



## **Analysis of the epidemiological profile of patients at the Physiotherapy School Clinic of UNEC - Nanuque**

### **Análise do perfil epidemiológico dos pacientes da Clínica Escola de Fisioterapia da UNEC – Nanuque**

**DOI: 10.56238/isevjhv2n5-010**

Receipt of originals: 25/08/2023

Acceptance for publication: 15/09/2023

**Kelly Ferreira de Oliveira**

**Patrícia Brandão Amorim**

**Ana Paula da Conceição Borges**

**Bruna Almeida Morais**

**Patrícia Alves da Silva**

#### **ABSTRACT**

The Health Care Center of UNEC-CASU is a clinic-school for the Physiotherapy course of the higher education institution Caratinga University Center -UNEC Nanuque. It was founded in 2010 and aims to meet the practical classes of the Physiotherapy course, as well as the mandatory supervised internship, which takes place from the eighth period of the course. Objective: To verify, through a documental analysis, information about the epidemiological profile of the patients of a physiotherapy clinic-school located in the city of Nanuque-MG. Methodology: This work analyzed through an exploratory documentary research the characteristics of the epidemiological profile, as well as the pathologies presented by the patients of a clinic-school of Physical Therapy, observing factors that interfere positively or negatively both in their health and in the quality of care, aiming at the results obtained through the Physiotherapeutic treatment performed by trainees of a higher education institution in the city of Nanuque-MG. Results: It was observed that the population seeks physical therapy rehabilitation services because it presents a greater number of musculoskeletal injuries depicting difficulties in performing daily activities. Conclusion: It is concluded that in general among the various areas of Physical Therapy worked in the clinics-schools of Physical Therapy, the specialty of Orthopedic and Traumatological Physical Therapy as being the most sought after area in the city of Nanuque-MG, observing that the population seeks physiotherapeutic rehabilitation services for presenting a greater number of musculoskeletal injuries comprising the difficulties in performing their daily tasks.

**Keywords:** Clinic-school of physiotherapy, Neurological diseases, Rheumatology, Urogynecology, Respiratory physiotherapy, Rehabilitation.

#### **1 INTRODUCTION**

According to (MACÁRIO *et al*, 2021) clinic-schools have a role of great relevance not only for the population, by offering free care, but also contributes to academic training, enabling



real contact with patients under the supervision of preceptors, acquiring practical training and thus developing skills during graduation.

It is of great importance to present to academics professional ethical principles and encourage them to provide care of qualidae, seeking evolution in treatment and always respecting the patient (NUNES *et al*, 2017).

The clinic-school of Physical Therapy Health Care Center of UNEC-CASU offers its patients a good physical structure as well as modern therapeutic resources and individualized treatment, as well as ethics and respect. In this way it provides free services to the population with fewer financial resources promoting pain relief, thus contributing to the improvement of health.

In view of the pathologies that affect the population, making the individual unable to perform their activities of daily living, in order to seek the services offered by the physiotherapy clinics-schools in order to provide the individual with rehabilitation and a better quality of life, returning them to functions through a humanized, respectable, responsible treatment and a good physical structure.

This study seeks to understand the phenomena related to the health of the population, in order to help reduce the picture of dysfunctionality, thus developing their functional capacities. Therefore, it is extremely important to know the profile of the patients seen in a physiotherapy clinic-school to outline the objectives and conducts according to the individuality of each patient.

## **2 THEORETICAL DEVELOPMENT**

### **2.1 CLINIC-SCHOOL OF PHYSIOTHERAPY**

It is known that Physical Therapy is a health science that studies, prevents and treats functional dysfunctions that affect organs and systems of the human body, generated by traumas, genetic variations and other acquired diseases, as well as rehabilitates individually and collectively in order to promote well-being, independence and giving it the ability to integrate into society (MACHADO and NOGUEIRA, 2008).

The Physiotherapy Clinics-schools are spaces located in higher education institutions and work with the purpose of prevention, cure and / or rehabilitation of orthopedic or traumatological dysfunctions and their main purpose is to offer students knowledge and practical experience (NOGUEIRA *et al*, 2016).

Thus, the clinics-schools establish services associated with institutions of higher education. In the Physiotherapy course the service is performed by students who attend the last three periods of the course under the supervision of an internship preceptor graduated in Physical Therapy. Thus



patients are cared for by academics, future professionals where they apply the techniques learned during the previous semesters (SILVA *et al*, 2014).

In this way, institutions that have a clinic-school provide academics with a tangible experience of the future profession, in addition to offering free quality care to the needy community contributing to social good (CASTRO *et al*, 2021).

The patients have the knowledge that they are attended by the Physical Therapy students in which they are in search of professional improvement. The student-trainee is guided by the professional Physiotherapist duly registered, in this way transmits to the patient confidence, competence, seriousness and good results, thus, effectively performing free care collaborating with the health of the population (SUDA *et al*, 2009).

## 2.2 REHABILITATION FOR NEUROLOGICAL DISEASES

Neurological diseases are those that affect the central nervous system or the peripheral nervous system, where disorders of the brain, spinal cord, peripheral nerves and neuromuscular junction are integrated. They may be due to genetic or hereditary and congenital changes, and may occur in different periods of life, from the neonatal phase to old age, compromising some functional and structural areas of the individual (DE SOUZA MATOS *et al*, 2019).

Among the main neurological diseases are tumors of the central and/or peripheral nervous system, developmental alterations, head and/or spinal trauma, degenerative diseases, infectious diseases, inflammatory diseases, vascular diseases and demyelinated diseases. Given this, neurological physiotherapy is a specialty of physiotherapy that enables the neurological patient to have a better quality of life after being diagnosed, allowing the partial or total recovery of their functions resulting from sequelae, where the physiotherapist seeks the most appropriate method aiming at maximum independence in the daily life of the individual (WATHIER and CANELLA, 2020).

Spasticity is a motor condition resulting from a neurological lesion where increased muscular endurance can be identified. Spasticity is linked to lesions of the pyramidal tract appearing along with paresis and exacerbation of myotactic reflexes, and may occur later to spinal cord and/or brain injuries such as stroke (Stroke), Traumatic Brain Injury, Multiple Sclerosis, Spinal Cord Injuries and Cerebral Palsy (ROCHA and RIBERTO, 2023).

For (RODRIGUES and BITENCOURT, 2013) spasticity is a sign associated with injury to the central nervous system in which results in increased muscular resistance to stretching. Among the various methods to reduce spasticity, we have the neuromuscular chemical blockade, in which



the blocking action of acetylcholine on the motor plate, botulinum toxin A is an efficient alternative intervention improving spasticity.

