

## THE CARE AND IMPORTANCE OF THE NURSE IN HUMANIZED BIRTH

### O CUIDADO E A IMPORTÂNCIA DO ENFERMEIRO NO PARTO HUMANIZADO

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#### **Abstract**

**Objective:** To verify the importance of nurses in humanized labor. **Methods:** The present study is a literature review where six studies were carried out in the electronic database of Latin American and Caribbean literature on health sciences (LILACS) using the keywords: "humanized childbirth", "obstetrician" and "nursing". The articles used were from the period of 2015 to 2019. **Results:** After analyzing the material, it was verified that the nurse is an important precursor to make the gestation process as natural and healthy as possible for the mother and the child. **Conclusion:** Studies were able to prove that humanized childbirth is a process that begins with the planning of gestation by the mother and goes until the child is born. It is important to emphasize that nurses have a fundamental role in what concerns the choices that the pregnant woman imposes, which must always motivate the mother, rescuing her autonomy and always be as empathic as possible.

**Keywords:** Humanized delivery. Nurse. Obstetrics.

#### **Resumo**

**Objetivo:** Verificar importância do enfermeiro no parto humanizado. **Métodos:** Trata de uma revisão de literatura onde foram feitas análises de seis estudos na base eletrônica de dados Literatura Latino-Americana e do Caribe em ciências da saúde (LILACS) utilizando as palavras-chave: "parto humanizado" "enfermeiro obstetra" e "enfermagem". Os artigos utilizados foram do período de 2015 a 2019. **Resultados:** Após análise de material, ficou constatado que o enfermeiro é um importante precursor para que o processo da gestação seja o mais natural e saudável possível para a mãe e para a criança. **Conclusão:** Estudos foram capazes de comprovar que

*o parto humanizado é um processo que se inicia com o planejamento da gestação pela mãe e vai até o nascimento da criança. É importante salientar que o enfermeiro possui um papel fundamental no que se diz respeito às escolhas que a gestante impõe.*

**Palavras-chave:** Parto humanizado. Enfermeiro. Obstetrícia.

## 1. INTRODUCTION

Studies show that Brazil is a leader in the world ranking in cesarean sections and, in this scenario, humanized childbirth is increasingly addressed, as it is a healthy method and demonstrably more suitable for parturients <sup>1</sup>.

Humanized childbirth begins at the time of prenatal care, where the nurse begins guiding actions regarding the moment of childbirth and also the postpartum period. The objective of these actions is to restore autonomy to women, thus respecting their culture and ideology, making the process of pregnancy as pleasant as possible <sup>2</sup>.

The obstetric nurse makes use of non-invasive technologies during childbirth in order to promote a physiologically natural practice in the process of labor and birth. Such technologies include allowing the parturients to walk freely, breathing exercises, Swiss balls, and all this, in order to obtain an environment that is as calm and welcoming as possible <sup>2</sup>.

In this context, the objective of this study is to verify the importance of the nursing professional during the humanized delivery process.

## 2. METHODS

The present study is qualitative, descriptive and deals with a literature review. This type of study allows for a broader analysis of the established theme, as it allows theory and application to be carefully reviewed. Therefore, this study focused on the existing protocol introduced in 2009 by Pompeo, Rossi and Galvão <sup>3</sup>.

Lilacs database from 2015 to 2020. After analyzing the titles and abstracts, six articles of greatest importance were selected and that obeyed the pre-established criteria.

After the selection phase of the articles, all of them were read to verify if, in fact, they corresponded to the problem of the study, according to what the study by Bardin <sup>4</sup> says.

## 3. RESULTS AND DISCUSSION

Six articles found in the online database of Latin American and Caribbean Health Sciences (LILACS) were selected using the keywords: "humanized childbirth", "nurse obstetrician" and "nursing". The research was carried out with studies that fell within the period from 2015 to 2020 and were organized in Table 1, with their respective data, containing title, authors, journal of publication and year of publication.

**Table 1** – list of articles selected for the study.

<b>Title</b>	<b>authors</b>	<b>periodical</b>	<b>Year</b>
Obstetric care in the process of delivery to birth	Oliveira JC; Paula ACS; Garcia ESGF; et al	Research journal Care is key	2018
Contribution of obstetric nurse in good practices of childbirth and birth assistance	WMA branches; Aguiar BGC; Conrad D; et al	Online research journal fundamental care	2018
Contributions of nurses in prenatal care to achieve the empowerment of pregnant women	MJA Garden; Silva AA; Fonseca LMB; et al	Research journal Care is key	2019
Reference system for hospital delivery of the carioca network program: postpartum women's perspective on nurse care	Silva MA.	Masters dissertation	2018
The approach of the nursing team about the humanized childbirth during the prenatal period: a narrative review	Ragagnin MV; Marchiori MRCT; Diaz CMG; et al	Online research journal fundamental care	2017
Analysis of deliveries accompanied by obstetric nurses from the perspective of the humanization of labor and birth	Kings CSC; Souza DOM; Walnut MFH; et al	Research journal Care is key	2016

Source: Integrative Literature Review, Lilacs , 2020.

### 3.1 Empowerment of pregnant women during prenatal care

In a predominantly patriarchal society, it becomes increasingly important to implement humanized childbirth from the discovery of pregnancy to the time of delivery itself. The autonomy of the pregnant woman is taken into account, since female submission can cause traumatic experiences during childbirth and also during the child's life. Therefore, the nurse's role during prenatal care is increasingly important, and the nurse must respect and encourage the pregnant woman's choices<sup>2</sup>.

In this context, the Ministry of Health encourages the practice of nurses as an incentive to the natural and innate capacity of women to give birth, and in 2011 an Ordinance was created, the Rede Cegonha, which aims to implement a network of care for women to have the right to reproductive planning and humanized care during pregnancy, childbirth and the postpartum period and, for children, the right to a safe birth and healthy growth and development<sup>5</sup>.

### 3.2 Stork Network

As previously mentioned, Rede Cegonha aims to care for women with the right to reproductive planning, humanized care during pregnancy, childbirth and the puerperium, as well as ensuring that the child has a safe birth and healthy development<sup>5</sup>.

the art. 6 of the Ordinance provides for four components for the Stork Network, and they are: Prenatal care, where there is a guarantee of care for pregnant women in the UBS and the performance of exams linked to prenatal care; Childbirth, where the pregnant woman can have a companion, even if he is male, and the guarantee of sufficient beds; Puerperium and Child Care, which encourages breastfeeding, provides for the follow-up of children from 0 to 24 months and carries out the search for vulnerable children and the last component, Transport and Regulation, provides that the RC establishes financial support for travel to consultations prenatal care and where the delivery site will be<sup>5</sup>.

### 3.3 The importance of nurse training

Obstetric violence is still quite common in maternity hospitals, both in public and private hospitals. Studies show that rude professionals lead mothers to abandon prenatal care, thus exposing children to severe risks<sup>6</sup>.

In view of this situation, it is necessary to train professionals who actually welcome the pregnant woman, providing the necessary assistance so that she feels welcomed and, above all, confident about the decisions to be taken during pregnancy<sup>6</sup>.

### 3.4 The nurse's role in humanized childbirth

Brazil leads the ranking of cesarean sections, reasons that range from the over-invoicing of the procedure to the lack of information of parturients<sup>1</sup>. In this context, the nurse must be attentive to all complaints and possible manifestations that indicate some risk, informing the pregnant woman about the evolution of labor and teaching about the conduct to be taken during the period of dilation. The literature also indicates the importance of the nursing team being focused on the well-being of the mother/baby binomial, prioritizing empathic relationships as much as possible<sup>7,8</sup>.

Another important point to be highlighted is that during contractions, the nurse must give clear and concise instructions, so that future mothers understand and feel the calm that is transmitted through the professional<sup>7,9</sup>.

### CONCLUSION

In view of the entire discussion, the importance of nurses throughout the birth process was verified, where their fundamental role is to guide the pregnant woman, respect her conditions and desires, be a facilitating agent so that the process is as natural as possible and, mainly, to return the autonomy of the pregnant woman with welcoming words and gestures.

It is concluded that the nurse has a very important role in the parturition process, the nurse's activities constitute the humanization of care in addition to transmitting tranquility and security to the parturient.

This has, among other skills, the role of protecting and ensuring that good practices are used, and must also take care and guide the parturient throughout the process, allowing her to decide what she wants for herself and her child, in favor of a humanized moment and full happiness for the parturient.

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**A NEW AND OLD PANDEMIC – THE BURNOUT SYNDROME***UMA NOVA E ANTIGA PANDEMIA – A SÍNDROME DE BURNOUT***Jose Francisco de Sousa**Orcid: <https://orcid.org/0000-0002-1890-7933>Lattes: <http://lattes.cnpq.br/4588079979758299>

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E-mail: [francisco1965@gmail.com](mailto:francisco1965@gmail.com)**Abstract**

The Burnout Syndrome (SB) is known worldwide, but scientific studies only started from the researches made by the American psychologist Freudenberger. Its concept encompasses three dimensions: emotional exhaustion, depersonalization and low professional achievement. It is currently a student in various fields of human knowledge, from Anthropology to Psychology. The area of Psychology that most researchers BS is the Psychodynamics of Work in which they call it "Malaise". However, researchers involving BS under the perspective of Behavior Analysis is scarce in Brazil and in the world. This study aims to analyze BS in several countries, from developed to poor countries, and in this sense supports the thesis that it is a pandemic. It is a study of a theoretical nature, of qualitative, descriptive and bibliographic nature and has as theoretical basis Skinner's Radical Behaviorism

**Keywords:** Burnout syndrome. Behavior Analysis. Pandemic. Coping.**Resumo**

A Síndrome de Burnout (SB) é mundialmente conhecida, porém estudos científicos só tiveram início a partir dos estudos feitos pelo psicólogo norte-americano Freudenberger. Sua conceituação abrange três dimensões: a exaustão emocional, a despersonalização e a baixa realização profissional. Atualmente é estudante em vários campos do saber humano, desde a Antropologia até a Psicologia. A área da Psicologia que mais estuda a SB é a Psicodinâmica do Trabalho no qual a chamam de "Mal-Estar", porém, estudos envolvendo a SB sob a ótica da Análise do Comportamento é escassa tanto no Brasil como no mundo. Este estudo tem por objetivo analisar a SB em vários países, desde os desenvolvidos até os países pobres, e nesse sentido sustenta a tese segundo o qual trata-se de uma pandemia. É um estudo de natureza teórica, de cunho qualitativa, descritiva e bibliográfica e tem como base teórica o Behaviorismo Radical de Skinner.

**Palavras-chaves:** Síndrome de Burnout. Análise do Comportamento. Pandemia. Enfrentamento

## INTRODUCTION

The whole world pays attention to a pandemic that has killed millions of people worldwide, caused by the COVID-19 virus. However, historically humanity has gone through several turbulent periods with various epidemics, such as the bubonic plague, in the 14th century that killed about of a third of the European population . The epidemic that wiped out millions of indigenous people in America caused by a virus brought by the Europeans, and more recently, the Spanish flu, not to mention smallpox, a disease that perpetuated for more than three thousand years and the cholera in the early 19th century. All of these diseases had in common a pathological agent :a bacteriam or a virus.

But, there are other diseases that are invisible because they are psychological or psychiatric, such as depression. This in turn, according to data from the World Health Organization, affects more than 300 million people worldwide and is considered one of the main causes of absence from work together with anxiety. Data from the Brazilian government estimated between 2012 and 2018, acording to the National Institute of Social Security (INSS) spent more than R\$ 85 millions to hold sickness support it self. These same data pointed to the year 2016 that 78 thousand people were removed from work, while the following year the number increased to 178 thousand of employees.

Due to this invisibility, the mentals illnesses / mentals disorders in historical terms have always existed, being understood in different ways by different cultures (eg in ancient times, among the Greeks, madness had a mix of myth that mixed with the normality; in the Middle Ages , under the strong influence of the Catholic Church, was attributed to Satan, the enemy of God. Only in the Modern Age, with the Renaissance and the Illumination, the madness leaves the world of natural or divine forces and becomes the opposite of the loss of reason , and than , the first studies on the subject begin) but its treatment is recent, as well as the appearance and understanding of new mentals illnesses / disorders, as in the Burnout Syndrome.

This essay aims to discuss the Burnout Syndrome (SB) understand as a silent pandemic that has affected thousands of workers worldwide and with that, productivity, and in the future, even the productive systems, because the workers due to intense exploitation of working the and new global settings.

The main characteristic of BS is physical and mental exhaustion, when the individual feels that he no longer has the energy to make small achievements, because the work activities does not allow to, and are emotionally overloaded. There are also two other important characteristics of SB, such as depersonalization and lack of interest in the work actives, which we will discuss in the topics below. A clearer definition of BS is based on the sociopsychological perspective, which



considers BS as a chronic response to interpersonal stressors arising from the work situation, since the work environment and its organization may be responsible for the suffering and wear and tear that affects workers (Maslach & Jackson, 1981; Maslach & Leiter, 1997; Maslach, Schaufeli, & Leiter, 2001). For Behavior Analysis, environmental factors are important sources of illness among workers, as well as the lack of a capable behavioral repertoire. to face the contingencies arising from the environment itself, in addition, the lack of reinforcers and stimuli at work, affect workers, making them sick.

### CONTEXTUALIZING

This essay aims to discuss the burnout syndrome, understanding that it is a silent pandemic that affects thousands of workers from all over the world, thereby affecting productivity, and in the future, even the productive systems because workers due intense labor exploitation and the technological improvement .

Since the advent of the Industrial Revolution in the 17th century and especially in the late 19th century with the advent of new inventions that replaced human's manual labor, several workers-related physical and psychological diseases. At the beginning of the 18th century, the Italian physician Bernardino Ramazzini published his first work on occupational diseases - *De Morbis Artificum Diatriba* (Franco, 2020). Over the years, several hygienic physicians began to worry about the relationship between work and illness and made several important discoveries that benefited workers (eg Patissier who somehow helped French goldsmiths by recommending that they raise their heads to avoid . visual fatigue, as pointed out by Silva & Paschoarelli, 2010; another example is the French physician Luis René Villemé, who associated excessive working hours, housing conditions, low wages, poor food versus the workers illness). Villemé had also found that half of the employer's children reached the age of 21, while the worker's children would have 2 years less , as also related by Engels lately (2007) founding the same results in England. However not only the Works relationships due social economics systems are the cause of Bunornout Syndrome been necessary avaluated such factores like individual and behavior, most envolvimental that may interfere directly or indirectly on prevalency of Burnout Syndrome. So, seans plausible that the affected individuals would be less propense to lide situation or multiplex stressors according environment, your resources and capacities.

Due conditions above, individual which weak behavior repertoire, would be more prone to the illness. Statically the reaserch all over the world, even Brazil has showed that the Burnout Syndrome is not a isolated phenomenon and not even a small relevance, by the way largest empical and theoretical studies in grow has been shown to be an old disease but now growing Thousands workers. Some hypotheses has been elaborated: (1) the grown level of workers with Burnout Syndrome all around the world has increase in association wth envolviromenal factores and mostly

due global transformation and the labors lows. (2) the burnout syndrome has affected the productive and in consequence na international crises. (3) The Workd Health Organization (WHO) with its powers has important situation to delivery norms against the disease.

### **THE ORIGIN OF BURNOUT SYNDROME**

Years later, in the richest nation in the world, during the 1970s, Freudenberger (1974) watching his fellow psychologists and himself, discovered that intense work was causing some symptoms in what he called Burnout Syndrome by identifying some physical signs (eg. exhaustion and fatigue, headaches, insomnia, gastrointestinal disorders, shortness of breath, etc.) and behavioral illness (irritation, anger, frustration, lack of control of feelings and emotions, frequent crying, fried and screaming, some paranoias, and sometimes, for relief the starts using drugs like tranquilizers and barbiturates)

At first, it was believed that the disease affected only a few workers, especially those who worked as caregivers of people, such as teachers, psysician, nurses, psychologists, but today, studies show that it affects any category, whether a worker or not. A survey by Martínez & Pinto (2005) with university students in Spain and Portugal found high rates of burnout in these individuals. Waterway workers who are not caregivers of people are also affected by the Burnout Syndrome, as the research conducted by Silva, Souza, Soares, Teixeira et al 2018) with 430 employees of a waterway transportation company in the State of Rio de Janeiro. All of these studies and others point out that the environment, especially the behavioral one, is decisive in triggering the Burnout Syndrome. Most studies, both national and international, point to the influence of the environment as a source of the disease, which supports hypothesis 1.

### **BURNOUT'S SYNDROME AS A PANDEMIC - ALL CONTINENTS HAVE THE DISEASE**

The burnout syndrome affects all social classes, all workers and is present on all continents. In the United States, Bakker & Schaufeli (2008) showed the influence of organizational behavior for triggering the Burnout Syndrome. Another North American study by Fried & Tiegs (1993) analyzed the effect of the engagement of workers in the automotive industry. North American scientific production with regard to the incidence of burnout syndrome grows every year, expanding to several professional categories, most showing that workers and companies are decreasing their productivity, and with this, products and services have become more expensive, according to hypothesis 2 (Artal & Vázquez-Cabrera, 2013; Hyeda & Hander, 2011). Canadian studies by Lee & Ashforth associate models management with the incidence of burnout. The study was carried out with 148 supervisors who are managers of the human resources area and found that job and life satisfaction, as

well as time spent with clients and subordinates, caused emotional exhaustion, and depersonalization.

Even North America, but now in an undeveloped country, Mexico, we found a lot of research on the incidence of burnout syndrome, especially in teachers (Villaverde, Unda, Escotto & Flores, 2019; Ramirez, Moreno, Beltran & Perales, 2014) and nurses.

While studies in North America are abundant, in Central America they are scarce. In Costa Rica, for example, it is estimated that SB reaches 20 to 70% of workers, according to Sabório Morales & Hidalgo Murillo (2015) who conducted a study involving a population of physician. But there are reports in this country of the incidence of SB in nurses, according to Bianchini Matamoros (1997). Also in Costa Rica, Diaz Araya (2007), in a cross-sectional study with 45 physicians, found that 20% of these professionals had BS and emotional exhaustion was the most affected dimension. Mackzie, Walker & Chin (2018) in a survey of physicians in the Bahamas, residents, staffs and medical students had reported burnout symptoms in the category also significant emotional exhaustion, otherwise, doctors on field did not show any of the three dimensions. In El Salvador the prevalence of Burnout are between to 2.5% and 5.9% among professionals (Grau, Flichtentrei, Suñer, Prates & Braga, 2009), in this country, there is a special highlight for social workers (Lizano & Sapozhnikoc , 2018). We did not find researchs in Cuba, Barbados, Belize, Dominican Republic and other small countries. It is needed to emphasize the study made by Grau, Flichtentrei, Suñer, Prates & Braga (2009) regarding SB with a sample of 11,530 health professionals in Spanish spoken countries, one of the most complete written date recently.

Somehow, researches on Burnout Syndrome in South American finds a fertile field and others various areas of knowledge and various professions (teachers of all levels, doctors from various areas). In Argentina, physicians are the hardest hit (Galván, Vasallo, Rodríguez, Otelo, Cardigni, et. Al, 2014) together with nurses (Torre, Santos Popper & Bergésio, 2019) and teachers (Marrucco, Flamenco & Ragazolli, 2004) . A survey by Jiménez, Figueroa, Gutiérrez & Celis (2012) with a sample of 89 Chilean teachers who worked in municipal establishments showed considerable symptoms of Burnout, however, unlike other countries, Chilean teachers showed low levels of job satisfaction. Chilean studies pointed to a high level of burnout in service providers. Faúndez & Gil-Monte (2007) with a sample of 393 workers from the Province of Valparaiso showed a high percentage of psychological distress (39.19%) but in the same way as the teachers, they showed high personal achievement. In another survey, with a sample of 277 professional care for people with physical disabilities, the same researchers found out the same results (Gil-Monte & Faúndez, 2011). In addition to research with teachers, service providers and people caregivers, Chilean police officers (carabineiros) are also affected by the burnout syndrome. The explanations are due to the fact that these

professionals deal with human problems of high complexity and impact, such as deaths from accidents, serious crimes, mistreatment, etc. (Briones Mella, 2007).

The phenomenon of SB is universal and affects thousands of professionals from all continents and from all categories. Some researchers point out to one of the causes of BS the intense exploration of the work or the intense involvement with the work. At this point in our analysis we will first discuss the situation of African workers and then European workers, with an emphasis on the OECD countries (organization for Economic Cooperation and Development) which are the most developed countries in the world, while most African countries they are considered the poorest, contextualizing to better understand the situation.

Africa as well as any continent has very heterogeneous characteristics, both in social, political and economic aspects. Most countries are Arabic-speaking and the Muslim religion prevails. The climate is also very varied and even more varied are the societies that make up this great continent. In terms of research on BS in that continent, they are still incipient and only a few countries whose characteristic is democratic openness disseminate research on the situation of workers, but what is disclosed, mainly by the international press, is that conflicts, civil wars, hunger and physical illness is very common in Africa. A serious aspect in the African continent, according to data from the World Health Organization (2006) is the intense migratory flow that causes displacement or even “a substantial number of health workers leave the health workforce, either temporarily or permanently.” (World Health Organization, 2006, p. 99).

In South Africa, a negative legacy after the apartheid system was the maintenance of low wages and often forced recruitment (Hirsch, 2005), and strict legislation, responsible for a high level of informality and subcontracting (Godfrey, Theron and Visser, 2007). Studies carried out in Nigeria among health professionals (Olley, 2003; Onyiezugbo and Nawfor 2010) who works in hospitals in Ghana (Fiadzo et al. 1997, psychiatric hospitals in Kenya (Ndetei et al. 2008) described similar findings. from the Kenyan country, high levels of depersonalization were observed in 47.8% of the psychiatric team, and high levels of emotional exhaustion and personal fulfillment around 38% and 37.3% respectively (Ndetei et al. 2008).

In African countries, studies on burnout are scarce and most were only developed in the last decade of the 21st century, as stated by Artal and Vázquez-Cabrera (2013) who still adding the weakness of health systems due to human resources, causing a crisis with the increasement of workload in care and teachers. In addition, we can also mention the lack of material resources, of the control over the work itself, inadequate and irregular working hours, , low wages and low career progression, and of course, in the case of psysicians, low job satisfaction (Thomas & Valli, 2006).

Following the United States and the countries of South America, studies on Burnout Syndrome in European countries are significantly in terms of amplitude and

numerics. In foreign and national databases with descriptors using the words “Burnout Syndrome” followed by the name of the respective countries, we found out incidences of BS, with the exception of the Vatican, San Marino, Malta, Monaco, Moldova, Armenia, Cyprus, Azerbaijan and Kazakhstan. One possible hypothesis is that these countries, besides being small, some live under authoritarian governments. However, researches and informations are lacking, but they do not imply the absence of suffering from workers with burnout symptoms. Our thesis intensifies the claim that it is a worldwide phenomenon caused by environmental changes at work, by intense exploration, pressures for productivity, etc.

Studies show that even European countries part of the OECD have a high incidence of BS. A study with Austrian anesthesiologists conducted by Lederer, Kinzl, Trefalt, Traweger & Benzer (2005), pointing out the complexity of the work, the individual lack of time control (Austrian surgeons work less than anesthesiologists), the lack of participation in the work management and in the organization in which their works. On the physicians studied (N = 26) presented physical complaints and dissatisfaction with their work. The authors concluded that working conditions that offer few opportunities to influence the pace of work and participation contributed to the onset of BS, however, communication and contact with colleagues appeared as regulatory factors for prevention. An additional study with Austrian teachers early in their careers indicated that the profession's uncertainty and insecurity is a triggering source of burnout (Talbot & Mercer, 2018)

BS is a serious disease in which many professionals even consider the possibility of giving up the profession, especially on the part of those whose profession is characterized by caring for people. This is what Soler, Grau-Martin, Flichtentrei, Prats, Braga, Font-Mayolas & Graus (2004) found with professionals in Argentina, Colombia and Spain. The same researchers found that 4% of the workers surveyed (464) had realized that the burnout syndrome affected family relationships.

## **THE MANAGEMENT OF PSYCHOSOCIAL FACTORS AT WORK AS A SOLUTION TO REDUCE THE NUMBER OF ILLNESS**

As a way to prevent BS, there needs to be a change in the work environment, like what happens in several companies in the world, making it a more relaxable and healthy place. In this organizational climate, it is also important for workers to be heard by managers in addition to promoting psychological listening mechanisms in the workplace (Amaral, 2018; Duarte, 2014).

