to a research by M. Ding et al. University of Sydney and published in scientific journal "The Lancet", for 2013, the physical inactivity health costs, would amounting to 67.5 billion dollars in the world.

A sedentary lifestyle is to have direct medical costs such as health care costs of more or less serious diseases beside which include indirect health costs, dictated by loss of productivity to be charged with diseases 'hidden', whose true cause is their physics inactivity. It comes to obesity, type 2 diabetes, cardiovascular disease, and some cancers.

Researchers at the M. Ding research group, highlighted the important role of physical activity and sports to be taken both as a preventive and as a channel to reduce especially conditions such as diabetes and cardiovascular disease (Ding 2016) [4].

Governments should take responsibility for the health of its citizens both to save on health care costs and to

honor the right/duty to the health of person *qua talis*.

Therefore, the legislature must invest more in physical activity, sport and education areas, promoting the citizens, the conquest of awareness of meaning and significance of the concept of 'state of individual health', for individual, community and societal. In summary, more sedentary more healthcare costs; conversely, prevent, - through education for physical practice - the occurrence of any non-infectious diseases, restores the societies' coffers, fostering in people the conquest of habits directed to an appropriate lifestyle.

The technologies also provide contributions to that effect; it is in this direction, in fact, that can be read with the creation of the App "*Pokemon Go*", - game-custom much in vogue today -, apparent response to physical inactivity.

Therefore, in the cities, motor activity of this kind turns into a real sports competition. Sport practice and the hunt for "Pokemon" become rampant and, in any place or environment, it's possible use the App.

However, the risk is to provide axiologici meanings not consistent with the peculiar act of sportsmanship. For that we need, on the part of adults, identifying educational models in which underage are moving so you can use these examples as useful tools for the promotion of an active lifestyle and anthropologically justified.

The educational objective, therefore, isn't only to encourage the practice of physical activity or sport, but also to use it as prevention of diseases, such as cost savings for society as peacemaker of every human with himself and with the society.

Life sedentary, inactive and lazy, is considered worrisome since they can occur early diseases and illnesses of varying extent and impact on mortality population. Physical activity, however, plays an essential role, achieving of personal welfare.

For younger generation the minimum recommended levels are still considerable continuous factor and distinctive lifestyle even only as prevention. Without forgetting that physical activity helps maintain the ideal weight, burning excess calories so losing body weight; It helps to prevent obesity, therefore, the overweight; It prevents osteoporosis since the muscle action favors the production of bone matrix, necessary to increase the strength and reduce the risk of fractures; stimulates the arterial and venous circulation.

In conclusion, modern society, in special attention should be given to sports and PA as prevention of diseases and disorders, social aggregating stimulus, self-regulating source. This is in view of the personal achievement of a style of living adequate for their needs. The lifestyle can be defined as the way of interpreting ourselves within the reality in which it is naturally inserted, considered as a set of biotic and abiotic factors. It's an individual concept, from person to person and consequence of several individual elements.

2. Physical inactivity and lifestyle

The main human problems, including the fulfillment of individual needs, are reflected in relationship problems with others, without which the man cannot be considered as a whole. The lifestyle is one of fundamental and relevant social issues for the lives of everyone because it's in the relationships network which the man says, and is recognized as respectful of his self and the others. The complex society determines, as well, the way of life of the citizens, while globalization (as a result of this society) conditions, in turn, individual behavior, generating, very frequently, embarrassments and personal maladjustment.

The great sense of discomfort and inadequacy resulted, leads to uncontrolled behaviors such as drug use, the crime's spread, disorder in nutrition with overweight and obesity (Lutte 1997) [5].

In that view, the most sensitive stages to change, are the pre-adolescence and adolescence, because the subject is a transition state from childhood to adulthood, where the world of childhood is a safe and protected space and reference adult figures belong mainly at the family sphere.

The child image of the outside world and the self-builds, in fact, go through the recognition and the reflection of their parents, that provide protection and reassurance (Iacoboni 2008) [6].

During adolescence occurs detachment from parental figures, winning, step by step, their independence and autonomy. In primitive society is a social ritual, equal for everyone to mark the transition from one phase to another, from adolescence to the adult world (Moro 2009) [7]. However, in Western societies the duration of adolescence is more variable because, generally, the social recognition is influenced mainly by the education/schooling road: the teenager is not considered an adult until "has yet to learn". There is, therefore, faced with adolescences "endless", where difficulties entering into employment intensify not emancipation from the family, by freezing the conquest of autonomy. All this can turn into inappropriate behavior with outcomes such as obesity.