The goal of Neurological Physical Therapy is to restrict the sequelae of body functions caused by chronic degenerative neurological diseases, thus increasing the levels of independence and improving the quality of life of patients. In this way it is essential that health professionals have theoretical and practical knowledge about the disabilities and functionality of individuals with neurological diseases, so that they can establish better strategies, contributing to the development of the patient through physiotherapeutic interventions (COSTA *et al*, 2021).

From studies it is possible to identify different types of physiotherapeutic treatments for the rehabilitation of patients affected by neurological diseases according to the sequela presented, being feasible the application of electrical and mechanical devices to assist in the inhibition of postural patterns, manual therapies, gait training and exercises to improve proprioception. (LIMA *et al*, 2021).

In view of neurological impairments, hemiparesis generates a loss of autonomy for individuals and thus they depend on caregivers. Physiotherapeutic rehabilitation is fundamental for the gain of functional independence. In this way, the Bobath method aims to influence muscle tone through key control points, in this way it will promote changes in postural control and performance of functional activities (PERES *et al*, 2009).

### **2.2.1 Stroke**

Cerebrovascular Accident (CVA) is defined as a neurological deficit of sudden onset caused by a vascular alteration that causes a partial or complete interruption of blood flow to a specific area of the brain, divided into two types, being hemorrhagic when provoked by the rupture of a vessel of the brain, or ischemic, when obstruction of an artery occurs, thus preventing the oxygenation of brain cells (ROXA *et al*, 2021).

Becoming one of the leading causes of death in developed countries, stroke occurs due to a blockage of blood supply in some regions of the brain causing sequelae. The sequelae of stroke will depend on the area and size of the lesion and may be sensory, motor and / or cognitive, resulting in deficits in functional capacity, interfering with independence and quality of life (FERLA *et al*, 2015).

Physical therapy rehabilitation will reduce functional limitations by reducing the negative impacts generated by stroke sequelae. According to the type of sequela presented, manual therapeutic resources, electrotherapy, proprioception improvement, gait training, stretching,



muscle strengthening and inhibition of the postural pattern are applied, making the patient more independent within their limitations (ALVES *et al*, 2019).

In view of neurological impairments, hemiparesis generates a loss of autonomy to individuals and thus they depend on caregivers, and physiotherapeutic rehabilitation is fundamental for the gain of functional independence, allowing the patient affected by stroke to use the affected limbs, returning compensatory mechanisms, and promoting exercises that will use new acquired skills. Among these physiotherapeutic conducts is the Bobath Neuroevolutionary method, this concept contains techniques of inhibition and facilitation through key control points, and the earlier the action, the better the patient's rehabilitation response because the method inhibits pathological patterns and stimulates normal movement patterns, thus reducing the sequelae acquired by the pathology and allows the individual independence in activities of daily living (FERNANDES *et al*, 2023).

### **2.2.2 Trauma-orthopedic disorders**

Traumato-orthopedic Physical Therapy is a specialty of Physical Therapy that acts in the investigation, prevention and treatment of acute and chronic disorders related to bones, muscles, joints and ligaments. These disorders can affect the day-to-day of patients and can bring functional disabilities. The professional elaborates his conducts developing techniques of electrotherapy, thermotherapy, kinesiotherapy, isokinetic therapy, stimulation of balance and muscle strengthening, respecting the particularities of each patient in the treatment of pathologies such as herniated disc, scoliosis, low back pain, tendonitis, fractures, sprains and dislocations (SILVA *et al*, 2021).

These disorders are most often related to the patient's way of life and working conditions, thus causing physiological changes, compromising the patient's quality of life and its functionalities (CERQUEIRA *et al*, 2022).

Since 1965 Melzack and Wall have been researching the physiology of electroanalgesia. A method based on the electrical impulses applied through Transcutaneous Electrical Nerve Stimulation (TENS), this procedure provides analgesic effects, before edematous and increases the functional recovery of the individual if applied early. Electrotherapy is very efficient in the treatment of trauma-orthopedic disorders (DO NASCIMENTO *et al*, 2020).

The Traumato-orthopedic Physiotherapy provides several resources to assist in the treatment of musculoskeletal injuries, as well as some manual techniques, among them the myofascial release of massage therapy, because in addition to the cost-benefit, it provides the



patient with good results minimizing the picture of pain and tension (OLIVEIRA *et al*, 2018).

### 2.2.3 Rheumatic disorders

Rheumatic diseases are a compound of different pathologies that mainly affect the locomotor system (muscles, joints, cartilages, tendons and ligaments), these pathologies can present acutely, and later evolve to the chronic stage, and may affect the individual in different stages of life, resulting in pain, edema, crepitation, stiffness in the musculoskeletal system, decreased range of motion and functional disability, it may also affect other organs and the immune system (REIS *et al*, 2023).

Individuals with rheumatic diseases have their functional capacity compromised, suffering functional and psychoemotional damage, because rheumatic diseases can reach the chronic and disabling phase, in which the individual faces some limitations to perform daily activities and self-care activities, generating harm in their social life (CAMPONOGARA *et al*, 2022).

The rheumatic pathologies that most occur are: arthrosis, ankylosing spondylitis, fibromyalgia, gout, rheumatoid arthritis, lupus and osteoporosis. In this case, physical therapy has several techniques that can reduce the symptoms arising from these diseases. In this way, the purpose of Physical Therapy is to reduce symptoms and improve the quality of life of individuals affected by rheumatologic disorders, with kinesiotherapy being the most used resource (CARVALHO *et al*, 2018).

Physical therapy is essential in the treatment of rheumatic diseases, among the main objectives are to perform behaviors that relieve pain, maintain or increase the range of motion and improve the strength of the muscles that are involved in the affected joint. (OF THE SAINTS *et al*, 2015).

### 2.2.4 Respiratory Disorders

The respiratory system has the function of offering oxygen (O<sub>2</sub>) to the body, and from it remove carbon dioxide (CO<sub>2</sub>), a result of cellular metabolism. This process occurs through hematosmosis, that is, the gas exchange that occurs in the lungs, where the venous blood is oxygenated through inspiration and carbon dioxide is eliminated through expiration (PEREIRA, 2000).