An important element is a new company vision in which gives greater autonomy to its employees together with the improvement of the management of psychosocial factors that triggers stress in the work environment (Moreira & Lucas, 2020) how to avoid high turnover and promotion security and stability mechanisms.



## CONCLUSIONS

Burnout syndrome still been an unknown disease for health professionals (Lima, Nuunk, Araújo, Chaves, Muniz & Queiroz 2007) and when diagnosed it is treated as a secondary disease alongside depression and anxiety, needing greater dissemination so offers an effective prevention and treatment.

It is a global disease (pandamic) that negatively affects the physical and psychological health of workers and the effectiveness of organizations, so it must be treated. The present study pointed to several epidemiological studies in both western and eastern countries, and on all continents

Unfortunately it is a phenomenon that grows reaching practically all countries in the world. According to data mentioned above, both poor and in developing countries, as well as countries with high economic development and high Human Development Index (HDI). Regarding to its difficulty in the scientific environment, national and international, establishig a single explanatory model, perhaps due to its complexity and multidimension. However, in the field of Psychology, the model adopted by Behavior Analysis, which removes a mentalist explanation, it is the closest scientifically, but studies in this field of knowledge are still scarce. In the international literature, specialized journals in Behavior Analysis do not have theoretical or experimental studies on the subject. However, in the internal Brazilian field. Theoretically it has already found some space (Schmitz, 2015; Schmitz & Soares, 2019).

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## THE MENTAL HEALTH OF THE ELDERLY IN TIMES OF PANDEMIC- COVID-19

### A SAÚDE MENTAL DOS IDOSOS EM TEMPOS DE PANDEMIA- COVID-19

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#### **Abstract**

**Theme:** the elderly population and mental health during the pandemic. **Problem:** what are the main factors that influence the mental and emotional health of elderly people in the context of the COVID-19 pandemic. **Hypothesis:** many elderly people suffer emotional shocks due to information about the pandemic that cause fear and anxiety, thus compromising their mental health. **Objectives:** to understand the aspects related to the mental and emotional health of elderly people in the context of the COVID-19 pandemic. **Justification:** the SARS-COV-2 pandemic affected many elderly people with social isolation, low purchasing power and/or excessive news in the media, frightening everyone. **Methodology:** This is a literature review. **Results.** In situations like the Covid-19 pandemic that cause stress and discomfort, it is necessary to deal with the problem with resilience, and also identify the strategies used in the past that were useful at similar times.

**Keywords:** Elderly. Mental health. Pandemic. Drugstore.



## Resumo

**Tema:** A população idosa e a saúde mental durante a pandemia. **Problema:** Quais os principais fatores que influenciam à saúde mental dos idosos no contexto da pandemia por COVID-19? **Hipótese:** Os idosos têm sofrido abalos emocionais devido as informações sobre a pandemia que causam medo e ansiedade, comprometendo assim a saúde mental. **Objetivos:** Compreender os aspectos referente à saúde mental e emocional de pessoas idosas no contexto da pandemia por COVID-19. **Justificativa:** A pandemia da SARS-COV-2 afetou muitos idosos com o isolamento social, queda do poder aquisitivo e/ou notícias em excesso pela mídia amedrontaram a todos. **Metodologia:** Trata-se de revisão bibliográfica. **Resultados.** Em situações como a pandemia de Covid-19 que causam estresse e desconforto, é preciso lidar com o problema, a resiliência, e também identificar as estratégias utilizadas no passado que foram úteis em momentos semelhantes.

**Palavras-chave:** Idoso. Saúde Mental. Pandemia. Farmácia.

## Introduction

The pandemic has caused great discomfort in the general population, but especially for the elderly, who show greater concerns for both physical and mental health. As soon as it emerged, the alarm that the group at greatest risk was people over 60 years of age, triggered a series of problems, among which were psychological ones. The new coronavirus pandemic crosses the entire fabric of society and has affected all areas of life in society, whether collectively or individually, wreaking havoc on the mental health of many, especially the elderly. In pandemic situations, the number of psychologically affected people are usually higher among people with some genetic predispositions or in cases of recurrence. It is estimated that problems in psychiatric issues, if not treated properly, can lead to problems with Dantesque severity. <sup>(1)</sup>

The new coronavirus, named SARS-CoV-2, which causes the disease Covid-19, was confirmed in Wuhan, China in the month of December 2019. The disease of COVID-19 (Coronavirus Disease 2019) is a respiratory infection caused by the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). Coronavirus is not the name of the disease, and the scientific world has decided to name the new virus Covid-19, that is, the "new coronavirus" discovered in 2019. It causes respiratory infections and has been very harmful to the elderly population. Between December 2019 and January 2020, Covid-19 was already spreading in other cities in China, Japan, the United States, Canada and Australia. In Brazil, on February 7, there were 9 cases under investigation, but without records of confirmed cases. <sup>(2,3)</sup>

The elderly population has been growing rapidly in Brazil and one of the explanations for this growth is the reduction in fertility. Brazil has more than 28 million people over the age of 60, a number that represents 13% of the country's population. The elderly person is more valued in today's society, in which care, attention and,

consequently, life expectancy have grown considerably. We are currently experiencing a series of measures adopted to contain COVID-19, which despite affecting the elderly and people with preexisting respiratory diseases more violently, no one is safe from this virus, and among the main prevention measures is isolation. social, which has been causing several mental disorders in the entire population, especially for the elderly. <sup>(4)</sup>

Although mental health problems are gaining more visibility worldwide, being a frequently debated topic in the last decade, reinforcing the need to expand care for this population through devices in PC. Although the new psychosocial care policies are focused on the inclusion of AB in mental health care, the trajectory of both - Mental Health and AB - had their very different paths. <sup>(5)</sup>

The present work has as its hypothesis the fact that the pandemic crisis has brought many issues little seen or cited in the context of mental health in general, even more so for those who, because they are in the risk group, need to strictly follow the rules of social isolation. In a pandemic, fear increases anxiety and stress levels in healthy individuals and intensifies symptoms in those with pre-existing psychiatric disorders. The art of psycho-emotional care is important, being one of the main supporting factors in the prevention of physical emotional illnesses and quality of life during isolation for the elderly.

The present study is justified, since during the SARS-COV-2 pandemic it affected many elderly people with social isolation, a drop in purchasing power and/or excessive news by the media, frightening everyone due to the negative aspects of its contents, thus, the elderly were affected in terms of their desires, physical integrity and mental health. Thus, it is clear that the elderly need more attention by various health professionals, to meet their desires in all aspects, whether social, physical and emotional. At this crucial moment, the greater the information and studies on the mental health of the elderly, the greater the probability of accumulating knowledge and strategies to deal with the mental health of the senile population.

Faced with this reality in which all of the Brazilian population, it is believed that the situation of the COVID-19 Pandemic has brought panic and generalized fear that permeates the routine of society as a whole, as people seek ways to prevent and take precautionary measures against the disease. The elderly are more concerned and in great fear for themselves and their loved ones. Your sleep changes and your appetite can also be impacted. A scenario conducive to even aggravating chronic health problems such as diabetes, hypertension, cardiovascular diseases and mental disorders. In this context, the guiding question of the present study is: what are the impacts on the mental health of the elderly who experience the period of the COVID-19 pandemic for their psychic and emotional health?

The research aims to understand aspects related to the mental and emotional health of elderly people in the context of the COVID-19 pandemic. We also sought to reflect on how the pandemic scenario affects the elderly population and describe the impact of the emotional health of the elderly due to the spread of viral and infectious disease during this phase. Finally, we will seek to evaluate the literature on the reaction of the elderly regarding nursing guidelines during the pandemic period.

This is a bibliographic review, in which scientific articles were selected regarding the mental health of the elderly in times of a pandemic - Covid-19. Bibliographic research is based on previously published material, consisting mainly of: books, magazines, publications in periodicals and scientific articles, monographs, dissertations, theses, internet, with the objective of putting the researcher in direct contact with all material already written. .<sup>(6)</sup>

The research has a qualitative approach. This approach considers that there is a dynamic relationship between the real world and the subject, that is, an inseparable link between the objective world and the subject's subjectivity that cannot be translated into numbers. <sup>(6)</sup>

Articles were selected from the databases of the Virtual Health Library (VHL), the Latin American and Caribbean Health Sciences Literature (LILACS), Medical Literature databases. Analysis and Retrieval System Online (MEDLINE), and articles published in Scientific Electronic Library Online (SCIELO). The inclusion criteria involved articles published in Portuguese between the years 2011 to 2021 and that had some of the following descriptors: mental health, elderly, pandemic and pharmacy. Articles published and recognized as scientifically valid in the last ten years, with at least one of these descriptors selected, were accepted.

## **Development**

Mental health is intrinsically linked to a person's full well-being, regardless of chronological age. From this point of view, studies have shown the effects on the mental health of the elderly after changes in behavioral adaptation and reconfiguration during the COVID-19 pandemic period. Mental health plays a key role in achieving full biopsychosocial well-being. In this scenario, the need for psychiatric care is not limited to reducing hospitalizations or controlling symptoms, but also includes personal, emotional, social and financial problems that affect health. Therefore, it is obvious that psychological sensitivity must not be neglected to ensure the holistic maintenance of well-being. <sup>(7)</sup>

The elderly are highlighted in the COVID-19 pandemic mainly because they present changes caused by senescence or senility. Unfortunately, despite the aging of the population, there is little visibility and appreciation of this part of the population. There is a distorted, stigmatized and stereotypically persistent view that incites age discrimination that legitimizes chronological age as a class differentiator, including the involvement of beliefs and attitudes that ridicule the elderly. The COVID-19 pandemic

has singled out the elderly primarily because of the potential risk posed by this population group through targeted social distancing measures and strategies specific to this group. <sup>(8)</sup>

Added to this are economic losses in the hardest-hit areas and growing concerns about the practical consequences of the pandemic on the economic sector. For example, it has been shown that the stress of financial loss in times of economic recession, poverty and unemployment would be a very common psychosocial risk, i.e. factors that could also negatively affect an individual's mental health during this pandemic episode. There is also an abundance of misinformation on social media, which increases fear of the disease. In addition, the very nature of the information and the way it is provided can have more or less positive effects on the mental health of the population in times of a pandemic. <sup>(9)</sup>

### **The elderly in Brazil**

The Brazilian elderly population has grown significantly as a result of the increase in life expectancy and is seen as a reflection of public health measures and advances in medicine and technology in force since 1940. Compared to the male universe, women's life expectancy increased, becoming larger. In less than forty years, Brazil has migrated from a mortality profile typical of a young population to one characterized by chronic and multiple diseases, especially in the more advanced age groups. <sup>(10)</sup>

The aging of the population alone is not enough to believe that the senile population has quality of life. It is important to live for so long, but with situations and moments that add quality to the years lived. This longevity-of-life phenomenon originally occurred in developed countries, but recently population aging has become more rapid in developing countries. In Brazil, the number of elderly people (aged 60 and over) increased from 3 million in 1960 to 7 million in 1975 and to 14 million in 2002 (more than 500% in 40 years) and in 2022 it will reach 22 million. <sup>(11)</sup>

The traditional medical approach, which focuses on a chief complaint, and the medical approach of combining symptoms and signs into a single diagnosis, are not suitable for the elderly. The elderly may be involved in more than one organ or system, making them candidates for constant medical surveillance and polypharmacotherapy. This practice can lead to undesirable synergisms and antagonisms, non-compliance with essential clinical product regulations, and excessive costs for unnecessary use. <sup>(10)</sup>

The elderly are probably the group most exposed to polypharmacotherapy in society. The average number of drugs used by these people is two to five drugs. In relation to the elderly residing in geriatric institutions, this number can be higher than seven medications per patient 8,9. Some studies have shown that women are the social group most likely to use drugs in terms of age, probably due to worse functioning and self-reported health, evidenced by the greater number of symptoms of depression and hospitalization. <sup>(10)</sup>

### **The pandemic and its effects on the lives of the elderly**

The context of the pandemic requires greater consideration by health professionals, including those related to their mental health. There were repeated reports of increased symptoms of anxiety, depression, sleep disturbances, increased drug use, psychosomatic symptoms, and fear of infection or transmission of infection to family members. One of the works with Wuhan doctors shows that they were under tremendous pressure, including high risk of infection and adequate protection from infection, overload, frustration, discrimination, isolation, support for patients with negative emotions, lack of contact with family and exhaustion. . This condition caused mental problems like stress, anxiety, depressive symptoms, insomnia, denial, anger and fear. These problems not only impair physicians' attention, understanding and decision-making ability, but can also affect their general state, well-being over time. <sup>(12)</sup>

The fear of infection, the proximity of the patient's suffering or death, as well as the fear of family members regarding the lack of medical care, insecure information about various resources, loneliness and concern for family members were aspects that were also addressed by mental suffering. of health professionals leading, in some cases, to reluctance to work. <sup>(12)</sup>

The greater risk of mental illness among the elderly is evidenced by the social isolation that keeps them away from family and loved ones. In addition, the observation of the high number of deaths causes anxiety and fear. The experience of death and death of employees, co-workers and neighbors as a result of contamination by SARV-CoV-2 scares people in their daily lives. In addition to this scenario, the configuration of an international economic crisis and the worsening of financial instability in Brazil can lead to widespread unemployment for both health professionals and their families. Therefore, there is a context of anxiety and panic disorder, depression, stress, insomnia, irritability, anger, signs of suicidal behavior and other manifestations that worsen the mental health of many people in the pandemic scenario, especially in relation to the senile population. <sup>(13)</sup>

The pandemic caused by Covid-19 has had a negative impact on the mental health of health professionals, especially those who work on the front lines of the health system, as they fear every day of being infected and infecting others, of not having personal protection and to overload work. (DANTAS, 2021).

As the pandemic progresses, there has been an overload of health services at the expense of suspected and confirmed cases of Covid-19, and there has been great demand for health services for mental health investigations that affect communities and people at large. When referring to mental health in this context, the elderly experience emotional distress on a daily basis while dealing with stress factors in their daily lives. <sup>(14)</sup>

The UN in a publication on COVID-19 made a report on the need for action to address the needs in the context of the mental health of infected people and makes it



clear that the COVID-19 pandemic is linked to a broad health crisis with potential and could get worse. the misery of the existing world. <sup>(15)</sup>

Among the problems are:

1. Fear: getting sick and dying from illness; infect others; losing loved ones; Losing livelihoods and income; Being socially excluded by illness or as a first-line professional

2. Feeling of insecurity about the future, helplessness in the face of events, helplessness, loneliness, sadness, pain and fear.

3. Changes in behavior: eating (having more or less appetite) and sleeping (insomnia or excessive sleep, nightmares).

4. Aggravation of interpersonal conflicts with family members and at work.

5. Thinking change: recurring thoughts about the pandemic, the health of loved ones, death and dying.

Faced with the pandemic reality, it is necessary for everyone to strive to have psychological resilience. This is understood as a positive manifestation that aims to overcome adverse situations and complex moments in life, whether or not there are imminent risks of a healthy development. It is also a dynamic process that allows the person to adapt despite the presence of stressors. Resilience involves factors that affect the emotional, cognitive and sociocultural aspects that were built throughout human existence, through gradual challenges, strengthening personal traits, coping strategies to crises, resizing the new values of life. <sup>(16)</sup>

In moments of great difficulty, it is possible to perceive that most people have the strength and capacity to face challenges. There are situations like the Covid-19 pandemic that cause stress and discomfort and to deal with them it is possible to identify the strategies used in the past that can also be useful in the present moment. While the scenario is different, stress management strategies can be accessed again individually or collectively to achieve resilience. <sup>(16)</sup>

The results of several studies have shown the effects of exposure on the mental health not only of the elderly, but also of those who care for them, that is , health professionals. Many of them are more often exposed to information about dead and infected and therefore have developed a greater likelihood of minor mental disorders. This exposure to frequent news of a situation like a pandemic is known to harm mental health. Previous research has shown that indirect exposure to mass trauma (such as the current pandemic) by the media can increase the rate of post-traumatic stress disorder (PTSD) symptoms . <sup>(9)</sup>

Regarding the mental impact on the elderly during the pandemic, it is common for health workers to detect despair, aggravated fear of repetition of the phenomena, fear of death for themselves and their loved ones, depressive and anxious symptoms and suicidal behavior in this population. <sup>(16)</sup>

A study of the elderly Chinese population, during the 2020 pandemic, found that frequent exposure to social media and news about COVID-19 is linked to an increased



risk of symptoms of anxiety and depression, which persists even after other factors have taken place. been quelled. <sup>(9)</sup>

The WHO director-general said the world is facing not just a pandemic but also an infodemic, indicating prolonged and excessive exposure to information about a problem, making it difficult to imagine a solution. As a result, a lot of misinformation and rumors can be spread even during a health emergency, which can hamper an effective public health response and create confusion and suspicion among people. <sup>(9)</sup>

### Final considerations

The bibliographic review aimed to understand aspects related to the mental and emotional health of elderly people in the context of the COVID-19 pandemic. Thus, the findings during the research, among others, were the following: the elderly population in Brazil has been growing since the 70s.

From the studies analyzed, it was observed that the elderly are more subject to diseases such as depression, stress and anxiety in times of a pandemic. Associated with this, the restrictive measures in the wake of the COVID-19 pandemic had a significant impact on the mental health of the elderly.

Given this reality, it was noticed that there is a link between the limitations of the pandemic scenario and the increase in the pathology of mental illness. The context of the government, the media and the population facing the pandemic has heightened feelings of fear and anguish, due to the lethality of the new coronavirus and the impotence in the face of the severity of the disease.

The COVID-19 pandemic made it evident that the health of the elderly was in need of government protection, respect, care, dignity and concern. Distance protection measures should preserve the autonomy and independence of the elderly and professionals need specific knowledge about this specific population group for better care.

These findings may suggest that social distancing and reduced physical contact with people during the pandemic are not in themselves a risk factor for mental illness; but that there is influence of other factors that permeate this context. It is concluded that the mental health of the elderly, during the Covi-19 pandemic, had problems, due to several factors, being preponderant to the reduction of family income due to the impact of the disease on the local economic scenario and the negative information of COVID-19. (such as number of deaths and infected people) providing an extremely hostile psychological environment for the elderly.

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### **THE WORK PROCESS OF PEDIATRIC NURSING IN CARE CHILDREN FACING THE REPERCUSSIONS OF COVID-19**

*THE WORK PROCESS OF PEDIATRIC NURSING IN CHILD CARE FACING  
COVID-19'S REPERCUSSIONS*

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#### **Summary**

Currently, children are little affected by the disease worldwide. Most of them present the disease in an asymptomatic or mild form. The highest magnitude reported in children with severe disease was 10.6% in children younger than 1 year, and 7.3% in children between 1 and 5 years. Objective: the objective of the study is to identify the work process of pediatric nursing in child care in the face of the repercussions of covid-19. By associating the descriptors, 17 texts were found in the VHL, 10 in PubMed and 1 in the Capes Periodical. After the eligibility criteria, 1 article from the VHL remained, 1 article from PubMed, and none from the Capes Journal. The present review shows the importance of taking care of professionals so that they can provide the necessary care to pediatric patients.

**Key words:** Pediatric Nursing. COVID-19. Kid.

#### **Abstract**

*Currently, children are little affected by the disease around the world. Most of them present the disease in an asymptomatic or mild form. The highest magnitude reported in children with severe disease was 10.6% in children under 1 year, and*

*7.3% in children between 1 and 5 years. Objective: the objective of the study is to identify the pediatric nursing work process in child care in light of the repercussions of covid-19. By associating the descriptors, 17 texts were found in the VHL, 10 in PubMed and 1 in Capes Journal. After the eligibility criteria, there were 1 articles from the VHL, 1 article from PubMed, and none from the Capes Journal. This review shows the importance of taking care of professionals so that they can provide the proper care for pediatric patients.*

**Keywords:** *Nursing Pediatrics. COVID-19. child*

### **Introduction**

In late 2019, a disease caused by a new strain of coronavirus - severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) - was identified in China, and in February 2020 it was named as COVID-19 by the Organization World Health Organization, 2020. Subsequently, the disease spread to other countries, and the situation worsened even further in mid-March 2020, after the detection of cases in Europe and America, becoming the biggest international public health emergency faced in decades (FREITAS et.al, 2021).

To date, there is no complete information on the natural history of the disease, with many still remaining to be clarified (BRASIL, 2020). However, this virus was detected in adults for the first time in China, in the city of Wuhan on December 31, 2019, and for the first time in children, in the same country, in the city of Shanghai on January 19, 2020 (PACHECO et al. al, 2020). Currently, children are little affected by the disease worldwide. Most of them present the disease in an asymptomatic or mild form. The highest magnitude reported in children with severe disease was 10.6% in children under 1 year old, and 7.3% in children between 1 and 5 years old (SOCIEDADE BRASILEIRA DE PNEUMOLOGIA E TISIOLOGIA apud PACHECO et al, 2020).

Although children are below the infection rates indicated by the epidemiological scenario, in relation to adults and the elderly, it is imperative to insert them in the context of care for families and health professionals, considering the other limitations that a pandemic imposes on the population. child health (SOUZA, et. al, 2020).

According to the Brazilian Society of Pediatrics (2020), it is necessary to reinforce the importance of measures to prevent the transmission of COVID-19 among health professionals in services intended for pediatric care, which include: restriction of visits and/or monitoring of the main caregiver, who should receive specific guidance on protective measures; forecast and provision of all necessary supplies for protection and a specific area for the care of children with suspected or confirmed disease.

It is necessary to reinforce that, although children seem to have the mildest forms of COVID-19, they are not immune to contamination (WU; MCGOOGAN, 2020). Furthermore, about 20% of infections in children present as an asymptomatic occurrence, which refers to the potential transmissibility caused by the new Coronavirus in the face of closer contact between the carrier of the virus with the health professional and their family members (CANEDO -MOROQUIN, et al 2020).

Therefore, the adaptation of professionals in the face of COVID-19 has generated drastic changes in the scope of work, and can be seen as one of the



main challenges faced in the midst of the pandemic. Such adaptation implies precisely fear, exhaustion, tension, wear and stress pointed out by Nursing professionals in Pediatrics, corroborating the literature, through the possibility of contagion/infection and death caused by the new coronavirus (RODRIGUES, SILVA, 2020). Thus, the objective of the study is to identify the work process of pediatric nursing in child care in the face of the repercussions of covid-19.

### Methodology

This is an integrative review of the literature on the role of pediatric nursing in child care and in the face of the repercussions of covid-19. The integrative review is a method that aims to synthesize results obtained in research on a delimited topic or question, allowing the generation of new knowledge, based on the results presented by previous research (ROMAN and FRIEDLANDER, 1998; BOTELHO, CUNHA, MACEDO, 2011).

In the present study, we chose to search in databases of wide scientific dissemination, using the Virtual Health Library (VHL), National Library of Medicine (PubMed) and the Capes Periodicals portal. For the digital search of scientific articles, the following descriptors pediatric nursing, child, covid 19, combined by the Boolean operator "AND" were used.

The language (Portuguese, English) and its free full availability (fully available) were established as eligibility criteria. After selecting titles and abstracts, studies that will respond to and meet the research objective were included and literature reviews, editorials, theses, dissertations that did not describe the methods were excluded.

After the complete reading of the article, a final sample of studies was selected. Information was also extracted to compose the summarized table, and the articles were then presented through the following characteristics: title, year of publication, publication journal, method and focus of nursing care. The studies were also categorized and presented by central themes: Stressors related to child care, Psychological impacts faced by pediatric nurses.

### Results and discussion

By associating the descriptors, 17 texts were found in the VHL, 10 in PubMed and 1 in the Capes Periodical. After the eligibility criteria, 1 article from the VHL remained, 1 article from PubMed, and none from the Capes Journal.

**Table 1:** Summary table of selected articles according to title, year of publication, journal of publication, method.

Title	Year	periodical	Basis	Method
Challenges in professionals in Pediatric Nursing in the face of the pandemic from COVID-19	2020	Magazine Latin-American of nursing	VHL	Search qualitative.
Prevalence and associated factors of depression, anxiety, and stress among Hubei pediatric nurses during COVID-19 pandemic	2021	ELSEVIER	PubMed	Study transversal

**Source:** prepared by the authors.

### **Stressors related to child care.**

The fear of contamination is a stressor for nurses, related to the challenge of preventing the spread of the virus while providing quality care without harming the patient (DINIS, 2020). According to RABHA et.al (2021), although children have milder symptoms, more than half of children affected by covid-19 manifest upper airway infection (URI).