A recent epidemiological survey, indeed, in recent years showed that, in Italy, one of three children is overweight and one of ten is obese ("Epicentro", Centro Nazionale Epidemiologia) [8].

A "obese" person is easily recognizable; generally the definition of "obesity" is the "presence of an excessive accumulation of adipose tissue". The humans main problem has always been the lack of food for which the tendency to eat everything available and the ability to accumulate fat, in the past, have represented an advantage and a defense. That's an exception of the last

fifty years.

Today, indeed, we are in presence of an exaggerated abundance of food, but we continue to see equally at a frantic because almost obsessive search of food in a manner not always balanced, transforming itself from a physiological necessity to a constant cooling (ADA0) [9]. The term overweight, therefore, generally indicates, excess weight compared at standard set by the World Health Organization.

In Italy, according to data ISTAT in 2009, 35,6% of population is overweight and 11% is obese, while a total 45% is overweight, or a little less than one Italian out of two. The statistics also reveal that the share of people with weight problems increases with age and is highest between 55 and 64 years, with a higher prevalence in southern regions.

In the rest of the world the situation is not much more comfortable because WHO data already point total in 2008 the presence of 1.5 billion adults (> 20 years) in overweight; of which about 200 million men and 300 million obese women. According to a realistic estimate of the time the WHO, by 2015, approximately 2.3 billion adults would be overweight and over 700 million are obese.

If this disheartening prophecy were to continue its course, the next five years there will be an overall increase in the overall rate of overweight and 53.3% obesity.

This condition is extended to many sectors of population, especially those in which the supply of food is plentiful and lifestyles are sedentary. To determine their level of generally state of fitness, it's using an indicator: the body mass index (BMI) introduced in the late nineteenth century by anthropologist, astronomer and Belgian statistical Lambert Adolphe Jacques Quételet (Gand, 22 February 1796 - Bruxelles, 17 February 1874), (Quételet 1869) [10]. This is a biometric data indicating the relationship between weight and height of an individual. Operationally, the body mass index is calculated as the ratio between mass-weight, in kilograms, and the square of height in meters. BMI recommended depends on variables such as age and sex, as well as by genetic factors, food, living conditions, and health conditions, etc.

The World Health Organization and nutritional medicine using the specific tables to define terms such as "thin" or "obesity." The BMI, therefore, is an characterized index by a good correlation with the amount of body fat, although it does not directly measure the fat mass of the subject, neither how it's distributed in the body.

According to the WHO definition, there is a overweight if the BMI value is > between 25 and 29 kg/m²; instead, it's obese if the BMI is > 30 kg/m².

These values are the basic indicators for mortality. Consequently, therefore, obesity is considered a significant risk factor for both the establishment of numerous chronic diseases and, especially for the worsening of health conditions in cases where there are already serious diseases (<http://www.guadagnaresalute>) [11].

A center for the control and prevention of diseases in the US, reveals that 22.7% of Americans are obese, with peaks of 65% among those who are just overweight. In this regard, E. Surmacz, researcher and lecturer at "Sbarro Health Research Organization" Institute (Koda, Sulkowska, Kanczuga-Koda, Cascio, Colucci, Russo, Surmacz, Sulkowski 2007) [12], specialized for Cancer Research, in Philadelphia, says:

"Obesity is a chronic disease with a complex etiology, can result from genetic predisposition, but very often is linked to behavioral and environmental factors. Also we find that obesity, in most cases, depends on disorders and psychiatric distress than metabolic ... areas of the brain that regulate eating are the same related to smoking addiction and drugs. In Mediterranean countries - continues Surmacz - there is a strong spread of this disease; in Italy 37 per cent of young people suffering by obesity and overweight is not a mere " (Surmacz 2007) [13].

According to official statistics - always reported by E. Surmacz - in US the social cost of obesity is equal to one billion dollars per year and is often hard to spread a message that explains the dangers of a disease, classified as such only since 1985. Obesity, therefore, it's to be considered as a real disease, the daughter of his era as a figure among the so-called "diseases of prosperity."

The physical underactivity plays a key role in the origin of obesity, determined by the spread of an increasingly sedentary lifestyle, with static working prototypes such as arduous office; improper habits, such as constant use of elevators, cars, remote controls and in general all the means facilitating the introduction of convenience in our lives.

Also significant is the role of the socio-economic condition of families as it affects in a decisive way, the physical activity and the habit of youth movement (La Torre, Masala, De Vito, Arzano, Fargione, Capelli 2003) [14]. But it's not all, however, because a positive energy balance can be determined by an hyperalimentation, then by excessive amounts of food ingested, but also by insufficient movement, detected by many studies by administering of specific anonymous questionnaires to a samples of people (Mannocci, Di Thiene, Del Cimmuto, Masala, Boccia, De Vito, La Torre 2010) [15].