According to (SOARES *et al*, 2004) there are several causes that contribute to the occurrence of dysfunctions in the lower airways, and the main ones are: obesity, disorders in the immune system, muscle hypotonia, great compression in the airways, pulmonary hypoplasia, reduced volume in the lower airways, diseases in the cardiovascular system, nasal congestion,



tonsils and adenoids, among others. In view of this, respiratory diseases are one of the main causes of death, and may or may not be accompanied by congenital heart disease.

Respiratory Physiotherapy uses techniques and interventions that can assist in the dysfunctions of the respiratory system. In view of this, after respiratory diseases, the rehabilitation of pulmonary function becomes essential to reduce the risk of disability and morbidity of patients. Manual techniques are applied, as well as the use of devices such as mechanical ventilation in patients with respiratory muscle weakness. Inspiratory muscle training is one of the techniques performed by the physiotherapist to treat respiratory muscle weakness and reduce associates, as well as accelerate the process of ventilatory weaning (BARBOSA *et al*, 2023).

Respiratory Physiotherapy provides instrumental resources, such as intrapulmonary percussive ventilation, noninvasive ventilation (NIV), high-frequency chest wall oscillation, high-frequency oral oscillation, expiratory positive pressure, respiratory muscle training devices and cough simulators, in addition to manual therapies. These resources assist in the removal of secretion and lung expansion (SCHIVINSKI, 2021).

In addition, some techniques can be used in respiratory physiotherapy, such as postural drainage and positioning, reverse lung expansion and bronchial hygiene methods, with this, the physiotherapeutic treatment is of great importance favoring the reduction of morbidity (ROCHA *et al*, 2022).

### **2.2.5 Urogynecological Disorders**

Urinary incontinence is a pathology of different types where some dysfunction occurs in the structures of the pelvic floor, which can be Urge Urinary Incontinence (UI) is the involuntary loss of urine along with the imminent need to urinate, is associated with the uncontrollable urge to urinate. Stress Urinary Incontinence (SUI) occurs urine loss involuntarily, is associated with exertion circumstances or when performing physical activity, and Mixed Urinary Incontinence (MUI) indicate characteristics of the two types mentioned above. Urinary incontinence can be caused by menopause, medication use, and type of delivery. Kinesiotherapy in the treatment of urinary incontinence is a non-invasive method and shows efficacy, where body movements are used such as the performance of proprioception exercises, stretching, and strengthening of the pelvic floor muscles (PEREIRA *et al*, 2021).

Kinesiotherapy in the Kegel method is one of the resources used in physical therapy for the treatment of urinary incontinence. This method consists of performing pelvic and perineal movements, in which it promotes increased muscle tone and vascularization of the pelvic muscles.



Pelvic electrostimulation and perineal biofeedback are also other effective resources used in physical therapy for the treatment of this (DE SOUZA AGUIAR *et al*, 2022).

### 3 METHODOLOGY

This is a theoretical survey on the epidemiological profile of patients seen at the physiotherapy clinic-school located at Rua Nelício Cordeiro, without number, in the Israel Pinheiro neighborhood in the city of Nanuque-MG, where it serves the sectors of Neurological Physical Therapy, Orthopedics and Traumatology, Rheumatology and Urogynecology. The questionnaires were applied to 40 patients of both sexes seen at the physiotherapy clinic-school in physiotherapeutic treatment from May 24, 2023 to May 31, 2023. The patients are cared for by the trainees at the Health Care Center of UNEC - CASU, belonging to the University Center of Caratinga - UNEC - Campos of the municipality of Nanuque - MG. All participants signed an informed consent form, agreeing to participate in the research. It is important to emphasize that participants can give up participating in the research at any time, if they so wish. The study collected information such as: gender, age group, marital status, profession, region of the city where you live, associated diseases and types of treatment. Based on the information collected, the epidemiological surveys aim to collect data to understand the needs of a clinic-school of Physical Therapy, seeking to attribute with excellence the care provided in it.

### 4 RESULTS

Regarding gender, there was a higher frequency of care provided to females, representing 57.5% of the sample, and 42.5% of the visits were performed to males.

According to family income, it was observed that 32.50% of individuals have a family income of up to 1 minimum wage, 62.50% of individuals have a family income of 1 to 5 minimum wages and 5% of individuals have a family income of 5 to 10 minimum wages. Regarding the level of education, it was observed that 5% of the individuals had never been to school, 30% of the individuals had incomplete elementary education, 7.5% of the individuals had completed elementary school, 7.5% of the individuals had incomplete high school, 32.50% of the individuals had completed high school, 5% of the individuals had incomplete higher education and 12.50% of the individuals had completed higher education.

Based on the information collected through the questionnaire applied, it was observed that 65% of the individuals have already needed to undergo some surgical process and 35% of the individuals have never needed to perform any type of surgery.

Regarding the use of pacemakers, it was observed that 100% of the sample does not use it. Regarding the use of metal structures, it was observed that 17.5% of the individuals make use of metal structures and 82.5% do not make use of metal structures anywhere on the body.

From the data obtained in relation to age, it was observed that 10% of the patients are aged between 20-30 years, 5% of the patients are aged between 31-40 years, 12.5% of the patients are aged between 41-50 years, 32.5% of the patients are aged between 51-60 years, 20% of the patients are aged between 61-70 years and 20% of the patients are between 71-80 years of age.

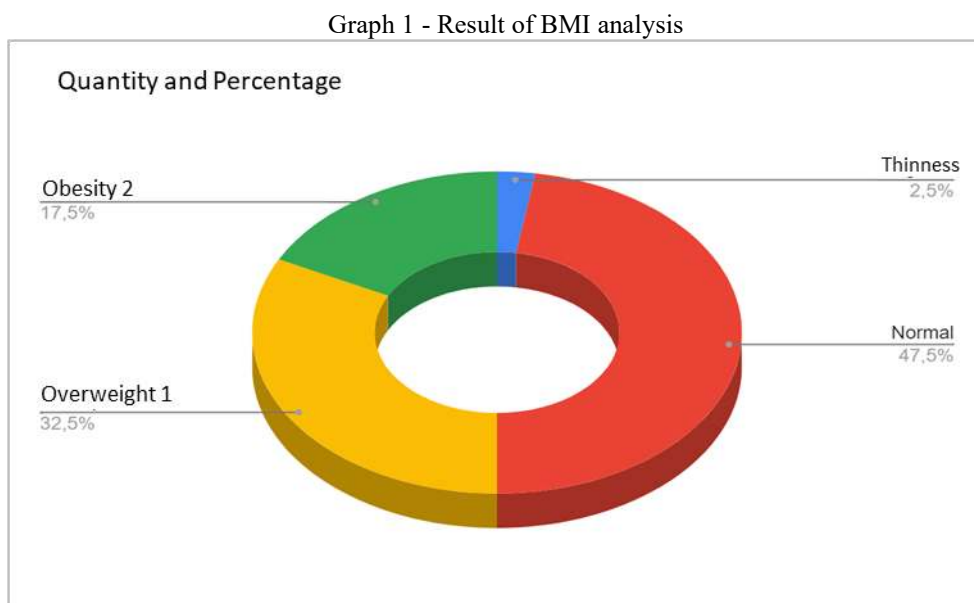
Through the data obtained in relation to race, it was observed that 17.5% of the individuals have White skin color, 57.5% are Brown and 25% are Black.