It is presented that the lack of knowledge of the clinical characteristics and the possibility of the children being asymptomatic leads to the fear of being a transmission vehicle for other patients, co-workers and family. In the study by (MO et.al, 2020) of the diagnosed children, 50% were asymptomatic, demonstrating the reason for the fear of professionals.

The shortage of personal protective equipment (PPE). PPE has a role fundamental in protecting the health of health workers in the current pandemic. In the case of the risk of biological contamination, they act as barriers that can prevent infection (ALMEIDA, 2020).

The rapid spread of the virus has led to a high demand for PPE, circumstances that have led to the risk of infection for professionals due to lack of sufficient PPE (WANG, ZHOU, LIU, 2020). Nurses experience an ethical and moral dilemma, when they assist patients without the use of adequate PPE, they put their lives and others at risk, but if they deny care to patients in a state of urgency and emergency, they can be held criminally responsible (MIRANDA et.al, 2020).

In Brazil, the Federal Nursing Council has already received about 7 thousand complaints, largely referring to the lack or insufficiency of PPE (COFEN, 2020). Professionals show knowledge of their rights to access PPE, in cases of lack of it, they can and should make complaints to regulatory bodies.

### **Psychological impacts faced by pediatric nurses.**

The working conditions of nursing professionals include external journeys, intense pace, professional devaluation, among other factors that trigger physical and psychological strain (MIRANDA et.al, 2020). In the study by (SANTOS et.al, 2021) it is evidenced that professionals who work in places without structure to face the covid-19 pandemic have higher prevalence of symptoms of anxiety and depression.

The fear of being infected, susceptibility to death, added to the speed of spread and the little-known course of the disease, make the impacts of mental health evident (MOREIRA, SOUSA, NÓBREGA, 2020). Also evidenced in the study by Humerez, Ohi and Silva (2020) who report the feelings most declared by nursing professionals, among them: anxiety due to lack of Epi; stress related to the increase in the number of patients and their death; fear of the risk of becoming infected or family members; ambivalence on the part of the population that applauds them, but discriminates, avoiding contact; depression due to loneliness, separation from families; death of co-workers and exhaustion or emotional exhaustion due to workload.

Professionals are also psychologically affected when away from their duties, with severe symptoms of depression 35% higher than those who continue to work normally (SANTOS et.al, 2021).

### Final considerations

The present review shows the importance of taking care of professionals so that they can provide the necessary care to pediatric patients. The mental health of pediatric nursing professionals is directly linked to the stressors experienced in the care routine. The lack of inputs such as PPE, causes frequent fear to professionals of contaminating themselves and others with the new corona virus.

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## PHARMACOLOGY OF OBESITY AND RISKS OF DRUGS FOR WEIGHT LOSS

### FARMACOLOGIA DA OBESIDADE E RISCOS DAS DROGAS PARA EMAGRECER

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#### Abstract

Obesity is currently considered a major public health problem, being responsible for the substantial increase in morbidity and mortality. It also presents itself as a large portion of the pharmaceutical industry, which involves the development of drugs, modified foods and also strategies that encourage dietary re-education and regular physical activity. This Literary Review sought a report on the drugs used to treat obesity and a description of their adverse side effects. Pharmacology for the treatment of obesity poses great health risks when not prescribed and monitored by qualified professionals.

**Keywords:** Obesity. Treatment. Medicines. Health Risks.

#### Resumo

*A obesidade é considerada, atualmente, um grande problema de saúde pública, sendo responsável pelo aumento substancial da morbimortalidade. Ela se apresenta, ainda, como uma grande parcela da indústria farmacêutica, que envolve o desenvolvimento de fármacos, alimentos modificados e, também, estratégias que estimulam a reeducação alimentar e a prática regular de atividade física. Esta Revisão Literária buscou um relato sobre os medicamentos usados no tratamento da obesidade e a descrição de seus efeitos colaterais adversos. A farmacologia destinada ao tratamento da obesidade traz grandes riscos à saúde quando não prescrita e acompanhada por profissionais qualificados.*

**Palavras-chave:** Obesidade. Tratamento. Medicamentos. Risco à Saúde.



## Introduction

Obesity is a chronic disease characterized by excessive accumulation of adipose tissue in the body. Its emergence comes from the association between genetic, metabolic, social, behavioral and cultural factors. In recent decades, it has become one of the main public health problems because, in addition to causing many health problems, it increases the risk of premature death and directly affects the quality of life. (RADAELLI; PEDROSO; MEDEIROS, 2016).

According to the World Health Organization (WHO), an individual is considered obese if the body mass index (BMI) is equal to or greater than 30 kg/m<sup>2</sup>. BMI is just an assessment tool, and in some situations it is necessary to associate other parameters. (SEGAL; FADIÑO, 2002). The treatment of obesity has the main objective of improving health and quality of life, aiming to reduce associated diseases and subsequent mortality.

According to the World Health Organization (WHO), Brazil is one of the countries with the highest obesity rates. The main causes are attributed to poor eating habits and lack of regular physical activity, and many of these patients resort to the use of drugs to reduce appetite, seeking a "magical" weight loss, fast and effortless. (CRUZ; SANTOS, 2013).

However, Cruz and Santos (2013) emphasize that weight-loss drugs should be used as a therapeutic supplement, helping to re-educate food, change habits and practice regular physical activity, as such drugs are effective in weight control only while they are being administered, and can cause new weight gain after suspension.

The consumption of these anti - obesity drugs can be dangerous if done by people who suffer from heart diseases such as hypertension or metabolic disorders and must be indicated by a specialist doctor, after physical evaluation, ruling out the presence of insulin resistance, thyroid changes or heart problems, should be accompanied by a hypocaloric diet and regular physical exercise. (SANTOS et al. 2019)

Therefore, this literature review study aims to highlight the importance of pharmacology in obesity and the risks that the indiscriminate use of drugs to lose weight represent, at the expense of the health and quality of life of the user.

## Methods

This is a Literature Review work based on scientific articles published in the last ten years in free databases on the internet, such as Scielo, LILACS, BVS, Pubmed, Ministry of Health publications, Google academic and virtual libraries. The descriptors used as inclusion criteria in the sample were: obesity, prevention, medication, health risks.

## Results and discussion

### Obesity

Obesity is a medical condition caused by the accumulation of body fat. One of the main causes of obesity is the exaggerated intake of calories, when there is no balance between the energy that is ingested in the form of food and the energy that is spent in everyday activities. (TAVARES; NUNES; SANTOS, 2010).

The increase in obesity is associated with a sedentary lifestyle and a diet rich in fats and additives, which favor the onset of chronic diseases such as lipid and cardiovascular disorders, changes in glucose metabolism, sleep apnea, orthopedic problems, polycystic ovary syndrome and metabolic syndromes. Another worrying factor, especially among young females, concerns the socioeconomic and cultural pressures associated with the aesthetic standards of the time, in view of the growing emphasis on thinness as aspects associated with beauty standards. (QUEIROZ, 2013).

According to Bolsoni- Lopes et al. (2021), the growth of obesity in the last three decades has reached more than 650 million people in the world, it is considered a chronic and inflammatory disease, caused by the increase in adipose mass. In a reflective analysis, these authors suggest that the severity of many current diseases, including Covid-19, is directly associated with an increase in BMI, also indicating that obesity may be a risk factor for morbidity and mortality from SARS-infection. COV2, regardless of association or not with other comorbidities.

In the understanding of several health professionals, the physiological mechanisms that connect obesity and Covid-19 are crucial for the adequate care of the disease. It is worth remembering that adipose tissue is the regulatory center of body metabolism, being an endocrine organ that produces hormones, adipokines and cytokines. In the assessments of health professionals, it is emphasized that obesity would be contributing to the increase in infections by SARs-COV2, namely: amplification of the state of inflammation, damage to the respiratory and cardiovascular systems and glucose metabolism, favoring the formation of thrombus and dysregulation of the immune system. (BOLSONI-LOPES et al. 2021)

### Obesity Pharmacotherapy

In the treatment of obesity, non-pharmacological and pharmacological therapeutic forms are fundamental. Non-pharmacological measures are evidenced in behavioral therapies, changes in eating habits, physical activity and guidance from a professional nutritionist, in order to reduce caloric consumption. Pharmacological measures should be used in the treatment of obesity, when there are therapeutic failures in the non-pharmacological alternative, and when the patient has comorbidities associated with obesity or in cases of obesity type II and III. (COSTA; DUARTE, 2017).

The therapeutic pharmacology of obesity has undergone profound changes over the last few decades, especially due to the development of new drugs and non-

pharmacological treatment proposals. Currently, pharmacological therapy is indicated in cases where patients have a body mass index (BMI) greater than 30. BMI is obtained by dividing the patient's (weight/height<sup>2</sup>). The pharmacological indication should occur when the patient has diseases associated with excess weight. (NEGREIROS et al. 2011).

pharmacotherapy consensus, it is recommended that slimming drugs are always used in conjunction with a lifestyle change program, such as helping to change eating habits and regular practice of physical activities. It is emphasized that drugs should only be used under medical supervision and after a careful assessment of the risk-benefit balance for each specific patient. (COUTINHO; CABRAL 2000).

### drugs to lose weight

Anorectic medications, also known as appetite suppressants, are drugs that cause a reduction or loss of appetite. They are not recommended as a single treatment for weight loss, as they act on the Central Nervous System and cause effects on mental and behavioral function. (CAMELO; DINELLY; OLIVEIRA, 2016).

It is essential that the user has a prescription and medical and pharmaceutical guidance in order to be aware of the risks and benefits of anorectic drugs and possible drug interactions, in addition to the problems related to the incorrect use of drugs. Through professional guidance, medication should be combined with non-pharmacological methods, such as physical exercise and patients' dietary reeducation. The interaction between patient, pharmacist and doctor is an important factor in the pursuit of patient health and well-being. (TAVARES, ANGELO; SOUZA, 2017).

In Brazil, the five drugs registered for the intervention of obesity, that is, the drugs most used in the weight loss process, are divided into two groups: those that minimize hunger ( amfepramone , fenproporex and mazindol ) or alter satiety (sibutramine ) and those that decrease digestion and nutrient absorption ( orlistat ). (SOUZA et al, 2017).

Originally, *amfepramone* ( diethylpropion ) was developed for the treatment of narcolepsy and, in contradiction, for children with hyperkinesia . Its side effect is appetite suppressant, and then it is used as an anorectic drug. (NACCARATO, LAKE, 2014).

Amfepramone is a derivative of  $\beta$ - phenethylamine acting on the central nervous system through several mechanisms of action that act on different receptors such as epinephrine , serotonin, dopamine and norepinephrine . This drug acts by increasing the release of monoamines , inhibiting the enzyme monoamine oxidase and favoring the synthesis of neurotransmitters. Additionally, it inhibits the reuptake of serotonin, at a lower intensity, due to the removal of the neurotransmitter from its presynaptic transporter. (PEREIRA; SOUZA, 2017).

However, the use of amfepramone can promote adverse reactions such as cardiac arrhythmia, nervousness, insomnia, hallucinations, psychotic conditions, tachycardia, abdominal pain, vomiting, nausea, decreased libido, arterial

hypertension, diarrhea, chills, pallor, excitement, dry mouth, decrease in sexual potency, and should be used with great care. (PEREIRA et al, 2012).

Femproporex is classified as an indirect-acting dopaminergic agent and acts by stimulating or inhibiting the *neuronal* reuptake of norepinephrine and dopamine in the synaptic cleft. The anorectic action occurs in the hypothalamic control center, causing an increase in catecholamine release from neural terminals and/or inhibition of reuptake . As a result, its psychostimulant effect suppresses appetite by voluntarily reducing food intake and reducing the activity of the gastrointestinal tract. (MARCON et al, 2012). The substance also has central effects that cause locomotor stimulation, state of excitability, euphoria, stereotyped behavior and anorexia. In moderate doses, it induces a feeling of well-being , increased concentration, interlocution and psychomotor improvement. (KONFLANZ; SILVA; DALLANGNOL, 2014).

The following side effects caused by the use of fenproporex have been reported : anxiety, insomnia, hallucinations, tremors, mental confusion and agitation, in addition to symptoms of depression, nausea, headache , dysphoria and fatigue (ESPOSTI, 2017).

Mazindol is a tricyclic amphetamine derivative used in the treatment of obesity and its consumption has already reached high levels in several countries. (KOEDA et al. 2017; LUCAS; TEIXEIRA; OLIVEIRA, 2021 ). Its anorectic action occurs by catecholaminergic action, being effective for weight loss and is widely used in obesity in association with hypocaloric diets.

This drug blocks the reuptake of serotonin and norepinephrine , in addition to inhibiting dopamine. This action causes the blockage of the production of gastric secretion, favoring the reduction of appetite. It is assumed that the hypothalamic action of mazindol causes the cancellation of the desire to ingest food, decreasing glucose absorption and intensifying locomotor activity (GONÇALVES et al, 2014).

The side effect of mazindol is similar to that of other anorectics, and therapeutic doses can cause constipation, dry mouth, tachycardia, irritability, among others. (BEHAR, 2002).

Sibutramine, initially developed as an antidepressant, was the first drug used in anti- obesity treatment , as during some tests, it was found that the substance was capable of reducing appetite. (COSTA; DUARTE 2017).

Some studies consider that sibutramine can improve the lipid profile of patients. This effect, associated with weight loss, can be a great ally in the fight against obesity-associated comorbidities (CAMPOS et al, 2018).

The use of sibutramine in hypertensive patients is recommended with great caution, with extensive monitoring of the patient's blood pressure until the end of treatment . Its use is contraindicated in patients who have coronary or peripheral artery disease, stroke and uncontrolled arterial hypertension. It is also not indicated for individuals who have diseases related to the central nervous system (LIMA et al., 2018; LUCAS; TEIXEIRA; OLIVEIRA, 2021 ).

The most frequent adverse effects of sibutramine are headache, dry mouth, constipation, insomnia and high blood pressure. The most common side effects occur in 10 to 20% of cases. (FORTES et al, 2006).

The use of orlistat is related to weight loss through significant reductions in systolic and diastolic blood pressure. The use of the drug must be with caloric-fat restrictions, which demonstrates weight loss in obese non-diabetic individuals, insulinemic reductions and glycemia reductions. With no central effect, it becomes a considerable choice in patients with psychiatric disorders and who use antidepressant drugs (SOUZA et al, 2017).

Orlistat has specific action on gastric and pancreatic lipases, functioning as a potent inhibitor. Lipases are catalysts for the hydrolytic removal of fatty acids from triglycerides, resulting in free fatty acids and monoglycerides. Orlistat covalently and irreversibly binds to the active sites of lipases, allowing one third of the triglycerides to be excreted without undergoing digestion, not undergoing absorption in the small intestine with consequent elimination in the feces. (OLIVEIRA et al, 2009).

The main side effects of orlistat are: diarrhea, decreased absorption of fat-soluble vitamins, abdominal pain, flatulence and incontinence. (RIBEIRO, 2014).

### **health risks**

The increase in overweight and obese individuals has been growing along with the search for an ideal body, which ends up causing the exaggerated and inappropriate use of appetite suppressants. However, appetite suppressant drugs should not be used only for aesthetic purposes, due to their side effects (ANDRADE et al, 2019). The uncontrolled use of these anti-obesity drugs can cause increased bacterial resistance through misuse and even brain hemorrhage due to the combination of an anticoagulant and an analgesic. (DUTRA; SOUZA; PEIXOTO, 2015).

Treatment with appetite suppressants is currently in the profile of drugs administered irrationally and exaggeratedly. Often, the drug is prescribed by certain doctors without any indication or information about concomitant treatments, such as dietary reeducation and physical activity. (CASSIN, 2018).

Almeida et al (2012) highlights that drugs are substances that can bring side effects and serious damage to health in the form of severe and/or moderate adverse reactions. Adverse reactions in children and adolescents are especially important as they can interfere with their physical and cognitive development.

In the Brazilian population, self-medication is a common practice, and individuals are usually exposed to the indiscriminate use of medication through indications from family, friends or the media. One should not underestimate the influence of fashion and culture, which can encourage the use of medicines for aesthetic reasons, such as drugs used to lose weight or gain muscle mass. (ALMEIDA et al, 2012).

According to Chaud and Marchioni (2004), anti-obesity drugs help with weight loss, but they can produce dangerous side effects. Even food supplements



and vitamins must be prescribed by a doctor, who will be able to correctly guide the treatment. Such medications, when taken without professional guidance, can be highly harmful, causing accelerated cardiac risk, increased blood pressure, cardiovascular risk, fatigue and even glaucoma.

In Brazil, the indiscriminate use of drugs to lose weight has been growing more and more, as has the sales of these drugs without a prescription, such as: appetite suppressants, laxatives, diuretics, hormones and manipulated products. Both users and health professionals should be aware that many of these drugs, after a few months, lose their effectiveness, causing a rebound effect where people gain weight again, which can also lead to other harmful health effects. (BRAZIL, 2002).

### Final considerations

Obesity has been getting worse in Brazil and in the world, bringing with it many risks to the health of the individual. Pharmacological treatment alone does not bring about a cure for obesity, being necessary and essential the association with dietary reeducation and physical activity, in addition to changes in habits and lifestyle.

However, the treatment for obesity must happen under the guidance of a qualified professional, who can evaluate, prescribe and monitor the use of drugs to lose weight.

Many of the drugs to lose weight have an extremely delicate action on the body, acting on the central nervous system, on the brain nucleus responsible for hunger, the hypothalamus. Such a mechanism can cause dangerous side effects, which include palpitations, insomnia, increased blood pressure, and even drug addiction.

On the other hand, indiscriminate use or without professional guidance can encourage practices that put the patient's health and quality of life at risk.

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**PHARMACEUTICAL CARE IN SICKLE CELL DISEASE: LITERARY REVIEW**

*ATENÇÃO FARMACÊUTICA NA DOENÇA FALCIFORME: REVISÃO LITERÁRIA*

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**Abstract**

The aim of this study is a literary review and to analyze the clinical aspects of sickle cell anemia with the attention of the pharmacist in relation to this disease. A literature review was carried out using Pubmed, Lilacs, Scielo, and Virtual Health Library (VHL) databases. Using texts available in Health Education, which is an essential tool to make patients aware of the characteristics of the disease and promote the correct use of medicines. The research is justified on the role of pharmaceutical care in Sickle Cell Disease in general. The results of this study can serve as support to the literature or even to Organs competent bodies of hospital sectors for implementations and improvements in health.

**Keywords:** Pharmacist. Sickle Cell Disease. Health Education.

**Resumo**

*O objetivo deste estudo é uma revisão literária a fim de analisar os aspectos clínicos da anemia falciforme com atenção do farmacêutico em relação a essa doença. Foi realizada uma revisão bibliográfica, através das bases de dados Pubmed, Lilacs, Scielo, e Biblioteca Virtual em Saúde (BVS), utilizando textos que dispunham na Educação Sanitária que é uma ferramenta essencial para conscientizar os pacientes a respeito das características da doença e da promoção do uso correto de medicamentos. A pesquisa justifica-se sobre a atuação da atenção farmacêutica na Doença Falciforme de forma geral. Os resultados deste estudo poderão servir como suporte às literaturas ou até mesmo aos órgãos competentes de setores hospitalares para implementações e melhorias na saúde.*

**Palavras-chaves:** Farmacêutico. Doença Falciforme. Educação Sanitária.



## Introduction

Sickle cell disease is a type of genetic and hereditary disease. Alteration in the genetic code can result in defective production of the protein hemoglobin, which is responsible for binding and transporting oxygenation. The result of protein alteration is that erythrocytes undergo important changes throughout their morphology, producing sickle-like abnormal sickle cell erythrocytes (GUIMARÃES; COELHO, 2010; HOFFBRAND; MOSS, 2013). Patients with sickle cell have several clinical manifestations and in the most severe forms they can lead to bone marrow necrosis, splenic problems, acute chest syndrome and hemolysis (BRUNETTA et al, 2010).

Diagnosis is performed in the first months of life through isoelectric focusing electrophoresis or high-performance liquid chromatography. The treatment is done by drugs whose most used are Hydroxyurea , Phenoxemethylpenicillin , Potassium, Benzylpenicillin , Benzathine and Erythromycin Stolate (BRASIL, 2016).

Sickle cell diseases are the most prevalent hereditary diseases in the world, with the highest prevalence of S ( HbS ) in tropical Africa (BRAZIL, 2016). In Brazil, it is considered a health problem with more incidents in the states of Bahia, Rio de Janeiro and Minas Gerais (CAVALCANTI; MAIO, 2011). According to studies, in Brazil, there are about 25 to 30 thousand carriers of the disease (CANÇADO et al, 2009), affecting around 0.1 to 0.3% of the Brazilian black population (LOUREIRO; ROZENFELD, 2005). It is estimated that around 3,500 new cases are diagnosed annually (CANÇADO et al, 2009).

Given the severity and destruction of sickle cell disease, early diagnosis and treatment of this disease has a great impact on the quality of life of patients. Aiming at this, the pharmacist plays an important role in genetic counseling, diagnosis and patient treatment, in which pharmaceutical care and care becomes an effective and necessary tool. Thus, this work aims to demonstrate possible treatments, symptoms and the importance of the pharmacist in sickle cell disease through a retrospective study and related publications.

## Pharmaceutical attention

In 1990, “ Hepler and Strand used for the first time in the scientific literature the *term Pharmaceutical Care* ”, which has been translated in our country to Pharmaceutical Care. Therefore, pharmaceutical care is the responsible provision of pharmacological treatment with the aim of achieving satisfactory health outcomes, improving the patient's style and quality of life. Pharmaceutical care is a sequence of steps of clinical methods. The clinical method includes data collection, problem identification and implementation of a plan for patient care and follow-up.

## sickle cell disease

Sickle cell disease is a genetic alteration, characterized by a type of mutant hemoglobin called hemoglobin S (or Hb , S) that causes the erythrocytes to distort, making them take the shape of a “sickle” or “half-moon”. Sickle cell disease is a genetic



issue, that is, inherited from parents to children. The parents are always carriers of S or C trait or heterozygotes or beta thalassemia or have sickle cell disease.

Sickle cell anemia (SCA) meets these conditions and involves psychological and social aspects that are difficult to manage, which is why patients with this disease need special care and comprehensive care. The disease has been studied from a molecular and epidemiological point of view, but there is little information on special care for this type of patient, while information on medication care is zero. (PAIVA and SILVA, RAMALHO & CASSORLA, 1993). Sickle cell anemia is the most common inherited blood disorder in the world. It is estimated that 1: 7,400 people born in the state of São Paulo are affected each year (MAGALHÃES et al., 2009).

### **Complications of the Disease**

#### **Pain**

An important aspect, especially in the care of these patients, is adequate pain management. The pain is due to the difficulty in blood circulation, which has increased viscosity due to sickled red blood cells, which can cause small vessels to clog. Denser cells, with higher concentrations of Hbs, have a lower affinity for oxygen and high viscosity, and may lose their deforming power, which hinders circulation through small-caliber vessels (FIGUEIREDO, 2007). Pains located in the hands and feet, and called dactylitis and very common in children up to five years of age (ANVISA, 2002).

#### **Jaundice**

When bilirubin levels are high in sickle cell patients, it generates jaundice, resulting from the accelerated destruction of red blood cells, generating an excess of their precursors and a precipitated formation of bile salts. Jaundice is a yellowing of the eyes and skin due to the accumulation of pigment in the tissues. The worsening of jaundice can lead to cholelithiasis, with multiple and pigmented stones, requiring surgical intervention in most cases (cholecystectomy) (GUMIERO et al., 2007).

#### **infections**

cell patients suffer from functional asplenia that causes immunosuppression. This occurs because the spleen is an organ that produces defense cells such as B lymphocytes, which synthesize antibodies against pneumococci and influenza type B (Hib) hemophilia. Pneumococci are considered the main agents related to those obtained associated with infections. (LOGGETTO et al, 1999). An infection is accompanied by dehydration and low blood oxygen tension, the painful crises become stronger, taking into account that the molecules increase the adhesion of red blood cells to the endothelium of the blood vessel facilitating vaso-occlusion. (DI NUZZO and FONSECA, 2004).

**Brain stroke**

Stroke occurs due to lesions that can be ischemic or hemorrhagic. In ischemia, blood flow is blocked by lack of oxygen in certain parts of the brain, leading to changes that may or may not express clinical symptoms. Bleeding includes blood vessel overflowing. In sickle cell patients, silent effusions are more of an event, visual changes and attention and memory deficits (PLUMACHER et al., 2004).