Obesity, therefore, represents a social problem, to be able to tackle and resolve. The most effective treatment have two-way:

- 1) quantitatively and qualitatively modify the diet, reducing, namely, the amount of calories

ingested daily through food;

- 2) boost the metabolism through exercise or alternative activities (<http://sip.it/formazione-aggiornamento/>) [16].

The combination of these two methods leads to faster and above all lasting effects. Very drastic diets, instead, can produce catabolic effects, impacting too much on lean mass, especially on muscle mass, causing a lowering of basal metabolism, resulting in reduced ability to burn calories.

This effect can be reduced by combining exercise and diet.

Experimental studies show that sedentary subjects, by increase of physical activity, have a decreased appetite [17-23]. Indeed, there is a threshold of physical activity to below which the appetite does not correlate with the degree of exercise; while above this threshold, the appetite seems re-correlate (significantly increasing the energy expenditure, it's increases the energy requirements).

Therefore physical exercise, practiced rationally, in a planned way and with continuity, brings, fundamental and important physiological adaptations in the treatment of obesity, over time. The most immediate adaptations are to load the locomotor apparatus with the increase of tone and muscle mass for an improved protein synthesis; hereinafter also improves the quality of the tendon tissue, occurring an increase in hydration, collagen and glycoprotein portion. A bone level improves the metabolism of calcium with an increase in bone density.

The joints are better fed and lubricated by synovial fluid, giving rise, as well, in a positive thickening of articular cartilage. But the longer-term adaptations occur in the cardiovascular and respiratory systems. It increases, in fact, the contractile capacity of the cardiac muscle, thus the cardiac output, decreasing the heart rate at rest.

It increases the tropism of the vessels that acquire greater elasticity, improves capillarization with increased presence of blood in the periphery and especially a decrease in peripheral resistance and blood pressure. Improves the mobilization of the rib cage, and breathing capacity, gas exchange and oxygen transport capacity transferred from the periphery to the organs.

However, it's to be determined, where there is the intensity with which it is exercised physical activities to practice: you can deal with adequate physical activity, whether sick or even transplanted which can often be in the overweight condition (Masala, Mannocci, Unim, Del Cimmuto, Turchetta, Gatto, Santoro, Ettore, Boccia, La Torre 2012) [24].

For weight loss is not useful a short work-intensive as it is tiring and has no effect on energy expenditure effectively. Especially in the first period in which the activity takes place, obesity is a limit to the efficiency of the

performance resulting in a psycho-educational-relational nature of the subject and give an overly burdensome stress on the joints especially of the lower limbs.

The work intensity to be considered ideal for the decrease of weight, burning fat, is low, within the aerobic threshold, between 60 and 70% of their maximum heart rate. This level also produces a slight increase of muscle tone and starts the cardiovascular adaptation.

The time for each time physical activity should be not less than 30-45 minutes, for a minimum of three times weekly frequency, alternating the working day with one of rest.

To improve the quality and speed of weight loss, this work can integrate with anaerobic strength-training activity, mainly involving large muscle groups, because the weight loss is so greater as the muscle mass involved, just think, for example, to the running (Skena, <http://www.univrmagazine.it>) [25].

Another positive aspect of muscle strengthening is the greater stabilization of the joints, in particular for the lower limbs that are the most stressed by the body weight. With training, gradually it grows and the physical development of the subject, then gradually disappear to the physical performance limits.

The fat decreases and improves body composition (lean mass/fat mass), improves movement skills and increase strength and endurance. To reinforce these results, in addition to improved performance capabilities, it helps even at the best physical appearance obtained with exercise and proper nutrition.

The surprises don't lack: the conclusion of a study coordinated by R. Sharman, University of the Sunshine Coast in Australia, has shown amazing results by studying the habits of 144 children aged between 5 and 13 years. If a person is overweight, it would seem to depend more on the time spent in front of a screen, computer, TV or video games rather than by his physical activity levels. In the research, presented at the Australian Psychological Society conference in Cairns October 10, 2013, were examined for each of the subjects, levels of physical activity, body mass index, correlated with time spent in front of the screen.

The result was as follows: overweight children does not depend only by the activity physics, but by the time spent in front of a screen. "The majority of children - according to surveys of R. Sharman - were reasonably active and they all maintained similar levels of physical activity, but didn't have a direct correlation with their weight. However, overweight subjects spent significantly more time sitting watching TV or engaged in video games, compared to those who fell within the normal weight range".