Regarding marital status, it was observed that 25% of the individuals are Single, 55% are Married, 7.5% are Divorced and 12.5% of the sample are Widowed.

According to the data obtained, in relation to the number of children it was observed that 7.5% of the individuals do not have children, 30% have 1 child, 15% have 2 children, 30% have 3 children, 10% have 4 children, 5% have 5 children and 2.5) have more than 5 children.

It was observed in relation to the region in which the individuals live, it was observed that 100% of the sample live in the urban area.

As shown in graph 1 (below), regarding BMI (Body Mass Index), it was observed that 2.5% of the individuals classified as thinness, 47.5% of the individuals classified as normal, 32.5% of the individuals classified as overweight 1 and 17.5% of the individuals classified as obesity 2.



Source: Research data

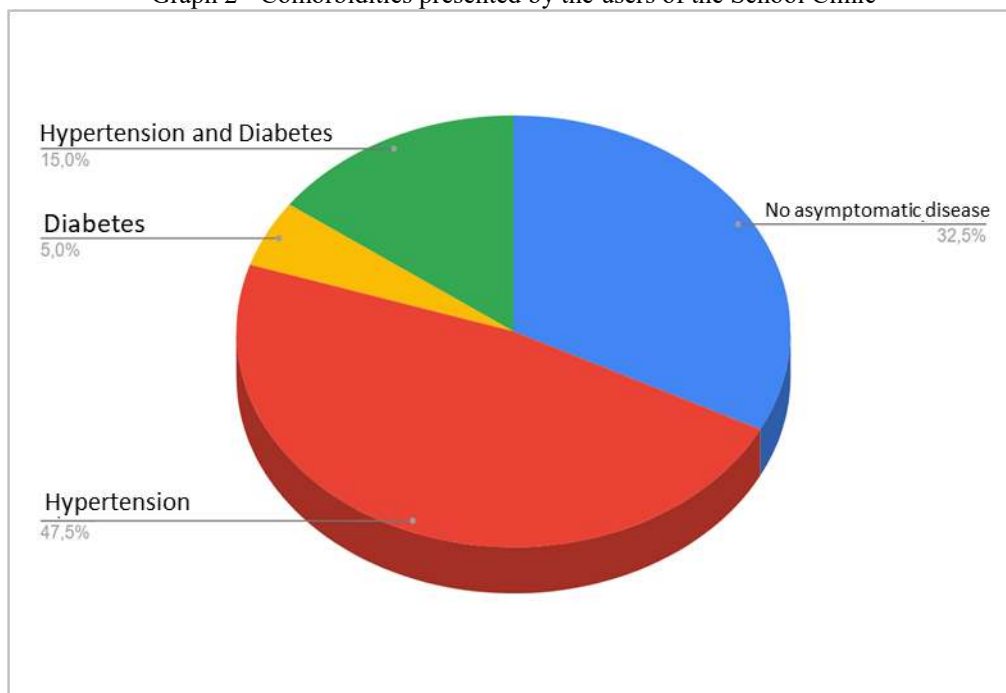
BMI is the most widely used index in the world to indicate obesity levels. This method

considers two variables, which are body mass and height. Obesity is a disease characterized by excess body fat, it was noticed that among the contributing factors to obesity, is poor diet and low caloric expenditure due to physical inactivity, factors that are responsible for excess population weight (TEIXEIRA *et al*, 2017).

It is perceived that the high BMI associated with other factors such as age and gender, are risk indicators for the emergence of cardiovascular diseases, thus being able to lead to damages to the quality of life of individuals (MASSAROLI *et al*, 2018).

As shown in graph 2 (below), in relation to associated diseases, it was observed that 32.5% of individuals do not have associated diseases, 47.5% of individuals have only arterial hypertension, 5% of individuals have only diabetes and 15% of individuals have both hypertension and diabetes.

Graph 2 - Comorbidities presented by the users of the School Clinic



Source: Research data

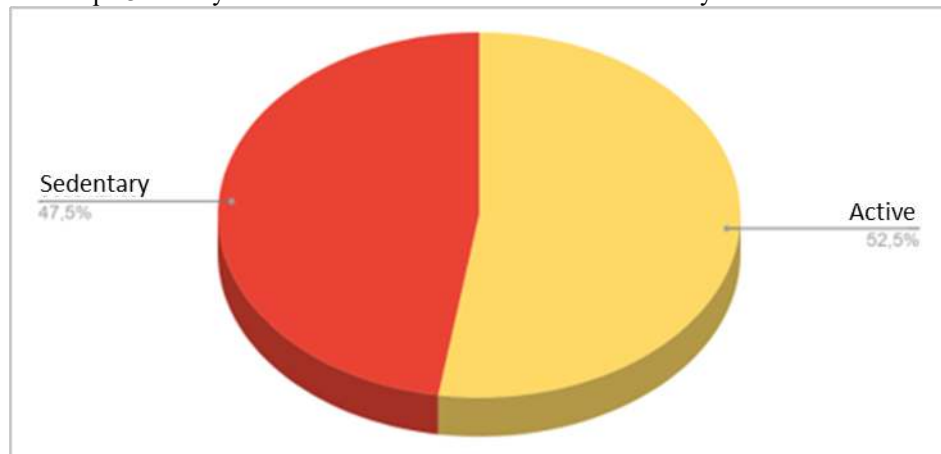
Over the last decades, there have been changes in the profile of diseases that affect the population. Among the factors of change is the decrease in the birth rate and increase in life expectancy, in this way there is an increase in the elderly population and consequently an increase in chronic-degenerative diseases (DOS SANTOS and GHISLENE, 2012).