**Acute splenic sequestration crisis**

Acute splenic sequestration crises (ASCS) are the major causes of mortality among sickle cell disease patients, occurring in up to 30% of these patients before the age of five years. It is characterized by the enlargement of the spleen, resulting from the accumulation of red blood cells within the organ, with a consequence of drops in circulating levels of red cells in peripheral blood of at least 2g/dl of the patient's baseline values (ANVISA, 2002). Because of this, patients are at risk of presenting hypovolemic shock, and may die within hours. The most effective way to reverse this condition of ACS is to perform a transfusion of red cells, since the detection of the episode is early and it may be necessary to perform a splenectomy operation (CANÇADO et al, 2009).

Some authors indicate a relationship between the occurrence of CSEA and infections, but this could not be proven. Noting that patients with higher levels of HbF are less likely to develop ACS (CANÇADO et al, 2009). The most recurrent attacks are in about 50% of patients who survive the first episode, with 20% mortality in these patients (ANVISA, 2002).

**Acute chest syndrome**

Vascular occlusion is common in the lungs of sickle cell patients, with water chest syndrome (WAS) being the main cause in adults that can lead to death (GUALANDRO, FONSECA & GUALANDRO, 2007). ACS has the characteristic of a series of symptoms that can start with fever and progress to a cough with dyspnea, chest pain and pulmonary infiltration evidenced by radiography (GUALANDRO, FONSECA & GUALANDRO, 2007).

**Treatment**

Concerning the clinical picture of the sickle cell disease patient, there is no specific treatment. Regarding the treatment, clinical protocol and therapeutic guidelines for sickle cell disease, priority is given to the prevention of vaso-occlusive crises, pain, aplasia, splenic sequestration, thoracic water and neurological with several complications, the prevention of infections in the first days and life, aiming at an improvement in the survival, the quality and well-being of patients. Other procedures are adopted as a means of minimizing its effects, such as: chelating, palliative and preventive drugs. (BRAGA, 2007; BRUNETTA, et al, 2010).

Most crises in sickle cell disease patients are characterized by episodes of severe pain. Some medications can relieve pain. Drugs such as paracetamol are indicated in mild cases, as it is effective in secondary pain. Most patients may have a

greater number of crises, and when the number is above six episodes of crises for a period of one year, the use of hydroxyurea is indicated, this drug generates a positive result, considering that it stimulates the production of fetal hemoglobin, helping to prevent the acute syndrome (SANTOS, 2009). In addition to hydroxyurea, other drugs can be used, such as Potassium phenoxemethylpenicillin, Benzylpenicillin, Benzathine, Erythromycin stolate (BRASIL, 2016). Hydroxyurea is a drug that has shown many positive results regarding the treatment of sickle cell disease, which began to be part of a therapeutic set for patients in 1998 and since then has been shown to be effective in preventing clinical complications by improving quality of life (CANÇADO et al, 2009).

## **MATERIALS AND METHODS**

The proposal developed in this study was to understand pharmaceutical care in sickle cell disease and some possible pharmacological treatments. The research was carried out through literature review and theses and articles published in Google Scholar and Scientific Electronic Library Online (SciELO). A bibliographic research was carried out using the following descriptors: Sickle Cell Disease, Pharmaceutical Care, Health Education. Full articles related to the topic published between 1990 and 2020 were used in the study. All scientific productions that did not meet the criteria described above were excluded.

## **RESULTS AND DISCUSSION**

### **The role of the pharmacist in sickle cell disease**

The important role of the pharmacist in pharmaceutical care, acting to guarantee access to the drug and its rational use. "According to Novaes (2009) the performance of therapy and diagnosis of patients, in many cases, will generally depend on the care provided by a multidisciplinary team." Thus, it is important to reinforce good integration and communication with professionals and participants of the entire team so that the patient is well attended. We can discard the importance of the Pharmacist within the multiprofessional team, as they are responsible for all pharmaceutical care to ensure the correct and safe use of medicines.

Pharmaceutical care has great importance in returning and carrying out activities that cover the correct and rational use of medicines. With this relationship, the pharmacist is able to identify and correct certain problems that may be related to medical prescriptions such as: drug interactions, drugs with the same therapeutic indication, drugs without dose, drugs with altered dosage and drugs without a route of administration and drugs that are out of date. of standardization (REIS, 2013). Sometimes patients with sickle cell disease do not have many resources or do not find what they are looking for in the health system. In some certain situations the pharmacist will be the last to have contact with the patient and will have as a health professional, before using any medications. In this way, pharmaceutical care is of great importance and being prepared to be able to serve well and have adequate knowledge

to offer the patient. (PEREIRA; NUNS, 2008). In addition, pharmacists work in neonatal screening and offer this genetic counseling, thus guaranteeing diagnosis of quality and care. (REIS, 2013 ).

## CONCLUSION

Therefore, through these studies, it is concluded that the role of the pharmacist in sickle cell disease is essential for carrying out activities and well-being, which go beyond some standard functions such as guidance, monitoring of drug therapy and the best quality of life for the patient. . The pharmaceutical professional is indispensable in the positive evolution of the sickle cell patient with a reduction in the occurrence of complications.

Pharmaceutical care is increasingly inserted in health services, its performance is beneficial both from the clinical point of view and from the economic point of view, improving and also contributing to a better quality therapy for patients and with the support of the prescriber, aiming at o mainly the rational use of medicines.

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## THE IMPORTANCE OF EXCLUSIVE BREASTFEEDING IN THE FIRST SIX MONTHS OF LIFE AND THE ROLE OF NURSING

### A IMPORTÂNCIA DA AMAMENTAÇÃO EXCLUSIVA NOS SEIS PRIMEIROS MESES DE VIDA E O PAPEL DA ENFERMAGEM

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#### **Abstract**

*Exclusive breastfeeding in the first six months of life is advocated in Brazil and in several countries. The problem of this study is: What is the importance of exclusive breastfeeding in the first 6 months of life and what is the role of nursing in this context? The general objective of this study is to describe the benefits of exclusive breastfeeding in the first 6 months of life and the role of nursing in this process. This study is an integrative literature review that brings together scientific articles published from 2010 to 2021. The role of nursing therefore involves information and guidance aimed at education and health promotion, in order to demystify ideas culturally perpetuated by sense that end up interfering negatively in the entire process involving breastfeeding.*

**Keywords:** *Breast Feeding. Nursing. Postpartum Period.*

#### **Resumo**

*A amamentação exclusiva nos seis primeiros meses de vida é defendida no Brasil e em vários países. O problema desse estudo é: Qual a importância do aleitamento materno exclusivo nos primeiros 6 meses de vida e qual o papel da enfermagem diante desse contexto? O objetivo geral desse estudo é descrever os benefícios do aleitamento materno exclusivo nos 6 primeiros meses de vida e o papel da enfermagem nesse processo. Esse estudo é uma revisão integrativa de literatura que reúne artigos científicos publicados no período de 2010 a 2021. A atuação da enfermagem passa, portanto, pela informação e orientação voltadas para a educação e promoção de saúde, no sentido de desmistificar ideias perpetuadas culturalmente pelo senso comum que acabam interferindo negativamente em todo o processo que envolve a amamentação.*

**Palavras-chave:** *Aleitamento materno. Enfermagem. Período pós-parto*

## Introduction

The World Health Organization (WHO), as well as the Brazilian government, suggests Exclusive Breastfeeding (EBF) in the first 6 months of children's lives, that is, without water, juices and teas. After this interval, breastfeeding becomes a supplement to food. The worldwide mobilization to encourage breastfeeding is given, among other factors, by the reduction of infant and child mortality caused by breastfeeding. <sup>(1)</sup>

Breast milk is a very complete and balanced food for the baby, it is simple to be digested, colic is not frequent in the baby. It contributes to the construction of the child's immune system, gives the proper defense against diseases, because milk has substances that protect the baby <sup>(1)</sup>

There are many benefits of breastfeeding for the baby, as it contains vitamins, minerals, fats, sugars, proteins, all of which are suitable for the baby's body. It contains nourishing and defensive substance, which is not found in cow's milk and in any other type of milk. It is a perfect food for the baby. It is most suitable for the child's stomach. <sup>(two)</sup>

Breastfeeding is also beneficial for mothers, as physical contact between mother and child during breastfeeding strengthens affective bonds. It can also decrease the mother's metrorrhagia after childbirth and automatically the uterus returns to normal size quickly and the decrease in metrorrhagia prevents maternal anemia. <sup>(two)</sup>

Exclusive breastfeeding reduces infant mortality by preventing diseases that are common in childhood, in addition to helping to recover from illness. Children who are not exclusively breastfed have a much higher risk of dying compared to those who are exclusively breastfed. <sup>(3)</sup>

The first information on the EBF situation in Brazil comes from a survey carried out in 1986, which showed that only 3.6% of children aged between 0 and 4 months were exclusively breastfed. <sup>(4)</sup> Since then, several studies and campaigns have been proposed to encourage breastfeeding in Brazil. As a result, there was an increase in the work of health professionals to implement breastfeeding and strategies at all levels of Health Care to improve breastfeeding rates.

Given the information presented, the present study has the following research problem: what is the importance of exclusive breastfeeding in the first 6 months of life in the current Brazilian context and what is the role of nursing in this scenario?

The role of the health professional, especially nursing, is to identify and understand the entire process of breastfeeding in the sociocultural and family context and, through this understanding, to provide due care for both the mother/baby pair and their family. It is necessary to look for ways to interact with the population to inform them about the importance of adopting a healthy practice of breastfeeding and addressing all the importance of exclusive breastfeeding, explaining and clarifying how this process works. Therefore, the professional needs to be prepared to provide

effective, solidary, comprehensive and contextualized assistance that respects the knowledge and life story of each woman and that helps her overcome, demystifies fears, difficulties and insecurities in the breastfeeding process. <sup>(5)</sup>

The general objective of this study is to evaluate the importance of breastfeeding in the first 6 months of life and the role of nursing.

The specific objectives foreseen for this study are: Addressing breastfeeding and its repercussions; discuss the current scenario of breastfeeding and factors that interfere with its realization; to evaluate the role of nursing in promoting and encouraging exclusive breastfeeding.

Knowing that breastfeeding is a much debated issue and that it directly interferes with the quality of life of mothers and their children, the objective of this study was to seek what is said in the current scientific literature about the benefits and importance of exclusive breastfeeding. and how nursing works in this process.

It is believed that this research has great relevance in the current scenario, as it will contribute so that mothers and health professionals can have a broader view on the subject, deepen their knowledge and reflect on their actions, aiming at the well-being of the mother. and the baby in this important moment.

The present research is justified due to the fact that we understand exclusive breastfeeding as a subject of vital importance today. This work will contribute to the dissemination of knowledge about the importance of exclusive breastfeeding and the role of nursing. With this, it will provide both mothers and health professionals with a broader view on the subject, in order to obtain more knowledge on this issue and reflect on its practice and its benefits.

It is known that today, breastfeeding is a much discussed issue, but many lack relevant information on this subject. It is vitally important that mothers and health professionals obtain knowledge about all the benefits provided by the practice of exclusive breastfeeding. Therefore, the question is: What is the importance of exclusive breastfeeding and how can nursing collaborate in this process?

This study is an integrative literature review, characterized by the synthesis of information based on relevant studies already published on the topic in question, in order to summarize what is already known about the subject and reach a conclusion about it. This research method, which aims to synthesize the results obtained through the knowledge of a certain subject, and makes it possible to direct knowledge gaps to be filled through new studies <sup>(10)</sup>

A survey of scientific articles was carried out in the following online computerized databases: Scielo, Medline, Virtual Health Library, Lilacs.

The inclusion criteria were articles published between 2010 and 2021, using the following keywords: Breastfeeding, nursing, postpartum period. After selection, the articles will be carefully analyzed through reading in full to select the ones that best suit the topic in question.

### Theoretical Reference

Pregnancy is considered an event that represents a change in roles for women in society, generating contradictory feelings. Given this, pregnancy can cause fears, insecurities and fears, and at the same time generate feelings of joy, fulfillment, satisfaction and contentment. These feelings in the face of pregnancy can be seen with greater intensity in primiparous women and are related to their sociocultural reality, interpersonal and family relationships and economic situation, and may even interfere with the bond with the baby, and later, in the breastfeeding process. maternal. <sup>(6)</sup>

Breastfeeding or Breastfeeding (BF) means breastfeeding and nourishing the child with the milk it produces, and is seen as a natural behavior. However, it can be based on learning, experience, observation and examples experienced by women, being linked to social and cultural determinants. <sup>(7)</sup>

It is recommended that breastfeeding should start in the first two hours of life, still in the delivery room, if the mother and newborn are in good health. This will favor contact between them and the beginning of effective suction of breast milk, influencing the longer duration of breastfeeding and causing long-term positive effects on mother-infant interaction, such as the fact that the child becomes more sociable. <sup>(8)</sup>

The approximation between mother and child is encouraged and recommended by the WHO, as the benefits of this approximation are numerous. It can increase the duration of breastfeeding, taking into account the fact that in the first hour of life the baby remains in a state of alert. Thus, they learn to suck more efficiently, create a bond with the mother, are warmed and receive colostrum that serves as the child's first immunization, promoting better results in their development. <sup>(9)</sup>

Early contact between mother and baby should be valued because it achieves several goals, including the human being's ability to love that occurs soon after birth, which is pointed out as a short period that brings long-term benefits. The first contact is very important for the woman, as it will be marked throughout her life, where her breastfeeding practice will be highlighted, and should be carried out in a way that generates positive experiences. <sup>(9)</sup>

Human milk is composed of several nutrients in exact amounts that allow the development of the human brain, unlike the milk produced by other mammals and often used to feed the newborn. In addition to providing a great nutritional contribution, it also exerts action on the baby's immunity. Lactation goes through three distinct periods, known as: colostrum, transitional milk and mature milk. Colostrum refers to the first secretion of the mammary glands. This stage occurs during the first week after delivery, with a volume ranging from 2 to 20 ml per feed for the first three days. Transition milk comes in the second postpartum week, acts as a link between colostrum and mature milk, which takes place from the second fortnight postpartum. <sup>(10)</sup>

The recommended time for Exclusive Breastfeeding (EBF) is six months, which can be extended up to two years along with other foods. <sup>(11)</sup>

The advantages of breastfeeding are many for both the mother and the newborn, both in the short and long term. It is very rare for the baby not to adapt to the

food. Among the numerous benefits of adequate breastfeeding, the following stand out: The prevention of gastrointestinal, respiratory and urinary infections; it also has a protective effect on allergies especially on cow's milk proteins, giving a better acceptance to other foods; long term: prevents diabetes and lymphomas. For the mother, it promotes early uterine involution, in some cases it protects against a new pregnancy and thus favors a lower probability of developing breast cancer, among others. Breast milk is considered the cheapest and safest way to feed the baby, but it is essential that some conditions are taken into account such as: free regimen, no milk supplementation, because in this way the baby will be protected. <sup>(12)</sup>

Carvalho et al <sup>(13)</sup> cite other benefits such as protecting the health of the infant, who will have less risk of severe infections and death (for example: diarrhea, which is frequent in artificial feeding), reduces the risk of premature necrotizing enterocolitis, respiratory disease, allergy, intestinal parasites, diabetes, juvenile arthritis, and lymphomas. The child when breastfed has better development of facial structures (dental arches and palate) and lower incidence of caries. Intellectual and psychosocial development will be favored. Children who breastfeed are smarter and are more successful in school life. Greater physical contact brings less risk of illness and death, also facilitating relationships and sociability. <sup>(13)</sup>

The practice of breastfeeding (BF) is not restricted only to the mother and child, but has consequences for society, as once the child is adequately nourished, it has repercussions in the reduction of neonatal and infant morbidity and mortality rates. <sup>(14)</sup>

When offering other liquids (water, tea, juice, etc.) together with breastfeeding before six months, which is a frequent practice, it can result in a decrease in breast milk consumption and, consequently, generate less milk extraction and production, contributing to early weaning, lower weight gain in the child, higher risk of diarrhea. <sup>(15)</sup>

It is concluded that breastfeeding is not only a biological issue, but also a social, cultural and psycho-emotional one. Many pregnant women, already in prenatal care, decide not to breastfeed <sup>(6)</sup>

Even with the evidence of the numerous advantages of breastfeeding and the improvement of the situation of breastfeeding in Brazil evidenced in the scientific literature, the indicators have revealed a tendency towards stabilization and are well below the recommended by the World Health Organization and the Ministry of Health, exclusive breastfeeding for up to six months of age and supplemented for two years or more. This reality shows that early weaning has a great impact on children's health. <sup>(16)</sup>

Despite the recommendation and benefits of breastfeeding, breastfeeding rates worldwide are still far from being reached and there are several reasons that interfere with this practice. Women may want to breastfeed, however, they encounter social, cultural and political barriers throughout the pregnancy-puerperal cycle, harming its beginning and continuity. <sup>(17)</sup>



The topic of breastfeeding has been the subject of research around the world, considering the various aspects of breast milk and breastfeeding. Despite all the scientific advances and the dissemination of the superiority of human milk and the advantages of breastfeeding, breastfeeding rates in Brazil are well below the recommended. According to the Ministry of Health, in 2008, the prevalence of exclusive breastfeeding in children under 6 months was 41% in Brazilian capitals and the Federal District, the median duration of exclusive breastfeeding was 1.8 months and the median duration of breastfeeding maternal age of 11.2 months. <sup>(18)</sup>

Considering the great positive impact of BF for the child, mother, family, society and observing the low adherence of mothers to BF, the United Nations Children's Fund (Unicef), in partnership with the WHO, launched in 1991-1992 the Baby-Friendly Hospital Initiative (BFHI), which was incorporated by the Ministry of Health as a priority action in 1992. The objective of this initiative is to protect, promote and support optimal nutrition for infants and young children, in order to achieve and maintain and the practices necessary to enable mothers, families and health professionals to give all children the best start in life. <sup>(19)</sup>

The study by Queluz et al <sup>(20)</sup> with a population of 275 children under 6 months of age, showed that the mean age, in days, of children under 6 months who were receiving exclusive breast milk was 60.6 days, standard deviation, 45.9 days and median, 47.5 days. <sup>(20)</sup>

Many beliefs are transmitted from generation to generation, and these interfere with the proper development of the breastfeeding process, leading many women to early weaning. Among them, the myth that milk is weak, the association between breast size and milk production capacity, and the use of teas for the management of colic stand out. Among the factors mentioned above, it is still noticeable how much mothers are still unaware of aspects inherent to the practice of BF. It is also evident the lack of knowledge, mainly regarding the composition of human milk, as well as its effectiveness in protecting from diseases. <sup>(14)</sup>

The results of a research by Junges et al, showed that the women interviewed feel strongly influenced by cultural aspects, referring to the relevance of the opinion of family members and health professionals, their own experiences in breastfeeding, the influence of aesthetic standards of beauty, and the construction of affective bonds between mother and child through breastfeeding, which culturally conditions the figure of the good mother as the one who breastfeeds. The strictly biological aspects emerged to a lesser extent and, when mentioned, they mainly punctuated the benefits to the baby's health. <sup>(21)</sup>

Carvalho et al <sup>(17)</sup> state that at the individual level, mother and child face a learning period which can be positive or negative for the duration and choice of BF type. Difficulties in initiating breastfeeding are common and pose a risk for early weaning. The authors cite other factors that interfere with the continuation of breastfeeding, which are those related to milk production, psychosocial factors, the nutritional and satisfaction situation of the child, the woman's lifestyle and health



condition, and also the presence of pain. when breastfeeding and difficulties with positioning and attaching the child to the breast.

Illnesses involving the mother can constitute important obstacles to breastfeeding. Poor breastfeeding technique, infrequent feedings and at predetermined times, are important factors that can predispose to the onset of lactation complications, such as: breast engorgement, nipple trauma and low milk production, since they constitute conditions leading to inadequate breast emptying. <sup>(22)</sup>

Fialho et al <sup>(23)</sup> concluded that the main reasons related to weaning are the use of pacifiers and bottles, expressions such as “the milk dried up” and the “baby cried”, “weak breast milk”. There is also the influence of socioeconomic level, the mother's level of education, maternal work, encouragement from the spouse and relatives, and the mother's intention to breastfeed. <sup>(23)</sup>

Young mothers, primiparous and/or women without an employment relationship, are possibly those who have greater difficulty in EBF, with water and non-breast milk being the most offered foods.

Therefore, several factors have been considered determinants of early weaning, among them, the low educational and socioeconomic level of the mother, early motherhood, parity, the attention of the health professional in prenatal consultations and work outside the home stand out. home. <sup>(24)</sup>

Law No. 7,498 says that it is up to the nurse, a member of the health team, to provide assistance to women during the pregnancy- puerperal cycle. <sup>(25)</sup>

The nursing professional acting directly in encouraging Breastfeeding, due to the fact of having greater direct contact with puerperal women and newborns, being present in the prenatal, immediate, mediate and late puerperium periods. In this way, the implementation of interventions, through intra-hospital and inter-institutional actions, provided by qualified professionals capable of performing nursing care aimed at helping to promote adequate latch and breast care, becomes effective as in which they are implemented and bring benefits to the nursing mother and newborn. <sup>(26)</sup> Batista et al <sup>(27)</sup> state that it is important for the nursing professional to carry out more home visits, not only focused on aspects of the physical examination, but considering the home visit as a daily instrument for health promotion actions, in which the professional is attentive to the specificities and particularities of each family. However, it is necessary to implement actions of education and encouragement of breastfeeding in the Basic Health Unit, allowing greater opportunities to disseminate and promote breastfeeding, encouraging mothers to breastfeed their children. In this way, it can contribute to the reduction of the rate of early weaning.

Health professionals need to have knowledge and skills in both the clinical practice of lactation and clinical skills in counseling. The guidelines on BF are not limited to prenatal care, but extends to the hospital, prepartum, delivery and postpartum areas. In this sense, it is important for the health team to know the mother's daily life and the sociocultural context to which they belong, their doubts, fears and expectations, as well as myths and beliefs regarding breastfeeding, so that they can demystify consolidated practices. that negatively influence lactation. <sup>(28)</sup>

Nurses must develop humanized care, as this aspect is extremely relevant as a multiplier of information, being able to carry out a socio-educational approach at the primary health level, with low cost and high effectiveness, and also the absence of adverse side effects, in which the cost-effectiveness advantages are great. It is believed that the more the mother is guided and committed, the greater the success in the practice of breastfeeding. The contributions of nursing in the practice of breastfeeding are extremely important, both for knowledge and for the information and practice that becomes paramount. In this context, the nurse acts as a manager and, together with this position, he/she needs to promote information through specific awareness and counseling strategies, as the need requires. <sup>(10)</sup>

Another factor that directly affects the practice of breastfeeding is the way health professionals approach mothers when providing breastfeeding counseling. The health professional listens and tries to understand how the mother feels, tries to help the mother decide what is best for her, decide what to do, and gain self-confidence. It seeks to help the mother to live the breastfeeding process in a healthy way, both biologically, sensorially and psychologically. It is in this context that they call attention to the difference between counseling and counseling, stating that the first concept is to tell the person what they should do and that counseling is a way of working with the mother where the professional listens to her, tries to understand her. she and, with her knowledge, offers help, in order to give the mother the opportunity to plan, make decisions and strengthen herself to deal with pressure, increasing her self-confidence and self-esteem. <sup>(29)</sup>

The support of the health team and their dedication are fundamental for the success of breastfeeding and for the prevention of trauma and mastitis, which occur in the first days of puerperium. It is important that nurses know these difficulties and intervene, so that lactation is successful, since the difficulties faced by women in the breastfeeding process can be predictive of weaning. <sup>(30)</sup>

Costa et al <sup>(31)</sup> conducted a survey with some health professionals and through the reports it was possible to show that many of them were unaware of the possible difficulties in breastfeeding. Thus, prior knowledge is necessary, as well as constant updates on BF, which can cover the guiding aspects of their care, from difficulties/complications, to ways of evaluating the breasts. This theoretical knowledge about lactation becomes essential for the realization of quality preventive care. For the subjects, the main interference of the implementation of BF is still the resistance of the puerperal women, in accepting the guidelines of the nursing team.