The research, according to the author, shows how essential is, by the parents, the lower limit of idle time, maybe in front of a screen. "For parents it's necessary to

encourage and support their children to be physically active, but also impose limits on time in front of a screen, to ensure that the benefits of exercise are not canceled out by too long sedentary" (Sharman 2013).

The research, also reveals that children involved in a sport have more inclination to physical activity and give up more easily to computers, TV or video games. Other surveys, finally, highlight how parents with active lifestyles or who practice physical exercise, condition, thanks to the example, their children.

The latter, in turn, are more active and leaner peers without such habits exercise. The current living conditions, especially in the cities, don't facilitate the physical activity of the child. Often you can not play outside and physical activity becomes the "programmed", often perceived as a sacrifice and a duty by both the parent, which must accompany and take the children to the various structures or gyms, both by minors who live the practice of physical activity as a function of parental availability as well as an additional load over the school year.

Sports activities often have a strong agonistic setting, so as to leave more to prevail over the commitment dimension instead of rewarding of the game. Instead, the satisfaction of which children need is transferred in sedentary activities (television, video games, computer) in respect of which probably the subject feels a decrease dell'elevate pressures already present even in his young life.

The poor quality of the presence of adults in the house allows to lower an increasing duration of exposure to new technologies and, in any case, to the mass media which, hopefully unwittingly, become the special baby sitter.

These activities are linked at several levels with the development of overweight and obesity. The computer always seems to generate even more problematic television, because the reason of attention active request to the child, this tool is even be a good substitute of the game and relationships with peers.

From an American research conducted on a large sample of the population it's estimated that, over the life time between 2 and 17 years, individuals spend in total in front of a video a number of hours corresponding to more than 3 years. What's more, it shall be added, on average, watching more than seven hours a week for DVDs and at least another five hours for video games.

Many actions aimed at reducing the prevalence of obesity in young people, implemented by reducing the time spent watching TV and video games, have achieved significant decreases in weight and BMI. The sedentary child enters a vicious cycle that tends to perpetuate and promote the condition of excess weight, making it less agile in games and sport, thus increasing the frustration and the desire to avoid them. The younger, thus, will eventually find consolation only in sedentary and solitary

activities.

The food, finally, can become very rewarding. Everythings will inevitably lead to a loss of control on weight with the additional burden of overweight initial problems. The growing subject, among other things, will not be exposed solely to family habits but, increasingly young age, will become the object of social stresses which are manifested through the wide availability of high calorie foods, highly appetizing and the constant advertising pressure needed to increase the their consumption.

European Union before accession of ten new members took place in May 2004, according to data of "European Association for the Study of Obesity", the percentage of obese adults ranged, in various countries, between 10 and 20 % for men and between 10 and 25% for women.

Searches conducted in the U.S.A. in the past how old, indicate that it is also increasing the proportion of children is overweight is obese. Between 1963 and 1970, for children aged between 6 and 11 years, the prevalence of overweight was equal to 4.2%; while, in boys aged between 12 and 19 years, the value was 4.6%.

According to the "National Health and Nutrition Examination Survey III (NHANES III)", in the years between 1988 and 1994, the prevalence of overweight in both groups had risen to 11.3% and 10.5%.

Currently it is estimated that in the age group between 6 and 19 years the percentage of overweight and obese is 15%.

In Italy, however, 33.4% of the adult population is overweight; while 9.1% are obese. Data, these, after all comforting compared to 22% of obese people in England and 13% in Spain.

The opposite, however, is the data regarding childhood and adolescence because, according to data from the Italian Auxologic Institute, overweight subjects in the younger age are the 30/35%; while clearly obese range between 12 and 15%.

The datum is well over the European average and exceeds even that of countries with major problems of obesity among adults, for example, in United States. Spain has a prevalence of 30% of overweight young people, while England stops at 22%.

At the end, the emergence obesity in our country is especially significant, mainly involving younger. It's estimated, approximately at 25/50% of obese children will maintain that status even as an adult with all the more or less well-known consequences for their future health. As for the distribution within the Italian territory, the South and the Center seem more subjected to obesity than Northern Italy.

According to data collected by the "Italian Company of Human Nutrition", compared to 10% of obese children

in Piemonte region, 13%, in Milan and 16%, in the Northeast, it's found 21% in Cagliari, 23% in Abruzzo, 24% in Bari and 34% in Lazio region. Moreover, a negative impact is also living in a city in that, for a child, is due to a limited ability to be able to enjoy an active outdoor life.

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