Biological and environmental modifications contribute to the appearance of some chronic diseases. This fact shows that lifestyle and genetics are factors that induce the emergence of diseases, that is, the human organism goes through several stages of development, these changes

can determine functional or structural changes of the organism, which together with environmental stress, increases the susceptibility and vulnerability to diseases (GOTTLIEB *et al*, 2019).

Regarding the practice of exercises, it was observed that 52.5% of the participants practice physical exercise regularly, three or more times a week with a minimum duration of 30 minutes and 47.5% of the participants do not perform any type of physical exercise.

Graph 3 - Analysis of the research where active and sedentary users were observed

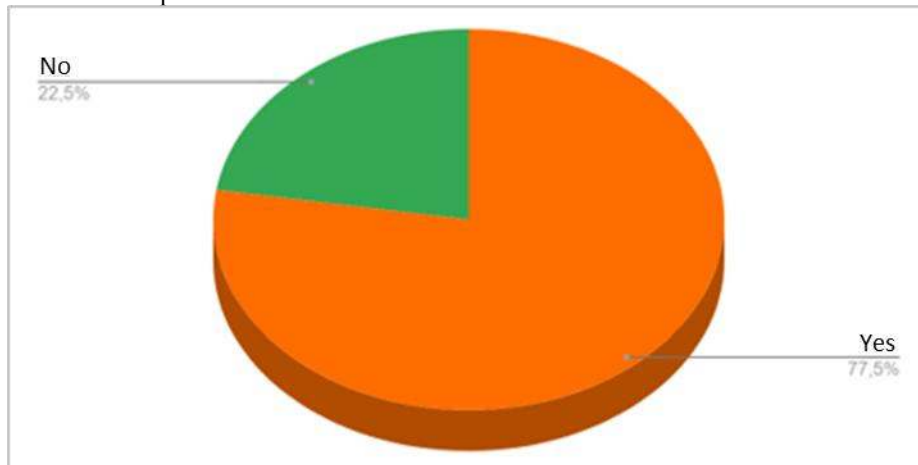


Source: Research data

The sedentary lifestyle are a set of habits that are related to the emergence of chronic-degenerative disorders in which they are extremely harmful to health. The practice of regular physical exercise tends to progress the general state of health of an individual, in this way the individual who performs physical exercise presents better indices of physical fitness becoming more active. Thus, improving lifestyle, aerobic capacity and environmental conditions, in which it inhibits the emergence of changes associated with the degenerative process, which promotes the best physiological functioning of the body and provides a sense of well-being (DA SILVA *et al*, 2017).

Regarding the use of medications, it was observed that 77.50% of the individuals make continuous use of medications and 22.50% of the individuals do not use medications.

Graph 4 - Indicative in relation to the continuous use of medicines

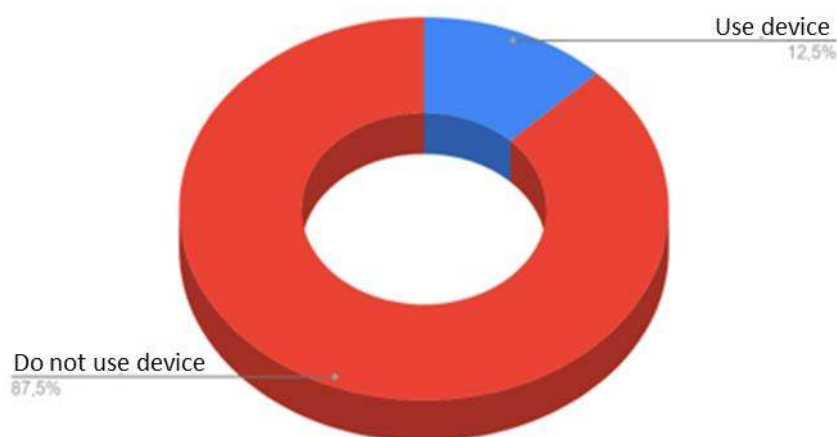


Source: Research data

As a result of the aging process, which is associated with the emergence of chronic diseases, mental, physical and cognitive disabilities, as well as the use of medications. The greater consumption of medicines increases health risks, such as drug interactions and adverse drug reactions thus causing a functional decline in health with regard to hepatic elimination and renal excretion, due to physiological changes related to the aging process (MOREIRA *et al*, 2020).

Regarding the use of auxiliary devices such as wheelchair, cane and walker, it was observed that 12.5% of the individuals use it and 87.5% of the individuals do not use any type of gait aid device.

Graph 5 - Data on the use of gait aids



Source: Research data

Gait aids are some kind of external assistance so that the individual who has some kind of limitation in the lower limbs can walk safely. Thus, the auxiliary devices help to decrease the load on the lower limbs to compensate for weaknesses or relieve pain, contributing to the

improvement of balance, helping in postural stability and improvement of functional independence in activities of daily living (ALBUQUERQUE *et al*, 2018).

The results of this study in relation to the areas of Physical Therapy in which patient care was performed, it was observed that there is a greater demand for the area of Traumatology with the percentage of 60%, Neurology with 20% of patients, Rheumatology with 17.50% of patients and Urogynecology with only 2.50% of patients.

In the distribution of gender by area of care in the clinic-school of Physical Therapy in the city of Nanuque-MG, in the area of Traumatology it was verified that there is a higher frequency of female individuals, being 54.20%, and 45.80% of male individuals. In the area of Rheumatology, 85.70% of the individuals were female and 14.30% were male. In Neurology, 50% of females and 50% of males were verified. In the area of Urogynecology, 100% of the male individuals were verified.

Table 1 - Frequency of individuals and gender distribution by area of care in the clinic-school of Physical Therapy

Specialty	N	Percentage	Female	Percentage	Male	Percentage
			N		N	
Traumatology	24	60%	13	54,20%	11	45,80%
Neurology	8	20%	4	50%	4	50%
Rheumatology	7	17,50%	6	85,70%	1	14,30%
Urogynecology	1	2,50%	0	0%	1	100%

Source: Research data

Musculoskeletal injuries have been the second leading cause of medical and hospital care by the population, as they cause changes in functionality and impaired activities of daily living. Due to this factor, physiotherapeutic rehabilitation in the specialty of traumatology promotes pain relief and returns it to functionality, thus gaining greater importance in the market (DAMASO *et al*, 2020).

For (JUNIOR *et al*, 2020) women seek health services more when compared to men. Male individuals have a greater resistance and lack of health care, that is, the male public has difficulty in accessing to seek resources that help both in the prevention and in the improvement of health.