The nurse must reflect on the nursing orientation, which needs to be sensitive and uniform with regard to breastfeeding. It is not enough to tell the pregnant woman that she "has" to breastfeed, that breast milk already has specific nutrients for the baby, which favors the mother-child bond, which has no cost, among many other advantages. Information about breastfeeding requires effective care in an empathic, comprehensive way, without prejudice or presuppositions, and that allows entering the world of the primiparous's life, trying to understand the social relationships that influenced the development of breastfeeding. <sup>(6)</sup>

The support of health services and professionals is extremely important for breastfeeding to be successful. In the course of educational activities aimed at women and children, the importance of exclusive breastfeeding up to six months should be emphasized, emphasizing the benefits of breast milk that protects the baby from infections and allergies, enumerating the other advantages of breastfeeding for the baby and mother. Providing help to mother and child in the breastfeeding process is not just a technique procedure and requires a series of factors such as skill and empathetic attitude, this process being called counseling. <sup>(5)</sup>

### **Final considerations**

The risk factors for breastfeeding not occurring range from the use of bottles, pacifiers and complementary feeding to socioeconomic and psychological factors of the mother. Thus, the success of exclusive breastfeeding can be influenced by an integral approach, focused on the care of the mother and baby within the context in which they are inserted and the effectiveness of multiprofessional and interdisciplinary programs at all levels of Health Care, from pregnancy until the end of the puerperal period.

The performance of nursing, according to the results found in the selected articles, therefore involves information and guidance aimed at education and health promotion, in the sense of demystifying ideas culturally perpetuated by common sense that end up interfering negatively in the entire process. that involves breastfeeding, especially the social pressure that involves it.

This study supports the investment in research that can support effective public policies to improve breastfeeding rates in Brazil, reflecting benefits for mothers, children, families and Brazilian society as a whole.

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**THE BENEFITS OF BREASTFEEDING FOR THE HEALTH OF THE CHILD:  
INTEGRATIVE REVIEW**

*OS BENEFÍCIOS DO ALEITAMENTO MATERNO PARA A SAÚDE DA CRIANÇA:  
REVISÃO INTEGRATIVA*

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**Abstract**

*The benefits of breastfeeding for mother and child have wide scientific recognition due to numerous positive aspects for the child's health in the short and long term. Thus, the present research has as main objective to carry out a bibliographic survey on the benefits of breastfeeding for the health of the child in the scientific literature of the last six years. The studies were found in the Scielo, Lilacs and PubMed databases, the following descriptors were used: Breastfeeding, Breastfeeding benefits, breastfeeding and child health. The analyzed literature indicates benefits for the child's oral health, favoring the healthy development of the stomatognathic and bone system in addition to preventing malocclusion, also promoting protection against infections and strengthening of the immune system and the development of the cognitive system, influencing intelligence and IQ, as well as acting in the prevention of diabetes and obesity. There is a gap in studies on the benefits in the psycho-emotional field, since only one analyzed study associates breastfeeding with the benefit of emotional strengthening between mother and child, this being a topic for future studies.*

**Keywords:** *Breastfeeding. Breastfeeding benefits. Breastfeeding and child health.*

**Resumo**

*Os benefícios da amamentação para mãe e filho possui amplo reconhecimento científico devido os inúmeros aspectos positivos para a saúde da criança em curto e longo prazo. Assim, a presente pesquisa possui como objetivo central realizar um levantamento bibliográfico sobre os benefícios da amamentação para a saúde da criança na literatura científica dos últimos seis anos. Os estudos foram encontrados nos bancos de dados Scielo, Lilacs e PubMed foram utilizados os seguintes descritores: Amamentação, Benefícios da amamentação, amamentação e saúde da*

*criança. A literatura analisada indica benefícios para a saúde bucal da criança, favorecendo o saudável desenvolvimento do sistema estomatognático e ósseo além de prevenção de maloclusão, promove também proteção contra infecções e fortalecimento do sistema imunológico e o desenvolvimento do sistema cognitivo tendo influência sobre inteligência e QI, assim como atua na prevenção de diabetes e obesidade. Há uma lacuna em estudos sobre os benefícios no campo psicoemocional, visto que apenas um estudo analisado associa a amamentação com o benefício de fortalecimento afetivo entre mãe e filho, sendo este um tema para estudos futuros.*

**Palavras-chave:** Amamentação. Benefícios da amamentação. Amamentação e saúde da criança.

## Introduction

The World Health Organization (WHO) recommends exclusively feeding the newborn with breast milk in the first six months of life, and also recommends that the introduction of other more solid foods start only at six months of age, age at which that the child is already physiologically prepared for it. (WHO, 2001).

This recommendation is indicated, among other reasons, because research indicates that breast milk is the ideal and natural food for the infant, thanks to its nutritional and immunological properties that protect the newborn from infections, diarrhea and respiratory diseases, in addition to providing strengthening of the child's bond with the mother. (SILVA, CERVATO, PASSANHA 2010, p.252).

It is also recommended that breastfeeding should be maintained in association with other foods until the age of two, as advised by the Ministry of Health (MOH), the World Health Organization (WHO), the United Nations Children's Fund (UNICEF) and the *World Health Organization*. Exclusive breastfeeding for up to one year of life could prevent 22.2% of deaths per year in the world of children up to 12 months. (VENÂNCIO, 2003)

In this context and recognizing the benefits of breastfeeding, the Ministry of Health has been working on the implementation of programs that encourage the practice of breastfeeding, among them, the Hospital Amigo da Criança (BFHI) initiative in health units, the program was developed in Brazil from March 1992, however, despite all the governmental and institutional efforts, the rate of early weaning in Brazil remains high, with the average duration of breastfeeding being seven months, with only one month being exclusive and second. data from the National Survey of Demographics and Health of Children and Women, in 2006 the prevalence of exclusive breastfeeding from zero to six months was 39.8%. (ALMEIDA, FERNANDES, ARAÚJO, 2004 p. 359).

The II Survey of Prevalence of Breastfeeding in Brazilian Capitals and the Federal District (PPAM/Capitals and DF) of 2008, funded by the Ministry of Health and carried out by researchers from the Health Institute of SES/SP, (State Secretariat of Health of São Paulo ) from the Child Health Technical Area of the Ministry of Health points out that in the Capitals and DF, only 67.7% of the children surveyed were breastfed in the first hours after birth, with regard to exclusive breastfeeding, the

research shows that the national average is 41, 0%%. (PEREIRA, 2010 p. 7).

In the most recent study carried out by the Federal University of Rio de Janeiro-UFRJ and funded by the Ministry of Health, the National Study of Child Food and Nutrition ( Enani ), carried out between February 2019 and March 2020, there is a considerable improvement in the rate of exclusive breastfeeding is compared to the 2008 survey. According to Enani , 53% of children in Brazil are breastfed in the first year of life, and the rate of exclusive breastfeeding and from zero to six months is 45.7% (UFRJ, 2020). ).

Given this scenario, the importance of nursing during the pregnancy-puerperal cycle is highlighted, considering that the nurse is the professional who is closest to the mother during this cycle, he has the vital role of guiding, instructing and advising, presenting himself as an information diffuser, ensuring that the pregnant woman knows the importance of breastfeeding and acquires the conviction that she is fully capable of exclusively breastfeeding the newborn (MESQUITA *et al.* 2016).

## MATERIAL AND METHODS

The integrative review has as its main characteristic the synthesis of knowledge and the incorporation of the applicability of results of significant studies in practice. It is a broader methodological approach to review that allows the inclusion of experimental and non-experimental studies in a more complete analysis of the phenomenon studied. (SOUZA; SILVA; CARVALHO; 2010).

As defended by Ercole , Melo and Alcoforado (2014, p14),

The integrative literature review is a method that aims to synthesize results obtained in research on a topic or issue, in a systematic, orderly and comprehensive manner. It is called integrative because it provides broader information about a subject/problem, thus constituting a body of knowledge.

It is important to highlight that the integrative review is not to be confused with the systematic review, although both methods use Evidence-Based Practice (EBP) as an investigation approach, the systematic review uses experimental research studies as a source of data, that is, it is aimed at the analysis of randomized controlled trials that portray strong evidence and seeks to exhaust the studies on the investigated topic with the inclusion of published and unpublished material. (MENDES; SILVEIRA; GALVÃO, 2008, p.759).

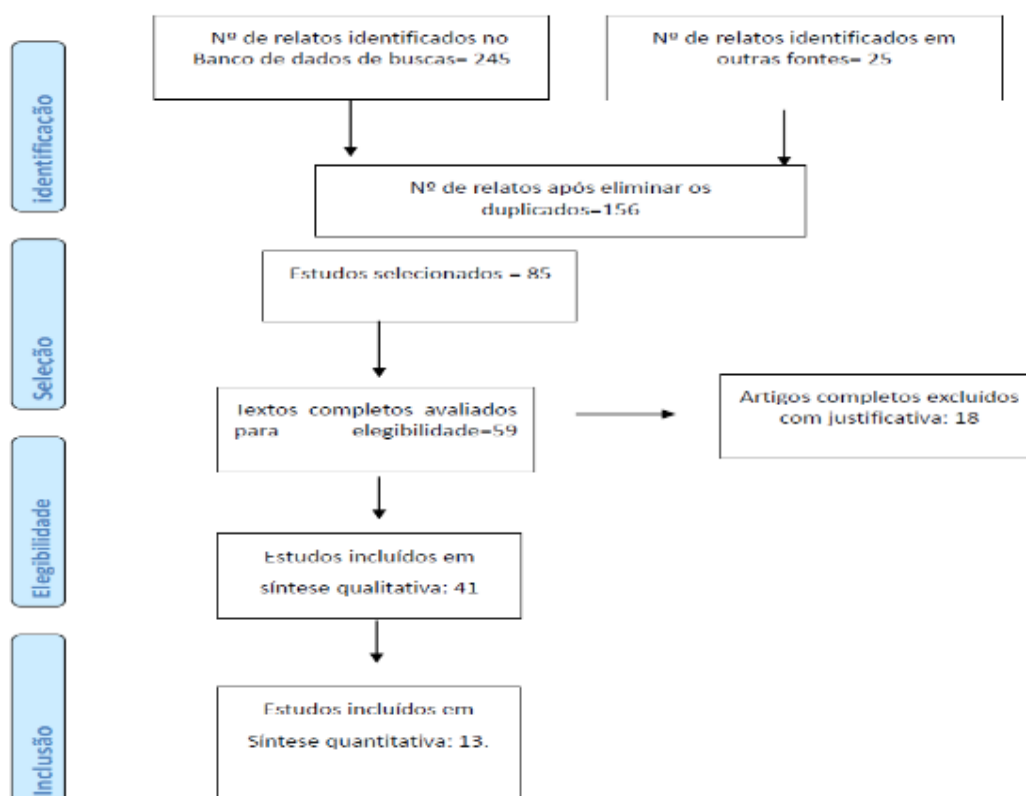
On the other hand, the integrative review “The integrative review includes the analysis of relevant research that supports decision-making and the improvement of clinical practice”, in addition, it allows the verification of the “state of knowledge of a given subject, in addition to to point out knowledge gaps that need to be filled with new studies” (ERCOLE; MELO; ALCOFORADO; 2014 p.18).

This method is essential in the health area, as it “promotes the synthesis of multiple published studies and allows general conclusions about a particular area of study”, which facilitates the reading of the health professional who seeks an objective reading that helps the practice clinic of the profession (MENDES; SILVEIRA; GALVÃO, 2008, p.759).

The procedure of the present research was as follows, first the choice of theme, then the guiding question of the research was delimited, the keywords of the research were defined, the selection of articles, analysis of the material, and soon after, the research was carried out. discussion of the knowledge gathered.

The selection of works was based on inclusion and exclusion criteria. The exclusion criteria were: incomplete works, which did not contribute to the elucidation of the research question, published more than 5 years ago and not fully available. The inclusion criteria were: complete and available works, published in the last five years, contributing to the discussion of the topic, works with a descriptive, quantitative and qualitative, quasi-experimental and experimental design. The research of the works took place between March 12 and March 15, 2021.

The table below presents the results of the research in the selection of articles Figure 1Prism Diagram of Article Selection.



Source: Prepared by the author.

Scielo , Lilacs and PubMed databases , the following descriptors were used: Breastfeeding, Benefits of breastfeeding, breastfeeding and child health. A filter was also used for articles in Portuguese published between 2016 and 2021.

## BENEFITS INHERENT TO BREASTFEEDING

Breastfeeding is the most natural way of feeding the newborn, it is considered the only food capable of meeting the physiological needs of the metabolism of children under six months of age, being essential for the healthy development of the child in the

short and long term. Complementing Pereira (2010 p.10) states that,

Breastfeeding is the safest and most efficient way to feed the child in the first six months of life, and no other single strategy achieves the impact that breastfeeding has in reducing deaths and hospitalizations of children under five years of age, especially in low-income children. socioeconomic.

The benefits of breastfeeding have been treated mainly from a nutritional, psychosocial and immunological point of view, and it is a subject of a comprehensive approach, requiring the concern of the entire health team, and in the meantime, the role of the nurse stands out, who must have this function incorporated in their attributions (ANTUNES, *et al.*, 2008 p.104).

It is important to mention the definition of breastfeeding used by the World Health Organization (WHO) in which it defines,

- Exclusive breastfeeding – when the child receives only breast milk, directly from the breast or expressed, or human milk from another source, with no other liquids or solids, with the exception of drops or syrups containing vitamins, oral rehydration salts, mineral supplements or medications.
- Predominant breastfeeding – when the child receives, in addition to breast milk, water or water-based drinks (sweetened water, teas, infusions), fruit juices and ritual fluids.
- Breastfeeding – when the child receives breast milk (directly from the breast or expressed), regardless of whether or not they receive other foods.
- Complemented breastfeeding – when the child receives, in addition to breast milk, any solid or semi-solid food with the purpose of complementing, and not replacing it. In this category, the child can receive, in addition to breast milk, another type of milk, but this is not considered complementary food.
- Mixed or partial breastfeeding – when the child receives breast milk and other types of milk (WHO, 2007).

As for exclusive breastfeeding, this should be maintained up to six months and together with other foods up to two years, this practice ensures the child's quality of life, less risk of hospitalization, as well as a strengthening of the bond with the mother. For women, studies show that breastfeeding reduces the risk of postpartum complications, breast and ovarian cancer. (PEREIRA, 2010 p.12)

Breastfeeding is also related to the development of the individual's personality. Children who are breastfed naturally tend to be calmer, because the physical contact between mother and child during breastfeeding helps to alleviate the emptiness of the sudden and abrupt separation of childbirth. (ANTUNES *et al.*, 2008 p.104)

Breastfeeding is also important for the development of the oral muscles and bones, providing the healthy development of important structures “such as the



maxillary sinus for breathing, phonation, development of muscle tone, anteroposterior growth of the mandibular ramus, canceling mandibular retrognathism ” (ANTUNES *et al . al .* , 2008 p.104).

In addition, “Breastfeeding provides the child with correct breathing, maintaining a good relationship between the hard and soft structures of the stomatognathic system and provides adequate tongue posture and lip sealing ” (ANTUNES *et. al.*, 2008 p.105)

However, the benefits of breastfeeding are not limited to the child and the woman, but families, health professionals, as well as the State also benefit from the reduction of early weaning. Encouraging breastfeeding stimulates the development of health professionals, who, seeing the positive result, seek more knowledge, seeking and improving methods to promote breastfeeding. The State, in the same way, benefits from less expenditure on public health, since there is a considerable decrease in hospitalizations of children and women, in addition to a healthier population, better indicators of infant and maternal mortality, as well as greater appreciation of the life. (PEREIRA, 2010 p.12)

Guidance on breastfeeding should include the importance of breastfeeding soon after delivery, studies indicate that breastfeeding in the first hours of birth is crucial for the healthy development of the child and reduction in neonatal and infant morbidity and mortality rates (UNICEF 2006; WHO 2007). ).

The Ministry of Health's technical manual for qualified and humanized care exposes the benefits of breastfeeding for the mother, such as strengthening the mother/child affective bond, favoring uterine involution and reducing the risk of hemorrhage, contributing to the normalization of the mother's body weight. mother, contributes to the increase in the interval between births, prevention of osteoporosis, and for the child, the manual states that breast milk is a complete food, does not need any addition until six months of age, facilitates the elimination of meconium, decreases the risk of jaundice, protects against infections and allergies. For families, breastfeeding presents itself as more economical, clean and always at the right temperature, and finally, for the state, exclusive breastfeeding means a decrease in hospitalizations, which results in less costs, in addition to a healthier society (BRASIL, 2005). , p 64).

Some atypical situations, such as mothers who smoke, alcoholic, use medication or other drugs, should be analyzed individually.

In prenatal care, in the cases mentioned, the professional's guidance should encourage the mother to give up alcohol and nicotine during pregnancy and postpartum, however moderate alcohol consumption (about 0.5g of alcohol per kilogram of the mother's weight per day), which corresponds to approximately one glass of wine or two cans of beer, does not affect breastfeeding. Mothers who smoke should be clarified that, despite the benefit of breastfeeding outweighing the harm of cigarettes to the child, the decrease in milk production and ejection may be linked to the use of nicotine. (PEREIRA, 2010)

In this way, it is a unanimous conception, in the researched literature, that breast milk is the most nutritious and safe food for the child, and the encouragement of the practice of breastfeeding is a global issue and has real impacts on the reduction of



infant mortality.

### Causes of early weaning

To establish strategies and promote the encouragement of breastfeeding, a study is needed on the reasons why mothers decide not to breastfeed or abandon it before the period recommended by the WHO. For Takushi (2008, p.492) "The practice of breastfeeding is not instinctive and, therefore, requires to be learned by the woman and protected by society".

According to King (2001, p.71) the belief of "insufficient milk" is one of the main allegations made by mothers to abandon exclusive breastfeeding. However, the vast majority of women are able to produce enough milk, since breast milk production occurs according to demand, lacking only the mother's confidence in her ability to feed her baby. (KING, 2001 p.71).

The same author recommends that the health professional check the reasons that lead the mother to believe that she does not have enough milk, according to him, this may occur because some mothers find the breast empty as soon as the child is born, or observe that the child cries, sucks more than expected or breastfeeding takes a long time, reasons that may be associated with hunger (KING, 2001 p.71). However, if the child's development is normal, the professional must help the mother to trust her ability to produce enough milk for the child, one of the strategies is doing the dry diaper test, which, according to the author, establishes that,

If the child receives only breast milk and if he urinates six times a day, he will be getting enough milk. If the mother is giving water or any other liquid, this test cannot help. The water will produce urine even if the child does not get enough milk. (KING, 2001 p.71).

Another common reason reported in research that makes breastfeeding difficult is the myth that "the baby did not want to take the breast", this may happen due to the difficulty that the newborn has in the first few days to suck properly. (MARQUES, 2009). Another reason related to early weaning is the presence of inverted nipples (TAKUSHI et al., 2008), explains that "When breastfeeding is a mother's option, inverted nipples tend to normalize with specific exercises since pregnancy or with insistent sucking of the baby." baby in correct latch". (TAKUSHI et al., 2008)

It is also noteworthy that some mothers introduce water and tea in their children's diet because they believe that milk does not "quench thirst", however breast milk has enough water for the child's hydration. (MARQUES, 2009)

In the research, other factors related to early weaning were reported, such as Mastitis, breast engorgement and fissures, pain when breastfeeding, and in these cases the health team can take educational measures clarifying the correct way to breastfeed, recommend cold compress and hydration of the nipple with the milk itself. (FILHO et al. , 2011)

Another point reported in the analyzed bibliography is the introduction of food before the child is six months old, as a way of preparing him for the mother's return to work, they are worried about the fact that returning to work means suffering. for the

child. (AMORIM, ANDRADE, 2009)

However, the mother must be informed that the Federal Constitution of 1988 guarantees her the right to maternity leave of 120 days, and in some states and municipalities, of 180 days, to favor exclusive breastfeeding, being also guaranteed by law the right of the nursing mother, after returning to work, one hour to breastfeed, which can be divided into two thirty-minute breaks. However, as it is not possible to breastfeed in the workplace, the mother should be instructed to express the milk, and the nurse must be instructed on the correct way to do it. (AMORIM, ANDRADE, 2009)

Thus, the factors that motivate early weaning may represent the mother's lack of information and experience, and it is important that nursing promotes educational actions that encourage mothers to breastfeed.

## RESULTS

The table below presents the summary of the articles selected for analysis.

AUTHOR/TITLE/YEAR	METHODOLOGY	RESEARCH OBJECTIVE	RESULTS
VICTORA, Cesar G. et. al. Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effects. 2016	Systematic review.	To develop a meta-analysis of the benefits of breastfeeding in the 21st century literature.	Our meta -analyses indicate that breastfeeding provides protection against childhood infections and malocclusion , increases intelligence, and likely reduces the occurrence of overweight and diabetes. No associations were found with allergic disorders such as asthma, or with blood pressure or cholesterol, and an increase in the occurrence of dental caries was observed with longer duration of breastfeeding.
MARQUES, Victor Guilherme Pereira da Silva. Breastfeeding: importance and benefits of breastfeeding. 2020	integrative review	Conduct a bibliographic survey about the importance and benefits of breastfeeding.	It is concluded that breast milk is the appropriate food for the child both from a nutritional and immunological point of view, as well as from a psychological point of view, because in addition to favoring the mother-child bond, it offers the nutrients that the child needs to start a healthy life, It is important that health professionals encourage and guide mothers regarding their practice.
ALVES, Yamê Regina et. al.. Breastfeeding under the aegis of support networks: a facilitating strategy. 2020	Qualitative research.	Knowing aspects related to breastfeeding from the perspective of women in a city in the interior of Rio de Janeiro and discussing the family support network built as a	Breastfeeding is an action based on subjectivity, on the experience of women and among the members of the social network. The need for effective participation of the nurse in prenatal care is highlighted, promoting breastfeeding and the inclusion of the father for better participation in the entire process of breastfeeding and family members, where both have a fundamental role in promoting

		facilitating strategy for women to breastfeed their children.	and continuity of exclusive breastfeeding.
CAMPOS, Paola Melo et. al. Skin-to-skin contact and breastfeeding of newborns in a university hospital. 2020	Quantitative cross-section.	To determine the prevalence of skin-to-skin contact (SPC) and encouragement of Breastfeeding (BF) and reasons for not performing these practices; identify whether women received information about these practices during prenatal care.	We believe that there is an opportunity for improvements in CPP and AM rates, given the benefits of these practices.
SOUZA, Jéssica Caroline Alves de; OLIVEIRA, Lucilene Fátima; PERUZZO, Silvia Aparecida. Knowledge of postpartum women about the benefits of breastfeeding in a hospital environment. 2019	Cross-sectional, qualitative, quantitative, investigative study.	To evaluate the knowledge of postpartum women during the hospital phase about the importance and benefits of breastfeeding.	The puerperal women showed knowledge about the benefits of breastfeeding, despite the vast majority having acquired this knowledge through reading and research on the subject and not by the guidance of health professionals. The role of the physical therapist is essential in preparing these women for childbirth and postpartum, offering support for breastfeeding.
SUAREZ-COTELO, Maria del Carmen et al. Knowledge about breastfeeding and the relationship with its prevalence. 2019	Prospective descriptive study.	To determine the level of knowledge about breastfeeding of pregnant women and to analyze to what extent it influences the intention to breastfeed after the introduction of infant feeding at the 6th and 16th weeks and at 6 months postpartum.	The level of knowledge of pregnant women about breastfeeding is regular and influences the choice of food for their babies and the duration of exclusive breastfeeding. Strategies must be implemented to increase knowledge and improve breastfeeding rates.
SAMPAIO. Renata Correia Teles, et. al. Association between pacifier use and breastfeeding interruption: A literature review. 2020	Literature review.	To verify, through a literature review, the association between pacifier use and interruption of breastfeeding or early weaning.	The analyzed articles demonstrate that the use of pacifiers can interfere with the duration of breastfeeding, causing early weaning.