Based on the data of the sample studied in the area of Neurology, it was observed 37.50% of the individuals diagnosed with Stroke, 25% of the individuals with diagnosis of Parkinson's Disease, (12.50%) of the individuals with diagnosis of Alzheimer's, 12.50% of the individuals with diagnosis of Cerebellar Ataxia and 12.50% of the individuals with diagnosis of Postoperative Spinal Cord Injury.

Table 2 – Patients with neurological diseases treated at CASU

Diagnosis	N	Percentage
Stroke	3	37,50%
Parkinson's disease	2	25%
Alzheimer's disease	1	12,50%
Cerebellar Ataxia	1	12,50%
P. O. of Spinal Cord Injury	1	12,50%

Source: Research data

Stroke is the second cause of morbidity worldwide and in Brazil it is the first cause that makes individuals with disabilities and severe injuries. The increase in life expectancy is a factor that makes the individual more exposed to the emergence of vascular diseases. In this way it is important to modify unhealthy lifestyle habits to have a healthy aging (JUNIOR *et al*, 2022).

Parkinson's disease is a chronic neurological alteration caused by the degeneration of the neurons of the substantia nigra of the midbrain, being identified by four clinical manifestations, namely, resting tremor, bradykinesia, rigidity and postural instability. Neurofunctional physiotherapy will develop exercises for gait training, balance, strength gain and motor coordination, seeking to reduce physical dysfunction so that the patient can have the greatest possible independence (SANTOS and FERRO, 2022).

Regarding the area of Rheumatology, it was observed 42.80% of the individuals diagnosed with Gonarthrosis, 14.30% of the individuals with diagnosis of Rheumatoid Arthritis, 14.30% of the individuals with diagnosis of Lumbar Osteoarthritis, 14.30% of the individuals with diagnosis of Chronic Pain and 14.30% of the individuals with diagnosis of Fibromyalgia.

Table 3 - Patients with rheumatic diseases treated at CASU

Diagnosis	N	Percentage
Gonartrose	3	42,80%
Rheumatoid arthritis	1	14,30%
Osteoarthritis, Lumbar	1	14,30%
Chronic Pain	1	14,30%
Fibromyalgia	1	14,30%

Source: Research data

The knee joint supports weight, in this way it is an extremely fundamental joint, because it provides body stability, so gonarthrosis is a degenerative pathology, in which it presents loss of function due to pain symptoms. In view of this, physiotherapeutic treatment should be started soon after the appearance of the first symptoms, which are pain, edema and difficulty in performing joint movements, performing strength training exercises, balance, motor coordination and muscle

stretching (DE SOUZA COSTA *et al*, 2022).

According to the studies in the area of Traumatology, it was observed 29.20% of the individuals with diagnosis of Shoulder Tendinopathy, 25% of the individuals with diagnosis of Low Back Pain, 12.20% of the individuals with diagnosis of Fracture, 8.40% of the individuals with diagnosis of Lumbosciatalgia, (8.40%) of the individuals with diagnosis of Cervicalgia, 4.20% of the individuals with diagnosis of Patellar Chondropathy, 4.20% of the individuals with diagnosis of Plantar Fasciitis, 4.20% of individuals diagnosed with Tenosynovitis and 4.20% of individuals diagnosed with Patellar Dislocation.

Table 4 - Patients with orthopedic and traumatological diseases treated at CASU

Diagnosis	N	Percentage
Shoulder Tendinopathy	7	29,20%
Lumbago	6	25%
Fracture	3	12,20%
Lombociatalgia	2	8,40%
Cervicalgia	2	8,40%
Patellar chondropathy	1	4,20%
Fascite Plantar	1	4,20%
Tenosynovitis	1	4,20%
Patellar Dislocation	1	4,20%

Source: Research data

Tendinopathy of the shoulder is a dysfunction characterized by the degeneration of the rotator cuff tendons being caused by excessive force, trauma, repetitive efforts and systemic diseases. From the physiotherapeutic evaluation, the treatment is defined through muscle strengthening exercises and muscle stretching, becoming effective in reducing pain and improving the patient's ability to perform day-to-day activities (SERENZA *et al*, 2017).

Low back pain is a painful condition located in the lumbar spine, being caused by muscle or ligament tension due to poor posture or irregular movements. According to studies, low back pain is a trauma-orthopedic pathology very common in adulthood, reaching a prevalence of 80% over the course of life (JUNIOR *et al*, 2020). Regarding the area of Urogynecology, 100% of the sample was diagnosed with Urinary Incontinence.

Table 5 - Patient with urogynecological disease treated at CASU

Diagnosis	N	Percentage
Urinary Incontinence	1	100%

Source: Research data



Knowing that urinary incontinence is defined by the loss of urine involuntarily, Urogynecological physiotherapy provides several resources for the treatment of this dysfunction, such as kinesiotherapy for strengthening the pelvic floor and electrostimulation have positive results for the improvement of symptoms and improved quality of life of patients (DE OLIVEIRA *et al*, 2017).

## 5 CONCLUSION

In this research the reader had the opportunity to know better about several specialties within Physical Therapy, about the main pathologies that affect the population and the importance of a clinic-school for undergraduate students of the course, as well as for the community. It is worth mentioning that the work developed within the clinics-schools happens in an individualized way, benefiting the population and providing rehabilitation and prevention for patients efficiently and free of charge.

This study sought to identify the epidemiological profile of the patients seen by the trainees at the clinic-school Center for Health Care of UNEC - CASU, destined to the Physical Therapy course from the results collected and analyzed through an exploratory documentary survey.

After the end of the study carried out in the city of Nanuque, knowing the epidemiological profile of the patients seen in the clinic-school of Physical Therapy, it is concluded that among the various areas of Physical Therapy worked in the clinics-schools of Physical Therapy, the specialty of Orthopedic and Traumatological Physical Therapy as being the areas of greatest demand in the municipality of Nanuque-MG, observing that the population seeks the services of physiotherapeutic rehabilitation for presenting a greater number of injuries musculoskeletal understanding the difficulties in performing their daily tasks.



## REFERENCES

ALBUQUERQUE, Vanessa S.; FERNANDES, Laíze P.; MÁRMORA, Cláudia Helena C. O uso de dispositivos auxiliares para marcha em idosos e sua relação com autoeficácia para quedas. Revista Hospital Universitário Pedro Ernesto (TÍTULO NÃO-CORRENTE), v. 17, n. 2, p. 51-56, 2018.

ALVES, Nágila Silva; DO NASCIMENTO PAZ, Francisco Adalberto. Análise das principais sequelas observadas em pacientes vítimas de acidente vascular cerebral-AVC. Revista da FAESF, v. 2, n. 4, 2019.

BARBOSA, Andreia Mendes; ARANTES, Ana Paula Felix; DA SILVA, Renato Canevari Dutra. A UTILIZAÇÃO DA FISIOTERAPIA RESPIRATÓRIA NA REABILITAÇÃO DE PACIENTES INFECTADOS COM COVID-19. RECISATEC-REVISTA CIENTÍFICA SAÚDE E TECNOLOGIA-ISSN 2763-8405, v. 3, n. 1, p. e31239-e31239, 2023.

CAMPONOGARA, Bruna Tainá Bordin et al. Aplicação do índice de funcionalidade em pessoas com doenças reumáticas. Revista Família, Ciclos de Vida e Saúde no Contexto Social, v. 10, n. 2, p. 202-214, 2022.

CARVALHO, Fernanda et al. Perfil epidemiológico e clínico dos pacientes com doenças reumáticas atendidos pela Fisioterapia na cidade de Goiânia. ENCICLOPEDIA BIOSFERA, v. 15, n. 28, 2018.

CERQUEIRA, Cecília Santos et al. PRINCIPAIS DISTÚRBIOS TRAUMATO-ORTOPÉDICOS ATENDIDOS EM CLÍNICA-ESCOLA DE FISIOTERAPIA. RECIMA21-Revista Científica Multidisciplinar-ISSN 2675-6218, v. 3, n. 10, p. e3102166-e3102166, 2022.

COSTA, C. M. B. et al. FUNCIONALIDADE DE USUÁRIOS COM DOENÇAS NEUROLÓGICAS CRÔNICO-DEGENERATIVAS. Revista CIF Brasil, v. 13, n. 1, p. 84-93, 2021.

DAMASO, SORAIA DE FREITAS TAVARES et al. PERFIL EPIDEMIOLOGICO E FUNCIONAL DOS PACIENTES ATENDIDOS EM UMA CLÍNICA ESCOLA NA ÁREA DE ORTOPEdia E TRAUMATOLOGIA. Revista Científica da UNIFENAS-ISSN: 2596-3481, v. 2, n. 2, 2020.

DA SILVA, Cinthia Lopes et al. Atividade física de lazer e saúde: uma revisão sistemática. Mudanças-Psicol Saúde, v. 25, n. 1, p. 57-65, 2017.

DA SILVA SANTOS, Sheyla; DE LIMA FERRO, Thauan Narciso. Atuação do fisioterapeuta neurofuncional no paciente com Doença de Parkinson: uma revisão narrativa. Research, Society and Development, v. 11, n. 2, p. e5211225363-e5211225363, 2022.

DE OLIVEIRA, Ana Heloísa Faustino Viana et al. Contribuições da fisioterapia na incontinência urinária no climatério. Revista de Ciências Médicas, v. 26, n. 3, p. 127-133, 2017.

DE SOUSA, Kariny Castro; MOTA, Pedro Henrique Alves; DA SILVA, Karla Camila Correia. Perfil sociodemográfico, clínico e de satisfação dos participantes de uma clínica escola de Fisioterapia no Município de Guaraí, Tocantins. Research, Society and Development, v. 10, n. 12,



p. e255101220309-e255101220309, 2021.

DE SOUZA AGUIAR, Jordana et al. Perfil dos pacientes com incontinência urinária atendidos na área de fisioterapia uroginecológica em uma clínica escola. Research, Society and Development, v. 11, n. 13, p. e337111335221-e337111335221, 2022.

DE SOUZA COSTA, Luana; DE AZEVEDO MESQUITA, Fabyana Nunes; LOPES, Millena Bezerra. A importância da fisioterapia no tratamento de gonartrose em paciente da terceira idade. Research, Society and Development, v. 11, n. 15, p. e117111536780-e117111536780, 2022.  
DE SOUZA MATOS, Lilian Ramine et al. Perfil epidemiológico e clínico de pacientes neurológicos em um hospital universitário. Revista Neurociências, v. 27, p. 1-17, 2019.

DE SOUZA SERENZA, Felipe et al. EFICÁCIA DE UM PROTOCOLO DE REABILITAÇÃO NO TRATAMENTO DE TENDINOPATIAS DO OMBRO. In: Anais do Congresso Brasileiro da Associação Brasileira de Fisioterapia Traumato-Ortopédica-ABRAFITO. 2017.

DO NASCIMENTO, Héliida Borges et al. PRINCIPAIS PATOLOGIAS E RECURSOS FISIOTERAPÊUTICOS UTILIZADOS NA FISIOTERAPIA TRAUMATO-ORTOPÉDICA: PRINCIPAIS PATOLOGIAS E RECURSOS FISIOTERAPÊUTICOS UTILIZADOS NA FISIOTERAPIA TRAUMATO-ORTOPÉDICA. Anais da Mostra Acadêmica do Curso de Fisioterapia, v. 8, n. 1, p. 87-90, 2020.

DOS SANTOS, Marilúcia V.; GHISLENI, Melissa M. Perfil epidemiológico de pacientes da clínica-escola de fisioterapia UNIVATES. Revista Destaques Acadêmicos, v. 4, n. 3, 2012.

DOS SANTOS JUNIOR, Edmilson Cursino; BORGES, Ana Maria Machado; VIEIRA, Bianca Alves. PERFIL EPIDEMIOLÓGICO DOS PACIENTES COM OSTEOARTROSE DE JOELHO ATENDIDOS NO SERVIÇO DE FISIOTERAPIA REUMATOLÓGICA EM DUAS CLÍNICAS ESCOLA DE MACEIÓ 2015.

DOS SANTOS OLIVEIRA, Andressa Lais et al. USO DE RECURSOS TERAPÊUTICOS ALTERNATIVOS NA ÁREA DE FISIOTERAPIA TRAUMATO-ORTOPÉDICA. CIPEEX, v. 2, p. 1714-1714, 2018.

FERLA, Fabíola Lindemann; GRAV, Magali; PERICO, Eduardo. Fisioterapia no tratamento do controle de tronco e equilíbrio de pacientes pós AVC. Revista Neurociências, v. 23, n. 2, p. 211-217, 2015.

FERNANDES, Laurilene Pompeu Lemos et al. Método Bobath na hemiparesia em pacientes acometidos por Acidente Vascular Cerebral: uma revisão integrativa. Revista Neurociências, v. 31, p. 1-21, 2023.