<p>, Samylla Maira Costa, et. al.. Breastfeeding as a protective factor for cow's milk protein allergy in childhood: what does the scientific evidence say?. 2020</p>	<p>Integrative literature review.</p>	<p>Investigate what the scientific evidence says about breastfeeding as a protective factor for cow's milk protein allergy (CMPA) in childhood.</p>	<p>Considering that cow's milk protein allergy (CMPA) is the most common allergy in childhood, with several manifestations that compromise the child's health and quality of life, it is important to encourage the practice of breastfeeding as a way to promote the child's health.</p>
<p>EUGENIO, Alex de Brito; NAZARI, Weder Fernando. Breastfeeding and the act of breastfeeding as influencing factors in children's neurodevelopment and cognition : A systematic review of the literature. 2020</p>	<p>Systematic review of the literature.</p>	<p>To analyze what primary studies point out as factors that influence breastfeeding and the act of breastfeeding on children's neurodevelopment and cognition</p>	<p>There are still divergences in the literature regarding the influence of other cofactors on the positive results found in the association of breastfeeding and infant-juvenile neurodevelopment and cognition, requiring more robust studies on the subject.</p>
<p>HARTWIG, Fernando Pires. VICTORA, Cesar Gomes. Genetic and epigenetic aspects of breastfeeding. 2018</p>	<p>Literature review.</p>	<p>To investigate the relationship between breastfeeding and infant DNA methylation through a systematic review of the literature and an original study, assessing DNA methylation levels in hundreds of thousands of regions across the genome.</p>	<p>The results of the three articles indicate that breastfeeding is associated with persistent epigenetic changes , and that breastfeeding is positively associated with IQ in all genotypes for the polymorphs studied.</p>
<p>MESSIAS, Agnes Martins, et. al. Natural, artificial breastfeeding and malocclusion : is there a correlation?.2019.</p>	<p>Cross-sectional, qualitative, quantitative study.</p>	<p>To verify the possible correlation between type and duration of breastfeeding and the development of malocclusions .</p>	<p>There was no correlation between a greater chance of developing malocclusion and a longer duration of natural (p=0.359) or artificial (p=0.244) breastfeeding. A longer period of breastfeeding will not necessarily indicate a greater tendency to malocclusion .</p>
<p>REINAS, Cátia Marisa Monteiro. Breastfeeding and osteoporosis. 2016</p>	<p>Literature review</p>	<p>Literature review in order to assess the risk and risk factors associated with osteoporosis in breastfed women.</p>	<p>In breastfeeding women, osteoporosis is expected to be associated with preventable risk factors.</p>

<p>CASSIMIRO, Isadora Gonçalves Vilela et al. The importance of breastfeeding for the stomatognathic system.2019.</p>	<p>Literature review</p>	<p>Arguing with enlightening information, the benefits of breastfeeding on the stomatognathic system as well as the disadvantages of non-nutritive sucking.</p>	<p>It is concluded that breastfeeding provides a harmony of the occlusal plane , preventing mouth breathing, atypical swallowing and deleterious habits.</p>
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Source: Prepared by the author

### DATA DISCUSSION

The research presented a vast amount of material about breastfeeding, most of the studies found are centered on the mother/child binomial and emphasize the importance of breastfeeding, emphasizing the benefits of breastfeeding.

Some studies emphasize the importance of nursing guidance to the mother during the gestational and postnatal process, as a fundamental factor in encouraging breastfeeding (SUAREZ-COTELO, 2019; SOUZA, OLIVEIRA, PERUZZO, 2019) while other studies present data about the difficulties encountered by the mother in this process, considering that breastfeeding is a practice that involves psychosocial, cultural and physiological factors, there is still social resistance to breastfeeding, difficulties arising from socioeconomic changes, since many women have a double workday, have there are still legal obstacles regarding the practice of breastfeeding in the workplace, which despite being expressed in law, many mothers renounce this right due to ignorance or fear of reprisals from the employer (ALVES, 2020; MARQUES, 2020).

As for the benefits to children's health, many studies point out that breastfeeding can contribute to the healthy development of the stomatognathic system (CASSIMIRO, 2019 ; ) ).

In this sense, the findings of the studies by Messias (2019) are in line with the aforementioned studies and point out that with regard to malocclusion , 91% of the children in the study who were artificially breastfed had the dysfunction, while among 70% of those who were naturally breastfed , 85% of the total sample had malocclusion , that is, the type of breastfeeding did not influence the development of malocclusion and longer breastfeeding time is not necessarily indicative of malocclusion development .

Studies by Messias (2019) also point to a higher prevalence of caries in children breastfed for more than 12 months.

Some studies point out that breastfeeding can have a strong influence on the child's cognitive development (VICTORA, 2016; HARTWIG, 2018). The findings of Eugênio and Nazari (2020) point out that there is a lot of divergence in studies that associate cognitive development with breastfeeding, in this context, the author argues that the ongoing debate whether breastfeeding confers a direct advantage on infant cognition, or if it is just an association with favorable socioeconomic status and family cognition is not purely theoretical. From a public health point of view, if breastfeeding



has biological effects on IQ, this will be one of the few economic means to significantly improve a child's neurodevelopment (EUGENIO, NAZARI, 2020).

Studies were also found that point to breastfeeding as a preventive practice for diabetes and obesity (MARQUES, 2020; VICTORA, 2016), and it also benefits the psychological plan as it strengthens the mother-child bond (MARQUES, 2020).

Another point discussed in the literature is the relationship between the child's immune system and breastfeeding, in this sense many authors argue that breastfeeding strengthens the immune system and provides protection against infections (VICTORA, 2016; MARQUES, 2020; CAMPOS, 2020; SAMPAIO, 2020).

## CONCLUSION

Breastfeeding is unanimously considered as the most complete food for the child, its importance is advocated globally by the WHO, UNICEF and in Brazil by the Ministry of Health and other organizations. In recent years, there has been an effort by health institutions in Brazil to promote breastfeeding, and in this scenario, the role of health professionals is essential.

Breastfeeding is a practice of great importance for the health of the child, in the short and long term, and involves multidisciplinary factors and should be seen as a complex, biological, but not instinctive process, and influenced by several psychosocial, cultural, economic, historical etc.

Thus, the research presented vast material on the study of breastfeeding, highlighting mainly the benefits of exclusive breastfeeding, factors that favor early weaning and the encouragement of breastfeeding in the public health network. The themes are found in great majority in studies in the area of nursing, dentistry and medicine.

As for the benefits of breastfeeding, the analyzed literature indicates benefits for the child's oral health, favoring the healthy development of the stomatognathic and bone system in addition to malocclusion prevention, it also promotes protection against infections and strengthening of the immune system and the development of the cognitive system having influences intelligence and IQ, as well as preventing diabetes and obesity. There is a gap in studies on the benefits in the psycho-emotional field, since only one analyzed study associates breastfeeding with the benefit of emotional strengthening between mother and child, which is a topic for future studies.

Another important point is the need for more in-depth studies on the relationship between breastfeeding and the cognitive system, being necessary to evaluate cofactors linked to cognitive development such as economic, social, cultural factors, etc.

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## CHOICE OF COURSE WORK TOPIC IN THE GRADUATION IN LAW

### ESCOLHA DO TEMA DE TRABALHO DE CURSO NA GRADUAÇÃO EM DIREITO

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#### **Abstract**

*Choosing the topic of a Course Paper in a law degree is complex. It starts with the following problem: "Is choosing the topic of a Course Paper in a degree in Law a great challenge?". As a hypothesis, it is believed so. The general objective of this manuscript is to investigate whether there is complexity for a university graduate in the Bachelor of Laws in choosing the topic of Course Work. The specific objectives are: to present internal and external factors that influence the choice of theme for a Law Course Paper; suggest a way to make the definition of the theme simpler and more objective; list subjects and contents separated by areas of Law, based on the study of course textbooks. This study is relevant for students and faculty advisors in the Law course, for legal science and for society. It is a theoretical and documentary research lasting three months.*

**Keywords:** *Theme. Completion of course work. Right. Course work. Legal Monograph.*

#### **Resumo**

A escolha do tema de um Trabalho de Curso na graduação em Direito é complexa. Parte-se do seguinte problema "A escolha do tema de um Trabalho de Curso na graduação em Direito se constitui um grande desafio?". Como hipótese, acredita-se que sim. O objetivo geral deste manuscrito é investigar se existe complexidade para um universitário do Bacharelado em Direito na escolha do tema do seu Trabalho de Curso. Sendo os objetivos específicos: apresentar fatores internos e externos que influenciam na escolha do tema de um Trabalho de Curso de Direito; sugerir um caminho para tornar a delimitação do tema mais simples e objetiva; listar assuntos e conteúdos separados por áreas do Direito, a partir do estudo de ementários do curso. Há relevância deste estudo para alunos e professores orientadores do curso de Direito, para a ciência jurídica e para a sociedade. Trata-se de uma pesquisa teórica e documental com duração de três meses.

**Palavras-chave:** Tema. TCC. Direito. Trabalho de Curso. Monografia Jurídica.



## 1. Introduction

The choice of the theme of a Course Work in the graduation in Law constitutes a great challenge. Certain students find it difficult to choose one of the many thematic ideas that come to them; other students suffer from the exact opposite: they can't even imagine what a good topic would be.

Gonçalves (2019a, p. 33) highlights affectivity towards a topic or even the high degree of personal interest in that subject as an internal factor. To work a research, it is necessary to have a minimum of pleasure in this activity. Therefore, the choice of theme is linked to the taste for the subject to be worked on. Working on a subject that the student does not like will make research an exercise in suffering and torture.

It starts with the following problem: "Is the choice of the theme of a Course Work in Law graduation a great challenge?". In other words, is it complex for a Bachelor of Law student to choose the theme of his Course Work, a mandatory requirement for the conclusion of his degree in this area?

The time available to carry out the research work, according to Gonçalves (2019a, p. 33), is also a relevant internal factor to be observed. He emphasizes that, when choosing the theme, the amount of activities that the student needs to perform to perform the work must be taken into account. In addition, you need to consider the time of work that you need to carry out in your own daily life, which are not related to research.

There is the following hypothesis "The choice of the theme of a Course Work in the Law graduation constitutes a great challenge". In other words, there is complexity for a university degree in Law to choose the theme of his Course Work, which is a mandatory requirement for the conclusion of his graduation in this area.

Another important internal factor to be considered is the limit of the researcher's capabilities in relation to the intended topic. It is necessary for the student to be aware of the limitation of their knowledge in order not to enter into a subject that they do not master. If the student's greatest domain is in Labor Law, for example, he should stick to topics related to this area (GONÇALVES, 2019a, p. 33).

The general objective of this manuscript is to analyze whether the choice of the theme of a Course Work in Law graduation constitutes a great challenge. That is, to investigate whether there is complexity for a university degree in Law in choosing the theme of his Course Work, which is a mandatory requirement for the conclusion of his graduation in this area.

For Gonçalves (2019b, p. 06), an external factor to be observed is the significance of the chosen theme for the scientific community in the legal area, its novelty, its opportunity and its academic and social values. He adds that we must be careful not to carry out a work that will not interest anyone, in the choice of

theme. If the work is worth doing, let it have a certain importance for people, for groups of people, or for society as a whole.

This article has the following specific objectives: to present internal and external factors that influence the choice of the theme of a Law Course Work; suggest a way to make the delimitation of the theme simpler and more objective; list subjects and contents separated by areas of law, based on the study of course syllabi.

Another external factor pointed out by Gonçalves (2019b, p. 06) is the time limit available for completing the work, established by the educational institution. When the institution sets a deadline for the delivery of the final research work, it cannot engage in matters that will not allow meeting this deadline. The chosen topic must be defined within the time possible for the completion of the work. This will determine, for example, whether the student will have time to carry out more empirical, field or documentary research, or to carry out a literature review, for example.

This work is important for professors and advisors of the Law course, as it facilitates the process of defining the theme of the Course Work of their advisors. Often the beginning of the flow that involves the orientation process takes time to occur precisely because of the student's difficulty in delimiting his theme.

Gonçalves (2019b, p. 06) also points out the consultation material and the data that the researcher needs as an external factor, evidencing the availability of material for consultation as another problem in choosing the topic. Often, the chosen topic is little worked by other authors and there are no secondary sources for consultation. The lack of these sources forces the researcher to seek primary sources that require a longer time to carry out the work. This problem does not prevent the research, but it must be taken into account so that the institutional time is not exceeded.

For legal science, this proposal is relevant because it allows the correct and well-made choice of the theme to allow better work and research to be carried out, even at the undergraduate level. Choosing to do a literature review, for example, without articles and books addressing the topic, should lead the student to seek to develop another subject. Choosing to research a topic that is still very new and with few published findings can awaken in the student the idea of wanting to produce from primary data collection, however, this will rarely fit in the institutional time allocated to the Course Work.

A literature review article is an academic article that will be based on other scientific or academic articles, or even from books or book chapters, which are considered basic and relevant references of that specific theme. In a literature review article, a theoretical reference is made from authors who have published consolidated research on the subject in question (GONÇALVES, 2020a, p. 97-98).

For society, the contribution exists, although it is more indirect. As if in a chained way, a well-chosen topic can generate a good Course Work in Law graduation. This research may awaken in the student the desire to continue the further development of the theme, producing science and legal reflection, which, in its ultimate end, can promote laws and jurisprudence that take this scientific production into account.

According to Marconi and Lakatos (2007, p. 45), after choosing the subject, the next step is to delimit it, and it is important to avoid choosing very broad themes that are either unfeasible as an object of in-depth research, or can lead to digressions, repetitions of commonplaces or “discoveries” that have already been overcome, or promote endless discussions.

First of all, it is worth noting that this article is not intended to be the only view on the topic addressed. It represents just another didactic strategy in order to facilitate the process of choosing the theme. Its purpose, then, in a practical way, is just to share a simplified methodology that has been successful, tested and tried in two decades of orientation of this target audience for the elaboration of this type of work.

## **2. Methodology**

This work brings a theoretical and documentary type of research. Theoretical because publications are based on: choice of topic; elaboration of a literature review article; elaboration of a research project; writing a review of a scientific or academic article; literature review article template; extended summary template; scientific or academic article review template. It is also a documentary research, since undergraduate law syllabi were studied, published with free download on the internet, from which the subjects and contents of each area of law were extracted.

This article is based on other authorial publications that, as a tool used, served as the bibliographic basis of this work: How to prepare a review of an academic or scientific article (GONÇALVES, 2020a); How to write a literature review article (GONÇALVES, 2019a); How to make a research project of a literature review article (GONÇALVES, 2019b); Scientific Methodology and Academic Writing (GONÇALVES, 2019c); Scientific literature review article model (GONÇALVES, 2020b); Review model of an academic or scientific article (GONÇALVES, 2020c); Scientific extended abstract model (GONÇALVES, 2020d).

The following were listed as exclusion criteria from the databases: addressing only about the choice of course work theme; delimit the exclusive training area for the Bachelor of Laws; use authorial materials aiming at an interrelation with other materials already produced that correlate with the theme of this manuscript; use only teaching plans and course syllabus of Law, whose

downloads are free on the internet. The estimated time for the preparation of this work was three months.

This research can be considered as qualitative, since the data obtained through the bibliographic research were treated, considering the relevant aspects raised by the analysis of the respective manuscripts. A literature review article brings up content from works to be analyzed and discussed. This reflection on the theoretical framework located and selected on that particular topic in question, even if in a secondary way, may promote new nuances or new directions that may supply future dismemberments.

It helps a lot if the academic has a pen and paper always at hand when writing his/her work, so that he/she can write down all the ideas. We generally like to rely on our memory, but when we don't take notes, we miss critical points from our research. With this pile of papers – or even digital notes – preferably loose and, for the time being, not organized, a script must be made, aiming to organize a certain order, based on the ideological proximity of the themes and sub-themes. Given this, it is essential to learn how to write a dissertation involving the topics of this brainstorm. When we manage to divide the generic theme into small parts, or items, we can write about each of the parts, significantly facilitating the development of the text (GONÇALVES, 2019c, p. 11,12,42).

### **3. Choice of Course Work theme in the law degree**

Choosing the theme of a Course Work in the Law graduation constitutes a great challenge. It is necessary to minimize this complexity for a university degree in Law in choosing the subject of his Course Work, which is a mandatory requirement for the conclusion of his degree in this area.

In this perspective of simplifying the process of choosing the theme, in an objective way, some goals are necessary: to present internal and external factors that influence the choice of the theme of a Law Course Work; suggest a way to make the delimitation of the theme simpler and more objective; list subjects and contents separated by areas of law, based on the study of course syllabi. Let's look at each of these three points in more detail below.

#### **3.1. Internal and external factors that influence the choice of the theme of a Law Course Work**

Several factors interfere and directly or indirectly influence the choice of theme. These factors are usually separated into internal factors and external factors. The internal factors are only related to issues of the researcher's private universe, in this case, the student of the Bachelor of Laws. On the other hand, external factors are the elements that do not depend on the researcher, but on the institution or even on other elements.

According to Marconi and Lakatos (2007, p. 44-45), the internal factors consist of: carrying out the selection of a subject according to the inclinations,

tendencies and aptitudes of those who propose to prepare a scientific work; to choose a subject that is compatible with personal qualifications, in terms of the researcher's training; locate an object that deserves scientific investigation and has conditions to be formulated and delimited according to the research itself.

Marconi and Lakatos (2007, p. 45) state that external factors require: having time available to carry out a complete and in-depth research; there are works that are relevant to the subject in sufficient quantity to study the subject globally; it is possible to consult and follow up with the guiding professor, for the correct analysis and interpretation of academic or scientific findings.

### **3.2. Suggested path to make the delimitation of the theme simpler and more objective**

In order to simplify the process of choosing the topic of the Course Work, seeking to make this delimitation simpler and more objective, the following step-by-step is suggested:

#### **3.2.1. Step 01: Choose the discipline already taken with the greatest mastery**

It is important that the baccalaureate remembers the subject that he liked the most in the course – that he has already attended, achieved an excellent grade, understood its content very well. It is very important for law students to consult their academic records to remember which curricular component was the easiest to assimilate the content.

Often this perception is linked to good teachers with whom the student has had contact. But this can get in the way of the process, as the student does not always master the subject of the discipline of excellent professors. For various reasons, the student may feel that they have greater mastery of subjects taught by professors that have not effectively impacted them.

#### **3.2.2. Step 02: Location of the syllabus of the subject already taken in the highest domain**

The student must locate the syllabus of this course. This can occur by contacting the subject's monitor or fellow students, or even asking directly to the professor who taught it, through an internet search of law syllabuses (most of which are available for free download).

To facilitate this process, this article brings a list of subjects by area of the Law course, based on research carried out in Law course syllabuses, whose downloads were available free of charge. It was possible to interrelate several teaching plans from different institutions, in order to make the list as comprehensive as possible.



### **3.2.3. Step 03: Choose a subject of greater domain**

The student needs to find in this chosen subject menu, or in this list available here, a topic of the syllabus (subject) that they feel they have full mastery of. The student should not sway at this point of choice, in the sense of not being convinced of his mastery of this particular topic.

A very common mistake is that the student decides to choose a subject that he does not master, seeking to understand more about it, this would be what could popularly be called “shooting himself in the foot”. You can't risk it when you're doing the Course Work, without a doubt the most complex research of your entire graduation.

### **3.2.4. Step 04: Search on trusted academic search engines**

A trend in research on the subject to be developed is for students to type directly into the browser's search bar the topic of interest. This is wrong. As there will be no academic filter, everything that the “robots” of that browser find will appear containing the keywords entered there.

Therefore, reliable academic search engines, such as Google Scholar or the Capes Periodicals Portal, for example, need to be used. Both already do the screening to show as a result of this search only academic works, most of them published in journals, that is, academic or scientific journals.

To access Google Scholar, the student can search in their browser “Google Scholar”, this will take them to this page, which is not the same as Google, but a new portal. You can also directly enter Google Scholar through a specific link ( <https://scholar.google.com.br> ). Being on the Google Scholar page, the student must search for the topic (subject) that he chose previously.

To access the Capes Periodicals Portal, the student can search in their browser “Capes Periodicals Portal”, which will take them to this page that gathers the publications in the main academic journals. You can also directly access the Capes Periodicals Portal through a specific link ( <https://periodicos.capes.gov.br> ). Being on the Capes Journal Portal page, the student must search for the topic (subject) that he previously chose in “search subject”. It is worth noting that this portal allows the student, in an “advanced search”, to apply filters, such as limitation of publication period or even other search refinements.

### **3.2.5. Step 05: Locating articles on the chosen subject**

Either on Google Scholar, or on the Capes Periodicals Portal – or similar academic search engines, if the advisor allows it –, the student must locate academic or scientific articles on this subject that he/she chose for having greater domain. It is important to note whether the title of these localized articles gives the direction the student would like to address.

When intending to carry out a literature review article, the student must locate at least five academic or scientific articles that address the researched



subject with the same direction intended by the Bachelor of Law student. It is crucial to check the direction given to the subject to see if it is compatible with what the student intends to address. In practical terms, localized articles need to say exactly what the bachelor's student intends to talk about.

What if the student can't find articles that address exactly what he wants to say? Simple, he should change the subject. You must, therefore, return to the third step, choosing another topic from the syllabus of that same discipline that you also feel you have full mastery of. You can also choose to change discipline or subject area within the law. You just can't go to the sixth step without having located at least five articles covering what he intends to say.

### **3.2.6. Step 06: Checking the academic quality of the articles located**

In general, it is not so simple to determine whether an article is of academic or scientific quality. However, there are some objective elements that can minimize the chances of choosing articles without quality: quantity of authors per article; title of the authors of the article; quality of the journal measured by its indexers or by the Qualis Periodicals seal from Capes.

To simplify this understanding, starting from a minimum rigor, compatible with the law degree level, three basic rules are suggested for verifying the academic quality of the articles located: that each article has a maximum of three authors; that, among the authors of each article, there is at least one of the authors who is a master or doctor; that the academic journal where the article was published has an ISSN.

The first basic rule refers to the number of authors. Articles with one author, two authors, or three authors can be chosen. However, in this method proposed in this work, the use of articles written by four or more authors is not suggested. When there are many authors in the same article, it is difficult for the reader to understand exactly the contribution of each one of them to the manuscript.

The second basic rule refers to the titles of authors. If finishing the law degree is already something complex, imagine being able to enter a master's or doctoral program and complete this training. The more you study, the tendency is that there is more rigor with what is published. Therefore, it is essential that all selected articles have at least one of the authors who holds a master's or doctoral degree.

The third basic rule refers to the quality of the publication vehicle, which directly affects the quality of the articles published there. Capes has a stratification of academic journals in nine levels – A1, A2, A3, A4, B1, B2, B3, B4, C – in which A1 is considered the vehicle with the highest quality and C the one with the least academic rigor. Therefore, it is always best to start with publications that are among the best strata of Qualis Periodicals (Capes).

However, considering that many vehicles for publishing articles of a legal nature are just websites, blogs, institutional pages of courts or other public bodies, it is suggested that all articles chosen have been published in academic or scientific journals that have ISSN, issued by the Ibict that, with minimum criteria, contemplates that publication with this first seal of quality.

In practice, the student must check whether the articles found meet the criteria: up to three authors per article; at least one of the master or doctoral authors in each article; journal that published each article with ISSN.

### **3.2.7. Step 07: Choose at least five articles within the criteria**

The student must choose at least five articles within the criteria explained in the sixth step. You can choose more than five articles, no problem, however, to develop a literature review article, the student will need to start from at least five works. The student who will prepare a monograph will need to select thirty works, which can be twenty articles and ten books.

What if the student cannot locate at least five articles that meet the established criteria? Simple, he should change the subject. Therefore, you need to go back to the third step, choosing another topic from the syllabus of that same discipline that you also feel you have full mastery of. You can also choose to change discipline or subject area within the law. You just cannot go to the eighth step without having located at least five articles covering what he intends to say and that meet the criteria described in the sixth step.

### **3.2.8. Step 08: Reading the abstracts of selected articles**

The student needs to read at least the abstracts of these selected articles, to check if they say what you intend to cover in your work. Often the title of the article seems to indicate a certain direction that the abstract or the article itself agrees with or contradicts. The ideal would be to read the article in its entirety, an action that will be mandatory at a later time. However, at this moment that includes the choice of theme, only a careful reading of the abstracts is enough.

### **3.2.9. Step 09: Delimiting the theme**

Based on the reading of these summaries of the five articles already selected, the student must write his theme, with a minimum of ten and a maximum of twenty words. This thematic phrase that will delimit the theme needs to specify exactly what the student intends to address in their Course Work, giving the reader, already by the title, the direction intended by the student.

All the words that make up the title are included in this count. For example, the title of this article has eleven words "Choosing the topic of course work in the undergraduate course in Law". Note that the contractions "do" and "na", and the prepositions "de" and "em" are also included in this count.

**3.2.10. Step 10: Check the previous steps**

For the proposal of this article to work, the student needs to strictly follow each of the nine previous steps. The student should not, therefore, propose to define the theme of his Course Work without having carefully followed the previous steps. This will be crucial for the delimitation of the theme to occur in a simple and objective way, facilitating the other stages of the production process of this complex work required to obtain the degree of Bachelor of Laws.

**3.3. List of subjects and contents by area of law**

As advisees always report some difficulty in locating certain teaching plans (menu) of subjects taken in previous semesters, this article proposes the following list of subjects and contents separated by areas of Law, based on the study of course syllabi, located with free download on the internet.