GOTTLIEB, Maria Gabriela Valle et al. Aspectos genéticos do envelhecimento e doenças associadas: uma complexa rede de interações entre genes e ambiente. Revista brasileira de geriatria e gerontologia, v. 10, p. 273-284, 2019.

JUNIOR, Dalberto Lucianelli et al. A informação é a principal ferramenta para diminuir a grande incidência de Acidente Vascular Cerebral-AVC e seus agravos na população/Information is the main tool to reduce the high incidence of Cerebral Vascular Accident-CVA and its problems in the population. Brazilian Journal of Health Review, v. 5, n. 1, p. 88-94, 2022.



JUNIOR, Ivan Neves Evangelista et al. Perfil dos pacientes atendidos na área de disfunções musculoesqueléticas em uma clínica-escola de fisioterapia do Norte do RS. *Revista Perspectiva*, v. 44, n. 165, p. 107-112, 2020.

LIMA, Jozeane Brito; CONCEIÇÃO, Núbia Máxima Pereira; DE ARAÚJO TAPPARELLI, Yuri. A fisioterapia motora no processo de reabilitação do acidente Vascular Encefálico. *Revista Saúde e Desenvolvimento*, v. 15, n. 23, p. 87-95, 2021.

MACÁRIO, Natália Rodrigues et al. Perfil epidemiológico dos pacientes atendidos no setor de fisioterapia de uma clínica-escola do interior do Ceará. *Research, Society and Development*, v. 10, n. 13, p. e419101321445-e419101321445, 2021.

MACHADO, Nayana Pereira; NOGUEIRA, Lidya Tolstenko. Avaliação da satisfação dos usuários de serviços de Fisioterapia. *Brazilian Journal of Physical Therapy*, v. 12, p. 401-408, 2008.

MASSAROLI, Letícia Carvalho et al. Qualidade de vida e o IMC alto como fator de risco para doenças cardiovasculares: revisão sistemática. *Revista da Universidade Vale do Rio Verde*, v. 16, n. 1, 2018.

MOREIRA, Francisca Sueli Monte et al. Uso de medicamentos potencialmente inapropriados em idosos institucionalizados: prevalência e fatores associados. *Ciência & Saúde Coletiva*, v. 25, p. 2073-2082, 2020.

NOGUEIRA, Alexandre Fernandes et al. Principais distúrbios traumato-ortopédicos atendidos em clínicas-escola de Fisioterapia. *Revista Científica da Faculdade de Educação e Meio Ambiente*, v. 7, n. 2, p. 33-44, 2016.

NUNES, Elidiane Mafioletti; FRIAS, Rondineli dos Santos. Perfil sociodemográfico, epidemiológico e do atendimento fisioterápico dos pacientes de uma clínica escola de fisioterapia que funciona no espaço de uma unidade básica de saúde particular de Foz do Iguaçu, PR. *Revista Pleiade [Internet]*, v. 11, n. 22, p. 46-55, 2017.

PEREIRA, Érica Rezende et al. A influência da cinesioterapia no tratamento da incontinência urinária em mulheres: revisão. *Brazilian Journal of Development*, v. 7, n. 1, p. 9734-9748, 2021.

PEREIRA, João Santos. Distúrbio respiratório na doença de Parkinson. *Fisioterapia Brasil*, v. 1, n. 1, p. 23-26, 2000.

PERES, Livia Willemann; RUEDELL, Aneline Maria; DIAMANTE, Cristina. Influência do conceito neuroevolutivo bobath no tônus e força muscular e atividades funcionais estáticas e dinâmica sem pacientes diparéticos espásticos após paralisia cerebral. *Saúde (Santa Maria)*, p. 28-33, 2

REIS, Kethryn Soares et al. Registro de doenças reumáticas atendidas em um hospital do interior do Amazonas. *AMAZÔNIA: SCIENCE & HEALTH*, v. 11, n. 1, p. 13-23, 2023.

ROCHA, ALICE ANNY DINIZ; SILVA, RUANA GLICYA LIMA. FACULDADE DE ENFERMAGEM NOVA ESPERANÇA DE MOSSORÓ CURSO DE BACHARAL EM FISIOTERAPIA 2022.



ROCHA, Eduardo de Melo Carvalho; RIBERTO, Marcelo. O uso da medicina canábica para tratamento da dor associada à espasticidade. BrJP, 2023.

RODRIGUES, Franciani; BITENCOURT, Lisiane Tuon Generoso. Atuação da Fisioterapia no Programa de Residência Multiprofissional. Revista Residência Multiprofissional em Saúde Coletiva da Unesc, v. 1, 2013.

ROXA, Gabriela Nunes et al. Perfil epidemiológico dos pacientes acometidos com AVC isquêmico submetidos a terapia trombolítica: uma revisão integrativa. Brazilian Journal of Development, v. 7, n. 1, p. 7341-7351, 2021.

SCHIVINSKI, Camila IS. Fisioterapia respiratória: discutindo um pouco de história e evidências das intervenções 2021.

SILVA, Thâmis Miranda; RODRIGUES, Gabriela Meira; MONTEIRO, Eliane. FISIOTERAPIA TRAUMATO ORTOPÉDICA NO TRATAMENTO DE PACIENTES COM DOR CRÔNICA. Revista Liberum accessum, v. 11, n. 1, p. 25-30, 2021.

SOARES, Janaína A. et al. Distúrbios respiratórios em crianças com síndrome de Down. Arq Ciênc Saúde, v. 11, n. 4, p. 230-3, 2004.

SUDA, Eneida Yuri; UEMURA, Missae Dora; VELASCO, Eliane. Avaliação da satisfação dos pacientes atendidos em uma clínica-escola de Fisioterapia de Santo André, SP. Fisioterapia e Pesquisa, v. 16, p. 126-131, 2009.

TEIXEIRA, Cauê Vazquez La Scala et al. Obesidade do peso normal e obesidade abdominal em praticantes de exercício físico: os " falsos magros" existem?. RBONE-Revista Brasileira de Obesidade, Nutrição e Emagrecimento, v. 11, n. 68, p. 748-754, 2017.

VIANA, JENIFER ROSSIELE SILVA et al. Avaliação da satisfação com a Fisioterapia de pacientes atendidos em uma clínica escola de Maringá-PR. Uningá Review, v. 17, n. 2, 2014.

WATHIER, Gislaine de Oliveira; CANELLA, Glauco César da Conceição. IMPORTÂNCIA DA FISIOTERAPIA NO TRATAMENTO DE DOENÇAS NEUROLÓGICAS 2020.