This list of subjects and contents by area of law can serve as an inspiration for choosing the theme of your course work. It is always important to emphasize that, as the Law changes in an uninterrupted way, that is, all the time, the reader of this manuscript, please, should disregard some subject that is no longer valid. The thematic areas will follow the subdivision of this article, however, to facilitate, the subjects or contents will have sequential and continuous numbering.

**3.3.1. Legal Anthropology**

01. Introduction to Anthropology and Legal Anthropology.
02. The Genesis of Law in Agrarian Societies.
03. Bronislaw Malinowski and the Contribution to the Teaching of Legal Anthropology.
04. Dispute Settlement Modes in the Agrapha Society.
05. Legal Systems Compared in the Light of Legal Anthropology.
06. Law in Complex Societies: Law and Technology.
07. Problems and Challenges of Legal Anthropology in Brazil.
08. Minority Rights: Indigenous and Quilombola Rights.
09. Education of Ethnic-Racial Relations (Law 11.645/2008 and Res. CP /CNE 1/2004).

**3.3.2. political science**

10. The origin of political reflection.
11. Introduction to Political Science: the concept of politics.
12. Theories of the origin of the State.
13. Concepts of territory, people, government, sovereignty, political parties, electoral system.
14. Classical political thought: Plato, Aristotle and Polybius .
15. Modern political thought: Machiavelli, Bodin , Hobbes, Vico, Montesquieu , Hegel and Marx.

16. Introduction to the Theory of the State.
17. Society, social classes, social change and the State.
18. Relationship between citizen and State - a matter of Fundamental Rights.
19. Institutions and political processes.
20. Public policies for the insertion of quotas related to Afro-descendants and indigenous people.
21. Themes of contemporary Brazilian Political Science: sovereignty and globalization.
22. Historical and cultural elements and sustainable development of Brazilian society.

### **3.3.3. Administrative law**

23. State.
24. Public Administration.
25. Constitutional Foundations of Administration.
26. Administrative Legal Regime.
27. Public Administrative Principles.
28. Special quotas in public tenders.
29. Decongestion.
30. Public Body.
31. Indirect Public Administration.
32. Administrative Act.
33. Bidding and sustainability.
34. Administrative Agreement.
35. Administrative Power.
36. Constitutional principles and guarantees of the Administrative Process.
37. Administrative Process.
38. Constitutional Regime for Public Agents.
39. Extra-contractual Civil Liability of the State.
40. Public Assets.
41. State Intervention in Property and the Economic Domain.
42. Control of Public Administration.
43. Public Services.

### **3.3.4. Environmental Law**

44. Constitutional foundations of Environmental Law.
45. Fundamental Right to Environmental Quality.
46. Notions, concept, relations of Environmental Law with other branches of Law.
47. Environmental Education Policies (Law 97956/1999 and Dec. 4281/2002).
48. Environmental education and socio-environmental awareness.
49. Environmental zoning.

50. Demarcation of indigenous reserves.
51. Civil liability and damage repair.
52. Criminal and administrative sanctions derived from conduct and activities that are harmful to the environment.
53. Pollution.
54. Protection of environmental heritage.
55. Environmental Crimes Law.
56. Systemic view of Environmental Law.

### **3.3.5. Notary and Registry Law**

57. Notarial and Registry Law: Concept and Legal Nature.
58. Introduction to the Notary and Registry System.
59. Civil Registry of Natural Persons.
60. Registration of Titles and Documents.
61. Real Estate Registration.
62. Notary Office.
63. Protest Notary.

### **3.3.6. Civil Law - Obligations**

64. Introduction to the law of obligations.
65. Structure of the Obligation.
66. Sources of Obligations.
67. Types of Obligations.
68. Transfer of Obligations.
69. Performance and Extinction of Obligations.
70. Default of Obligations.

### **3.3.7. Civil Law - General Theory of Contracts**

71. General Theory of Contracts.
72. The social function of contracts.
73. Formation of contracts.
74. Classification of contracts.
75. Redibitory Vices.
76. Eviction.
77. Termination of contract.
78. Contractual liability.
79. Civil Liability.
80. Studies on civil liability for environmental damage.
81. The constitutional guarantee of ample compensation for damages to the human person.
82. General notions of civil liability.
83. Types of Liability.

84. Assumptions and Elements of Civil Liability.

85. Exclusions of Liability.

### 3.3.8. Civil Law - Civil and Commercial Contracts

86. Contracts in kind: Purchase and sale, exchange or exchange, promise of purchase and sale.

87. Estimation contract .

88. Donation.

89. Lease: of urban, residential and non-residential things and buildings.

90. Fundamental right to decent housing.

91. Bail.

92. Loan: Lending and mutual.

93. Provision of services.

94. Contract.

95. Voluntary and required deposit.

96. Transport.

97. Mandate.

98. Commission.

99. Agency and Distribution.

100. Brokerage.

101. Insurance.

102. Game and bet.

103. Transaction.

104. Commitment.

105. Constitution of Income.

106. Unilateral Acts: promise of reward.

107. Unilateral Acts: business management.

108. Unilateral Acts: undue payment.

109. Unilateral Acts: illicit enrichment.

### 3.3.9. Civil Law - Possession and Property

110. Real rights and personal rights.

111. Ownership.

112. Effects of Possession.

113. Limitation of property rights and environmental protection.

114. Property and its constitutionalization.

115. The social function of property and the right to housing.

116. Fundamental right to minimum equity and the threshold theory. 117.

Condominium.

118. Resolvable property.

119. Principles of Urban Law.

120. Neighborhood Law.



- 121. Real rights over other people's things.
- 122. Of enjoyment.
- 123. Of the acquisition.
- 124. Of the guarantee.
- 125. Literary, scientific and artistic property.

### **3.3.10. Civil Law - Family**

- 126. History and Evolution of Family Law.
- 127. The Family in the Federal Constitution.
- 128. Marriage: historical evolution and theories about marriage.
- 129. Study of matrimonial legal regimes and conjugal society.
- 130. Dissolution of society and the conjugal bond.
- 131. Stable union: constitution and dissolution.
- 132. Kinship relationships; natural kinship and adoption.
- 133. Guard and Food.
- 134. Property law.
- 135. Benefits of the family.
- 136. Guardianship and Guardianship.
- 136. The Fundamental Rights of the Family, Children, Adolescents, Young People and the Elderly.

### **3.3.11. Civil Law - Succession**

- 137. History and Evolution of Succession Law.
- 138. The right to inheritance as a constitutional guarantee.
- 139. Of the inheritance and its administration.
- 140. Hereditary vocation.
- 141. Acceptance and Waiver of Inheritance.
- 142. Of those excluded from the succession.
- 143. Laying inheritance.
- 144. Of the inheritance petition.
- 145. Of the necessary heirs.
- 146. Right of Representation.
- 147. Of the will in general.
- 148. The ability to test.
- 149. Of the ordinary and special forms of will.
- 150. Of the codicil.
- 151. Legacies of the right to add.
- 152. Substitutions.
- 153. Of disinheritance.
- 154. Of the inventory.
- 155. Of sharing.
- 156. Of the collation.

157.Of evasion.

### **3.3.12. Constitutional right**

158. Brazilian Constitutions.

159. General Theory of Natural, Human and Fundamental Rights.

160. Constitution and International Law.

161. Equality, affirmative action and quota system.

162. Environment and sustainable development.

163. Trade unionism.

164. Nationality.

165. Federative System and Federation.

166. Notions of Public Administration.

167. The Legislative Power.

168. The Legislative Process.

169. The Executive Branch.

170. The Judiciary.

171. Constitutionality control notions.

172. The constitutionality of the racial quota system: a comparative study.

173. Sustainable development and the economic order.

### **3.3.13. Constitutional Procedural Law**

174. Constitutional Theory.

175. Theory of Fundamental Rights.

176. The Federal Constitution and the process.

177. Procedural constitutional law and constitutional procedural law.

178. The principles of full defense, contradictory, right of action.

179. Constitutional Remedies.

180. Jurisdictional control of constitutionality.

181. The defense of citizenship.

### **3.3.14. General and Professional Ethics in Law**

182. Morals.

184. Ethics.

185. Legal Axiology.

186. Social representations and their integration with legal dichology and deontology in the professional practice of law.

187. Fundamental Right of Access to Justice.

188. The lawyer's constitutional role and the fundamental right to full defense.

189. Institutional function of advocacy.

190. Role of the OAB in defending the rights of minorities and protecting the environment.

191. Double characteristics of law (public and private).

192. OAB's Code of Ethics and Discipline, Lawyer's and OAB's Statute and its Regulation.

193. Ethics of the legal professions essential to the functioning of the Democratic State of Law: Judiciary, Public Ministry, Police Delegates and Public Defenders.

### **3.3.15. General and Legal Philosophy**

194. Philosophy as a form of knowledge - Importance and Birth of Philosophy.

195. Philosophy and Philosophy of Law.

196. Philosophy of Law and Science of Law.

197. Jus-philosophical topics.

198. Natural Law and Positive Law.

199. Contributions of the Greeks and Romans to Philosophy and Philosophy of Law.

200. Justice.

201. Morals.

202. The ethical question.

203. Philosophical Foundations of Equality and Liberty.

204. Descartes, Kant, the French Revolution.

205. Human Rights and the racial question.

206. Human survival and environmental protection as an ethical issue.

### **3.3.16. History of Law**

207. Introduction to the History of Law.

208. Law in Eastern Antiquity.

209. The Hebrew Law.

210. Law in Ancient India.

211. Law in Ancient Greece.

212. Roman Law.

213. History of Brazilian Law: Law in Colonial Brazil, Kingdom and Empire - up to the Abolitionist Laws.

214. Teaching Afro-Brazilian and Indigenous History and Culture (Law 11.645/2008 and Res. CP /CNE 1/2004).

### **3.3.17. Introduction to the study of law**

215. Notions of Law.

216. Sources of Law.

217. Theory of the Legal System and Legal Standard.

218. Interpretation of Legal Standards Objective and Subjective Law.

219. Legal Fact.

220. Legal Relationship.

221. Notions of History of Law.

- 222. Notions of Law.
- 223. Theory of the Legal System and Legal Standard.
- 224. Objective and Subjective Law.
- 225. Legal Fact.
- 226. Legal Relationship.
- 227. The human being as a subject of law.
- 228. The evolution of the Rule of Law in the protection of Fundamental Rights.
- 229. Fundamental Rights to Protect the Environment.
- 230. History of Fundamental Rights in Brazilian Constitutions.
- 231. Abolitionist Laws in the Imperial Era.
- 232. Access to justice through consensual means.

### **3.3.18. Juridical Psychology**

- 233. Definition and historical context of Legal Psychology.
- 234. Interdisciplinary Aspects of Human Development Science.
- 235. Knowledge, concepts and methods of Psychological Sciences applied to practices and Legal Sciences.
- 236. Interdisciplinary challenges and possibilities.
- 237. Psychology and Human Rights.
- 238. Psychological aspects of conflict.

### **3.3.19. General and Legal Sociology**

- 239. Historical context of the emergence and evolution of Sociology.
- 240. Fundamental concepts and theoretical matrices.
- 241. Sociology as a science.
- 242. The object of study of Sociology.
- 243. Social transformation and contemporary issues in Sociology.
- 244. Control and Social Change.
- 245. Changes in the world of work, neoliberalism and globalization.
- 246. Social movements, citizenship and human rights.
- 247. Structure and social organization.
- 248. Environmental protection and social organization.
- 249. Social Stratification.
- 250. Social Institutions.
- 251. Multiculturalism: cultural diversity and ethnic and racial inclusion in Brazil.
- 252. Afro-Brazilian and African History and Culture.
- 253. Culture: Indigenous and Quilombola.
- 254. Quilombola Law: Resistance and Legal Autonomy.
- 255. Education in Human Rights.
- 256. Respect for ethnic minorities and social inclusion of minority groups.
- 257. Introduction of systems of compensatory quotas for minority groups.

258. Education of Ethnic-Racial Relations in the formation of Brazilian nationality.

259. Discussion on environmental education policies.

### **3.3.20. Consensual Methods of Conflict Resolution**

260. Access to Justice.

261. Historical evolution.

262. Theory of Conflict.

263. Conflict Resolution.

264. Conciliation, mediation, arbitration and court proceedings.

265. Multiport system.

266. Characteristics, phases, techniques of jurisdictional equivalents.

267. Community Mediation.

268. Restorative Justice.

269. Constellation.

### **3.3.21. Children's and Adolescents' Rights**

270. Evolution and Principles of the Rights of Children and Adolescents.

271. Integral protection system.

272. Fundamental rights and the Child and Adolescent Statute.

273. Child and adolescent care policy in Brazil.

274. Infringing acts.

275. Socio-educational measures.

276. Justice of childhood and youth.

277. Procedures.

278. Crimes and administrative infractions.

279. Education in Human Rights.

280. Violence against children and adolescents ( Re.CP /CNE 1/2012).

281. Adoption.

### **3.3.22. Consumer Law**

282. Consumer Constitutional Protection.

283. Consumer and Consumer Code.

284. National Consumer Relations Policy.

285. Basic consumer rights.

286. Business Practices.

287. Contractual protection and administrative sanctions.

288. Criminal Offenses.

### **3.3.23. Labor Law**

289. Constitutional foundations of Labor Law.

290. Labor Law in the Universal Declaration of Human and Citizen Rights.

291. General notions of Labor Law.
292. Principles.
293. Sources.
294. Employment relationship.
295. Employment contract.
296. Remuneration and salary.
297. Workday.
298. Paid breaks.
299. Termination of the employment contract.
300. Current Labor Law topics.
301. Provisional employment guarantee hypotheses.
302. FGTS.
303. Occupational Health and Safety – insalubrity and dangerousness.
304. Special Work Regimes – domestic, rural, bank, teacher work and protection of the work of women and minors.
305. Accident at work.
306. Employer's civil liability.
307. Prescription and decadence.
308. Collective Labor Law.
309. Collective Labor Instruments.
310. Collective Labor Disputes.
311. Conventions of the International Labor Organization ratified by Brazil.

#### **3.3.24. Labor Procedural Law**

312. Fundamentals of Procedural Labor Law.
313. Concept.
314. History.
315. Characteristics.
316. Prior Conciliation Commissions, Labor Justice.
317. Organization.
318. Competence.
319. Procedural Acts, Terms and Deadlines.
320. Nullities.
321. Of the Parties.
322. Representation and Third Parties.
323. Labor Action.
324. Individual Agreement.
325. Collective Bargaining.
326. Resources.
327. Execution.
328. Perspectives of Procedural Labor Law.
329. Special Procedures.



### **3.3.25. Electoral and Party Law**

- 330. Political Rights of the Citizen.
- 331. Political Rights as First Generation Fundamental Rights.
- 332. Constitutional rights of the voter.
- 333. Electoral Judiciary.
- 334. Superior Electoral Court.
- 335. Material Electoral Law.
- 336. Vote.
- 337. Right.
- 338. Obligation and faculty.
- 339. Political parties and their evolution.
- 340. Electoral Process.

### **3.3.26. business law**

- 341. Concept.
- 342. History.
- 343. Acts of Commerce x Theory of the Company.
- 344. The constitutional economic order.
- 345. The company's social function and the principle of its conservation.
- 346. Applicability of fundamental rights to corporate legal entities.
- 347. Entrepreneur: types of entrepreneur: Individual and social entrepreneur, qualities, prerogatives and obligations.
- 348. Company and Entrepreneur.
- 349. Register of Commerce.
- 350. Business Name.
- 351. Commercial Bookkeeping.
- 352. Industrial Property.
- 353. Personified and non-personified companies (each species per se).
- 354. Microenterprise (LC 123/2006).
- 355. Theories of Extraordinary Liabilities (Disregard of Legal Personality, etc.).
- 356. Criminal and civil liability of companies for damage to the environment.
- 357. Corporate social responsibility.
- 358. Corporate Law – Credit Securities Noção de Crédito.
- 359. Elements of Credit.
- 360. The right to credit as a legal and economic instrument for the realization of fundamental rights.
- 361. General Theory of Securities.
- 362. Credit instruments as facilitators of the Circulation of Wealth and the
- 363. Economic Order.
- 364. Concept of credit instruments.
- 365. Legal Nature and Economic Function of Credit Securities.

366. Attributes of Credit Securities: Cartularity , Literality, Autonomy, Abstraction, Independence and Formalism.
367. Original relationship and extracartular relationships .
368. The new definitions of the Civil Code.
369. Classification in terms of issuance and circulation.
370. Bill of Exchange.
371. Legal Nature and Characteristics.
372. Promissory Note.
373. Legal Nature.
374. Characteristics.
375. Duplicates.
376. Legal Nature.
377. Checks Features.
378. Legal Nature and Characteristics.
379. All titles presented: validity requirements.
380. Exchange Statements (Withdrawal, Acceptance, Endorsement, Aval).
381. Maturity and Payment.
382. Protest.
383. Socio-environmental responsibility and carbon emission reduction.
384. Social function of the company and its conservation.
385. Business crisis.
386. Bankruptcy Law Fundamentals.
387. Judicial Reorganization.
388. Extrajudicial Reorganization.
389. Bankruptcy.
390. Bankruptcy crimes.
391. The new Law on Recoveries and Bankruptcy (Law No. 11,101, of February 9, 2005).

### **3.3.27. International right**

392. Purpose of International Law, Sources and Theories.
393. Rules of International Law.
394. Application of Foreign Law.
395. Immigration Policies.
396. International Trade Law.
397. Development combined with environmental sustainability.
398. The international society.
399. International persons: state, interstate, non-state.
400. Environmental Education Policies (Law 97956/1999 and Dec. 4281/2002).
401. The Role of International Environmental Law and Issues Related to the Climate Crisis.
402. Public Policies at the United Nations.

403. State bodies in international relations.

404. International disputes.

405. Sanctions.

### **3.3.28. Criminal Law - general part**

406. Fundamental rights and guarantees relating to Criminal Law.

407. Principles of Criminal Law.

408. Insertion of criminal liability of legal entities in environmental crimes and ethnic-racial relations in contemporary criminal law.

409. Sources of Criminal Law.

410. Interpretation of Criminal Laws.

411. Legality and Priority of the Criminal Law.

412. Application of Criminal Law in Time.

413. Time and place of the crime.

414. Application of Criminal Law in Space.

415. Effectiveness of Foreign Judgment.

416. Counting the term and fractions of the penalty.

417. Apparent conflict of rules.

418. Theory of crime.

419. Typicality.

420. Subjective elements of the crime.

421. Dolo and guilt.

422. Crime qualified by the result.

423. Unlawfulness (unlawful).

424. Guilt.

425. Consummated and attempted crime.

426. Type error and prohibition error.

427. Contest of people.

428. Introduction and theory of negative general prevention.

429. Theory of retribution, special prevention and general positive prevention.

430. Contemporary theories of punishment and the criminality of legal entities in environmental crimes.

431. Deprivation of liberty.

432. Fundamental right to liberty.

433. Penalties Restrictive of Rights.

434. Fine penalties.

435. Application of the penalty.

436. Aggravating and mitigating factors.

437. Causes of increase and decrease.

438. Contest of crimes.

439. Conditional suspension of the sentence.

440. Conditional Release.

- 441.Effects of conviction and rehabilitation.
- 442.Security measures.
- 443.Extinction of punishment.
- 444.Prescription.

### **3.3.29. Criminal Law – special part**

- 445.Crimes against the person.
- 446. Protection of racial diversity.
- 447.Crimes against property.
- 448.Crimes against intangible property.
- 449.Crimes against the organization of work.
- 450. Crimes against religious sentiment and respect for the dead.
- 451. Related special criminal legislation.
- 452.Environmental crimes.
- 453.Crimes of racism.
- 454. Crimes against women.
- 455.Crimes against sexual dignity.
- 456.Fundamental Right to Sexual Freedom.
- 457. Crimes against the family.
- 458.Fundamental right to the family.
- 459.Crimes against public safety.
- 460.Crimes against public peace.
- 461. Crimes against public faith.
- 462.Crimes against the public administration in general.

### **3.3.30. Criminal Procedural Law**

- 463. General Theory of Criminal Procedural Law.
- 464.Police Inquiry.
- 465.Procedural principles.
- 466. Defendant's Fundamental Rights.
- 467. Public, private and subsidiary private criminal action.
- 468.Jurisdiction and jurisdiction.
- 469. Attributions of the Public Ministry in the protection of the environment.
- 470. Attributions of the Public Ministry in the protection of minorities.
- 471. Subjects of the process.
- 472. General Theory of Evidence.
- 473.Processes in kind: common process.
- 474.Processes in kind: special processes.
- 475.Processes in kind: process within the jurisdiction of the courts.
- 476.Procedures in special law: environmental (Law 9,605/98).
- 477.Procedures in special law: anti-drugs (Law 11,343/06).
- 478.Procedures in special law: Maria da Penha (Law 11,340/06).

- 479.Sentence.
- 480.Nullities and Resources.
- 481.Habeas Corpus.
- 482. Criminal Enforcement Law.
- 483.Military Judicial Organization.
- 484. Provisional detention.
- 485.Procedural sanctions.
- 486. Issues and Incident Processes.

### **3.3.31. Social Security Law**

- 487. Human dignity and Social Security Law.
- 488.Study of Social Security Law: its evolution.
- 489. Study of Social Security Law: denomination.
- 490.Study of Social Security Law: autonomy.
- 491.Study of Social Security Law: division and sources.
- 492.Social Security Legislation.
- 493.Principles of Social Security.
- 494.Social Security funding sources.
- 495. Insured.
- 496. Social Security, Social Security benefits and benefits.
- 497. Accident at work.
- 498. Private pension.

### **3.3.32. Civil Procedural Law**

- 499. Subjects of the process: Judge and his assistants.
- 500. Prosecutor's Office.
- 501. Public Defender's Office.
- 502.Procedural acts.
- 503. Provisional guardianship.
- 504. Formation, suspension and termination of the process.
- 505. Acknowledgment Process (Common Procedure): Initial Petition.
- 506. Defendant's response.
- 507. By default.
- 508.Preliminary measures.
- 509. Judgment according to the state of the case.
- 510. Instruction and Trial Hearing.
- 511. Compliance with Judgment and Enforcement Process.
- 512.General Notions.
- 513.Principles.
- 514.Legitimacy.
- 515.Competent Court.
- 516. Executive Title.

- 517.Espécies: obligation to do and injunctive relief, deliver certain and uncertain things, payment of an amount.
- 518.Execution against the Public Treasury.
- 519.Execution of Food.
- 520.Means of Defense.
- 521.Sentence and res judicata.
- 522.Proceedings in the Courts.
- 523. Resources.
- 524. Theory of proof.
- 525. Special Litigation and Voluntary Jurisdiction Procedures of the NCP.
- 526.Writ of mandamus.
- 527.Habeas data.
- 528. Public civil action.
- 529. Tax Enforcement.
- 530.Special Civil Courts.
- 531. Special Public Treasury Courts.
- 532.Federal Special Courts.

### **3.3.33. Tax law**

- 533.The financial activity of the State: the tribute.
- 534.The financial activity of the State: the financing of the State.
- 535. The State's financial activity: the definition of tax species.
- 536. The legal-tax relationship: the tax obligation.
- 537.The tax credit: the release.
- 538. The tax credit: decadence.
- 539.The tax credit: the statute of limitations in tax law.
- 540. The tax credit: extinguishing, suspensive and excluding effects.
- 541.The tax credit: guarantees and privileges.
- 542.Tax legislation: sources of tax law.
- 543.Tax legislation: effective.
- 544.Tax legislation: application.
- 545.Tax legislation: interpretation.
- 546.Tax legislation: integration of tax legislation.
- 547. Constitutional limitations on the power to tax: concepts.
- 548. Constitutional limitations on the power to tax: political bases.
- 549. Constitutional limitations on the power to tax: the political principle of consent.
- 550. Constitutional limitations on the power to tax: the tax constitutional principles.
- 551.Fundamental Taxpayer Rights.
- 552.Tax jurisdiction: the concept of tax jurisdiction.
- 553.Tax competence: the bases of Brazilian fiscal federalism.



- 554. Tax jurisdiction: species of tax jurisdiction.
- 555. Division of Tax Revenue.
- 556. The tax administration.
- 557. The National Tax System: concept.
- 558. The National Tax System: structure.
- 559. The National Tax System: taxable bases.
- 560. The National Tax System: tax jurisdiction.
- 561. The National Tax System: taxes within the competence of the Union.
- 562. The National Tax System: taxes within the jurisdiction of the States.
- 563. The National Tax System: the taxes within the competence of the Federal District.
- 564. The National Tax System: taxes within the jurisdiction of municipalities.
- 565. Tax incentives for the protection of the environment.
- 566. Tax Proceedings: the tax authorities' actions.
- 567. Tax Process: the taxpayer's actions.
- 568. Tax Illicit: crimes against the tax order.

### **3.3.34. Economics applied to law**

- 569. Concepts of Economics.
- 570. Microeconomic models.
- 571. Macroeconomic Models.
- 572. Markets and Prices.
- 573. Demand.
- 574. Offer.
- 575. Theory of the firm.
- 576. Market Structures.
- 577. Macroeconomic Policy Goals.
- 578. Role of Government.
- 579. Economic factors for reducing ethnic-racial discrimination.
- 580. Interdisciplinary aspects of Economics with Business Law.
- 581. Interdisciplinary aspects of Economics with Financial Law.
- 582. Interdisciplinary Aspects of Economics with Consumer Law.
- 583. Human Development Index - public education policies.
- 584. Human Development Index - public housing policies.
- 585. Human Development Index - public sanitation policies.
- 586. Human Development Index - public health policies.
- 587. Human Development Index - public security policies.
- 588. Human Development Index - public defense policies.
- 589. Human Development Index - public policies for sustainable development.

### **3.3.35. Constitutional Theory**

- 590. Theory of Constitutional Norm.

- 591. Constitutional Interpretation.
- 592. Principles and Methods.
- 593. Concept of Constitution.
- 594. Supremacy of the Constitution.
- 595. Constituent Power.

### **3.3.36. General Theory of Law**

- 596. Theoretical presuppositions of Contemporary Law.
- 597. The General Theory of Law as the foundation of legal-decisional reasoning.
- 598. Cognitive activity and judicial decision: rational limits of law enforcement.
- 599. The importance of the general theory of law for legal dogmatics.
- 600. A new theoretical view of the legal system: the fragmentary structure of the Legal Standard.
- 601. Legal Standard and Judicial Decision.

### **3.3.37. General theory of the process.**

- 602. General Theory of the Process.
- 603. Procedural rule.
- 604. Constitutional principles and guarantees of the process.
- 605. The structural trilogy: jurisdiction, action and process.
- 606. Jurisdiction and jurisdiction.
- 607. Theory of action.
- 608. The process and the procedure.
- 609. The procedural legal relationship.
- 610. Subjects of the process: Parties and their attorneys.
- 611. Joinder.
- 612. Third party intervention.

### **3.3.38. Legal Practice**

- 613. Jurisdiction and Jurisdiction.
- 614. Organization of the Judiciary.
- 615. Procedural subjects.
- 616. The role of legal practitioners and the law of professional practice.
- 617. Analysis and comments on different types of procedures.
- 618. Judicial mandate .
- 619. Procedural Acts.
- 620. Procedural Terms.
- 621. Procedural Deadlines;
- 622. Preparation of procedural documents: postulatory phase (initial petitions and defenses).
- 623. Preparation of procedural documents: instructional phase.

- 624. Preparation of procedural documents: appeal phase.
- 625. Summated hearings.
- 626. Jurisprudential and doctrinal research.
- 627. Study of closed records.
- 628. Guided Visits.
- 629. Conciliation.
- 630. Trading.
- 631. Mediation.
- 632. Arbitration.
- 634. Assistance to the needy population
- 635. Identification of legal solutions for the specific case.
- 636. Identification of documents required for each type of action.
- 637. Preparation of procedural documents in the civil area.
- 638. Preparation of procedural documents in the criminal area.
- 639. Preparation of procedural documents in the labor area.
- 640. Distribution of the initial petition.
- 641. Protocol of petitions in the courts.
- 642. Monitoring of Hearings.
- 643. Follow-up of assisted processes.

### **3.3.39. Cyber Law**

- 644. Introduction to Digital Law.
- 645. The Law of Electronic Process.
- 646. Consumer Law in the Electronic Environment.
- 647. Providers' civil liability.
- 648. Electronic Monitoring.
- 649. Crimes Against Honor.
- 650. Electronic Embezzlement.
- 651. Electronic Contracts.
- 652. The Probable Value of Evidence Obtained in the Electronic Medium.
- 653. Digital Law and Community Law.
- 654. Cyber Law and Human Rights Education: Right to Intimacy and Fundamental Human Rights ( Re.CP /CNE 1/2012).

### **3.3.40. Human rights**

- 655. Historical Aspects of Human Rights.
- 656. Religious, Philosophical and Scientific Basis of Human Rights.
- 657. Human Dignity and Vulnerability.
- 658. Sources of Human Rights.
- 659. Characteristics and Dimensions of Human Rights.
- 660. The United Nations.
- 661. Declarations and International Treaties on Human Rights.

662. International responsibility for human rights violations.
663. Human Rights Protection Systems.
664. Human Rights and the Brazilian legal system.
665. Protection of the various vulnerable groups.
666. The protection of Afro-Brazilian and indigenous culture in the evolution of Human Rights (Law 11.645/2008 and Res.CP /CNE 1/2004).
667. Human Rights Bodies in Brazil.
668. Current issues and problems in the application of Human Rights.
669. Human Rights, Democracy and Citizenship.
670. Education and Culture in Human Rights ( Res.CP /CNE 1/2012).

#### 4. Final Considerations

This article started from the difficulty – faced by undergraduate law students – in choosing the theme of their Course Work, judging this thematic delimitation process more complex than it actually is. Many times, some students bring many ideas, not knowing which one to choose, others already make the opposite complaint: they say they don't even know where to start when it comes to defining a subject they could be interested in.

As a strategy to facilitate this process, this work suggested ten steps so that the delimitation of the theme occurs in a simple and objective way, reducing the degree of difficulty usually faced. Obviously, it is not the only way proposed here, however, it only aims to be another proposal of a didactic-methodological nature for students who face this difficulty.

In addition to the ten steps, this manuscript listed six hundred and seventy subjects or contents subdivided into forty areas of the undergraduate course in Law. This is because there are constant reports of advisees with difficulties in locating syllabuses or teaching plans, sometimes being charged by some private educational institutions.

It would be very interesting if this article could arouse in other faculty advisors the initiative to share, through publications, their experiences and methods that have simplified the choice of subject of their Bachelor of Law students, providing an opportunity for a constant exchange of experiences, so enriching for all faculty developing guidance at the undergraduate level.

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### ABOUT THE INTERDISCIPLINARITY HOW CONCEPT

#### *SOBRE A INTERDISCIPLINARIDADE COMO CONCEITO*

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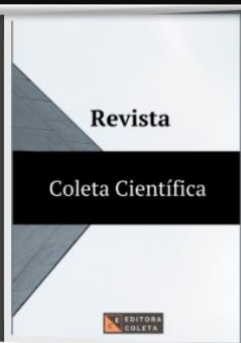
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## ABSTRACT

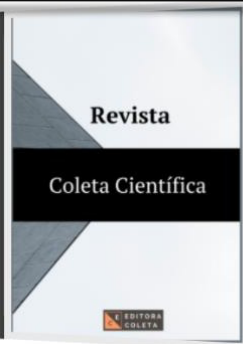
*In today's culture, interdisciplinarity is seen as a necessary prerequisite for teaching and research. The concept of interdisciplinarity has recently gained traction in policy, practice, teaching and research circles. While there is still some skepticism about the concept, it has recently taken on moral connotations with explanations of why interdisciplinarity is desirable and inevitable. As a result, both the Academy of Higher Education and the Research Councils support interdisciplinarity in both teaching and research. Based solely on an exhaustive review of the literature, this article provides an outline of the idea, its teaching implications, and its meaning for contemporary policy. The idea of interdisciplinarity, on the other hand, has been exaggerated to the point of trivialization. The topic is timely, interesting and little known in practice, so it needs to be considered in depth. Transformations, deconstructions and reconstructions of what is typically presented are necessary to adhere to an interdisciplinary project. The study of interdisciplinarity is still in its infancy, not offering theoretical and methodological security for those who feel attracted to develop a work of this magnitude.*

**Keywords:** Knowledge. Interdisciplinarity. Disciplinary. human sciences

## RESUMO

*Na cultura atual, a interdisciplinaridade é vista como um pré-requisito necessário para o ensino e a pesquisa. O conceito de interdisciplinaridade recentemente adquiriu força nos círculos de política, prática, ensino e pesquisa. Embora ainda haja algum ceticismo sobre o conceito, ela recentemente assumiu conotações morais com explicações de por que a interdisciplinaridade é desejável e inevitável. Como resultado, tanto a Academia de Ensino Superior quanto os Conselhos de Pesquisa que apoiam a interdisciplinaridade tanto no ensino quanto na pesquisa. Com base unicamente em uma análise exaustiva da literatura, este artigo fornece um esboço da ideia, suas implicações de ensino e seu significado para as políticas contemporâneas. A ideia de interdisciplinaridade, por outro lado, foi exagerada ao ponto da banalização. O tópico é oportuno, interessante e pouco conhecido na prática, portanto, precisa ser considerado em profundidade. Transformações, desconstruções e reconstruções do que é tipicamente apresentado são necessárias para aderir a um projeto interdisciplinar. O estudo da interdisciplinaridade ainda é incipiente, não oferecendo segurança teórica e metodológica para quem se sente atraído a desenvolver um trabalho dessa magnitude.*

**Palavras-chave:** Conhecimento. Interdisciplinaridade. Disciplinaridade. Ciências Humanas



## **1. INTRODUCTION**

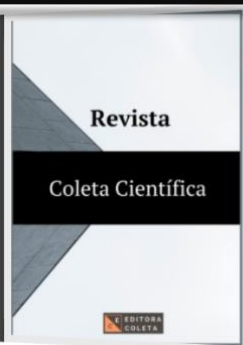
The interdisciplinarity It's often referred how a new idea education, but it has been discussed since the mid-twentieth century. The theme continues in discussion, due to the challenges practical what face, and still no It's much used in schools and higher education institutions. After all, the concept of bridge disciplines, up until then studied in isolation, have potential for cause changes significant in the teaching-learning process. Although these changes may generate fear in between country, teachers and coordinators in centers educational, they also can be a powerful ally in the development of critical thinking and more informed citizens. We will address definitions, objectives, methods and benefits gives interdisciplinarity as well with your paper at the University education.

The main writers who commit to the study of this theme, both from a theoretical and an applied point of view, from a broad lifting bibliographic what subsidized This one article about interdisciplinarity. The subject is thought-provoking, but it has neither a clear meaning nor a "philosophy" of interdisciplinarity. There is no consensus on its principles, and every attempt to describing it comes across a multitude of approaches to the problem. It is a topic what have most hypotheses of what implemented in form effective, and up until same was criticized by your application.

In this sense, this article is classified as qualitative research and bibliographic. This one article features a path methodological based in assumption in search bibliographic and methodology qualitative, what imply in a organized set of processes for seeking answers to a question with attention to the object of study. THE in this respect, O article is structured:

This article aims at theoretical work on the descriptors "interdisciplinarity" and "disciplinary" with O objective in draw O development historic of those concepts. Books and book chapters, as well as academic and scientific articles, formed the basis of this theoretical framework, allowing us to contextualize the two first themes of this article.

The state of knowledge, also known as the production survey academic and scientific, and the literature review, which led the authors to support the historical contextualization of the descriptors "interdisciplinarity" and "disciplinarity". The state of knowledge is the recognition, registration and classification that leads to an reflection and synthesis about The production scientific in an determined area to the long of time, including articles, theses, dissertations and books about a Subject or Subject specialized (SAINTS; MOROSINI, 2021). At the state of knowledge, was accomplished gives Following search.



Regarding the descriptor “interdisciplinarity”, in data collection in the search for fulfilled at base of Portal in periodicals gives capes (CAPES, 2021), were found 1 book and 292 articles in both Scopus (Elsevier) and SciELO databases (CrossRef), from 2000 to 2021. Seven scientific productions were selected, being articles what if concatenate with the idea in bring a contextualization gives interdisciplinarity, by the following authors: (LEIS, 2005); (CHETTIPARAMB, 2007); (KLEIN, 2000); (MENAND, 2001); (ROSAMOND, 2006).

As for the descriptor "disciplinarity", in the data collection in the search carried out at the base of the Capes Periodicals Portal (CAPES, 2021), five productions scientific, being articles what if concatenate with the idea in bring a contextualization historical give acting teacher, From following authors: (HILTON JAPIAS, 1976); (HANSON, 1999); (KLEIN, 1996); (KLEIN 1996; FRANK 1988).

A revision gives literature, so much at perspective from authors cited and addressed theoretical framework, as well as a bibliographic analysis based on the of state of knowledge, guide This one article. It is revision literary included writers or researchers what examined you following themes: formation in teachers, teaching performance and teacher-researcher, in order to contribute to the establishment in a referential theoretical and theoretical foundation.

to Severino (2007, for. 122):

Bibliographic research is one that is developed from the available record, due in researches previous, in documents printed, how books, articles, theses, among others. use of data or of theoretical categories already worked per others researchers and properly registered.

Second Gonçalves (2020, p.98), at tools used in a revision in literature include books with ISBNs and articles in magazines of ISSN writings per masters or doctors. Such efforts begin with the search for keywords (descriptors) that compose the theme in scientific articles search databases, such as the Google Scholar Those engines in search in articles academics or scientific work how indexers, making a filter what only finds periodicals scientificand your publications about a certain theme.

### **1.1. INTERDISCIPLINARITY**

Debates about interdisciplinarity occupied a central place in the culture current, especially in the institutions in teaching, although in Many teachers believe in what It's a concept relatively new. Due The fragmentation of knowledge and to the recognition gives need gives Communication in between at many different subjects at understanding of world and of to be human in today, have there has been a great impulse for encourage the interdisciplinarity.

Second demo (2001), The production of knowledge it is centered at singularity of each area of knowledge as a distinct field that needs of research and deepening for their formation, but this process occurs in parallel with the interaction of several areas, as each is a distinct part of a movement in interaction to be continued what form the totality of knowledge. THE



dimension of the knowledge unit cannot be compromised by the study of a theme specific.

Hilton Japiass (1976) wrote one of the first works on the subject in the Brazil, the leave in your thesis defended at France, in what intended address the interdisciplinarity how part gives answer the fragmentation of knowledge, problem brought fur positivism. This fact It's confirmed, second O author, per areas specialized what progressively separate your fields of knowledge, resulting in information that only makes sense to experts in each area how if were independent in between yes, culminating at exit in a intellectshattered.

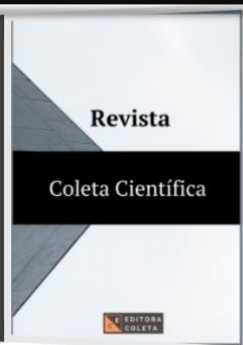
According to Japiassú (1976, p. 75), we can say that we recognize ourselves facing an interdisciplinary enterprise whenever it manages to incorporate the results in several specialties, what we take borrowed tools and methodological techniques from other disciplines, and that we use conceptual schemes and analysis found in many branches of knowledge for integrate them and converge them after have been compared judged

In today's culture, interdisciplinarity is a fundamental prerequisite for teaching and research. However, before delving into this matter, it is important highlight that the term "interdisciplinarity" (as well as "transdisciplinarity") has been overused, which can lead to its trivialization. As a result, it is sensible to circumvent the theoretical-ideological debates about what interdisciplinarity is and, instead, start with the topic of how this activity manifests itself in the sector academic in today (LAWS, 2005, p.02).

Interdisciplinarity is a notion that aims to bring together the contents of two or most subjects for what you students can deepen the understanding of these topics. THE practice interdisciplinary Visa break up with you standards traditional what promote the fragmented production of knowledge, highlighting similarities and encouraging O study critical in various approaches about O same Subject.

O concept in interdisciplinarity recently acquired force US circles in policy, practice, teaching and research. Although there is still some skepticism about the notion, it has recently taken on moral connotations with explanations of why interdisciplinarity is desirable and inevitable. Interdisciplinarity is widely recognized US circles politicians of Kingdom United. How result, so much The gym in Teaching Higher how much you Advices in Search what support The interdisciplinarity in both teaching and research (CHETTIPARAMB, 2007, p.01).

The fact that researchers and professors are involved in idiosyncrasies what are unaware, engaged in debates endless about a theme deep and widely polysemic, circulating per all you places geographical and institutional, but with different meanings, is a serious impediment for understanding the meaning of interdisciplinary activity. The idea of bringing "order" The "disorder" It's a ruse what, at the your extreme, contradicts The practice gives interdisciplinarity. Above in everything, it's about in address you phenomena how a



continuous process and not as a static exercise driven by epistemologies and methodologies well defined (LAWS, 2005, p.03).

Given the multiple nomenclatures, concepts and differences that exist within the notion of interdisciplinarity, the first step is to offer a review that aims to explain at several Definitions, interpretations and disputes in the of term. THE definition and the nature gives disciplinarity are defined in first place, an turn what The notion interdisciplinarity cannot be fully understood without first to understand O concept in disciplinarity (MENAND, 2001, for. 261).

## 1.2. STORY

THE word interdisciplinarity was sister-in-law per Roberta Frank (1988, cited in Klein, 1996, p. 8) at the Social Science Research Council, when it was employed as a a form of "bureaucratic shorthand" for research involving two or more societies professionals. THE first quote at the Webster's Ninth new collegiate Dictionary and A Supplement to the Oxford English Dictionary, on the other hand, refer to to a December 1937 issue of the Journal of Educational Sociology, which includes a announcement for SSRC post Doctoral fellowships (KLEIN 1996; FRANK 1988).

Many movements, since then, defend the interdisciplinarity. One there It's O movement Unit gives Science, what acted at the Western during at decades in 1930 and 1940. Interdisciplinarity also benefited from the search for "big and simple" as the second rule of thermodynamics, mass-energy equivalence, physics quantum and theory general from systems (KLEIN, 2000, for. 5).

With student unrest in the late 1960s, the concept gained strength in the United States. During the unrest, one of the demands was that the systems disciplinary in the universities were abolished and replaced per Principles more holistic and practical. Later, interdisciplinarity became associated to change, creativity and development (WEINGART; STEHR, 2000, p. XII). THE OECD launched the flagship publication Interdisciplinarity in 1972, after considerable transnational research. The aim was to promote interdisciplinarity in teaching university and organizational frameworks. Then, a series of research and conferences were carried out. At the however, When The OECD revisited The interdisciplinarity a decade and a half later in Interdisciplinarity revisited, they discovered what The interdisciplinarity there was lost force and what departments and faculties were not only back, but had gotten stronger (LEVIN; BEAUTIFUL 1985, for. 9).

Klein (1996, pp. 20-21), quoting Peterson (nineteen ninety, for. 223), emphasizes The idea in what multidisciplinary programs are scarcer today than they were in the 1990s. 1970. However, she notes that if we look outside the organizational charts, the multidisciplinary activities occupy a greater proportion of the team's time. THE Clayton's (1984, 1985) conclusion that while "open interdisciplinarity" may not have progressed much, "the disguised reality of interdisciplinarity" is blooming per back of "facades of subject" cited per Is it over there.





## **2.0 INTERDISCIPLINARITY HOW ANALYZE IN PHENOMENON IN CONCRETE**

Any demand per a definition unambiguous and definitive gives notion in interdisciplinarity he must to be denied, because It's necessarily a proposal originated in an of cultures disciplinary current. In others words, the assignment in meet Definitions "finals" for interdisciplinarity would be most disciplinary of what multidisciplinary. we feel what we must avoid search Definitions abstract in interdisciplinarity, a turn what no exist a definition viable for That idea, but lots of, so many how many are at experiences interdisciplinarity continuous at area of knowledge (LAWS, 2005, p.05).

O knowledge interdisciplinarity, per other side, no It's paradigmatic (at the sense de Kuhn, 1962). With this, the history of interdisciplinarity is confused with the living dynamics of knowledge. The same cannot be true of the history of disciplines, which freezes knowledge at a given historical moment of form paradigmatic, defending yourself in an fight in trenches against any other perspective. THE interdisciplinarity It's usually a reaction the approach disciplinary standardized (whether in teaching or research) of the many objects of study in a sense deep.

As a result, there are always multiple multidisciplinary responses to the same knowledge issue. The modern university is faced with the conundrum of to have what presume what you advance institutional recent had a cost unacceptably high in terms in knowledge. THE departmentalization gives University led to gradually the to waive to your purpose in favor in new challenges US fields of teaching and gives search, directing it, about everything, the replication gives information of Marketplace in work (LAWS, 2005, p.05).

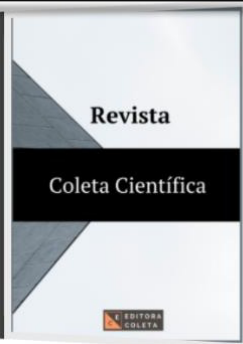
The interdisciplinarity spirit has grown in modern society through many channels, second Klein (nineteen ninety), two of which most conventional and two most creative. At attempts in to maintain or reinstall notions historical essential in unity and synthesis of knowledge, as well as activities that encourage openness and extension of disciplinary perspectives, are among the classics. On the one hand, the creation of new teaching and research programs and, on the other hand, the emergence of movements interdisciplinarity, they are in between you innovators.

## **3.0. INTERDISCIPLINARITY AND DISCIPLINARITY**

You arguments for The interdisciplinarity usually They emerge in discussions disciplinary. Two strands main they can to be identified in arguments for interdisciplinarity. O first defends The interdisciplinarity normative, framing it how an form in Fill at gaps what The disciplinarity he leaves without Fill or how an form in to reach The transcendence beyond of what The disciplinarity he can wait to reach.

With relationship at worries environmental, brewer (1995, for. 327) it says inside of argument normative, what defends the occupation in fill in gaps gives interdisciplinarity:





Many sciences in high quality illuminate your problems environmental, but lots of times is poorly organized or incomplete. Often there is no integration and synthesis interdisciplinary approach that allows problems to be seen in a broader context. broad, especially in a context ecologically sensitive and sensitive. Often, no It's adequate the scale necessary for to clarify your problems environmental in importance in long deadline for O well-being human. In sum, many knowledge essential no are able in guide O policy development, raise public awareness, or even inform and to clarify O debate political (BREWER, 1995, for. 327).

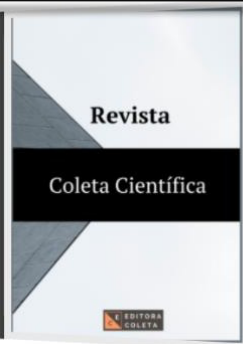
Brewer (1995, for. 328) to be continued the comparison with the disciplinarity, stating: "The problems identify theory and techniques, not the other way around, in remarkable contrast with the investigation based at discipline and oriented through the curiosity". Problems, on the other hand, are more created than given; are a representation often restricted or distorted by experience and expectation human. Brewer presents a normative case for interdisciplinarity from a problem-solving perspective. Interdisciplinarity is defined by integration, synthesis, contextualization, scale relevance, validation of visions of disciplinary world, ideas and techniques and concern with longer time horizonslong.

Rosamond's (2006) proposal for interdisciplinarity in studies of globalization makes a substantially similar argument. "The dialogues academics are, in general, matters introverts and self-referential", he he writes (for. 517), O what implies what "our world academic existing It's congenitally unable in to lead with the globalization" (for. 517, following Smith 1998). O Following It's The progressionof argument:

Anything most It's of what an invitation card the reflect about your constraints pathological what the disciplinarity imposes to the development of knowledge about The globalization and its consequences. In addition to being reified insofar as their criteria judgment interns of rigor and excellence have become dynamic contributors in your production, independently in if or how their objects in study they arechanging. (For. 518).

Rosamond notes the author's awareness of how theoretical starting points generate some forms of analysis and exclude the possibility of other discoveries in your evaluation of work in Sorensen (2004). Rosamond he does The Following affirmation, quoting Sorenson:

If realists want to make a serious (sic) contribution to the debate about what happens to the state, it is necessary to modify some of its central premises. Of contrary, will remain cornered in a corner Where The position centered at thestate realist It's ever justified, independently of what happen at the worldreal, because the state's unassailable power is built into the realistic assumptions about the worlds. This reduces the realistic state-centric view to a mere issue of faith and the debate with the retreat scholars is transformed into a competition in screams "religious" in turn in a effort analytical for discover O whatit is really happening. (ROSAMOND, 2006, p.521-522)



“Disciplinarity has definitely impacted the growing dominance of in globalization in a sense negative”, Rosamond to be continued, “but the interdisciplinarity will only make a difference if epistemological radicals speak to epistemological radicals across disciplinary divisions.” (ROSAMOND, 2006, p.530).

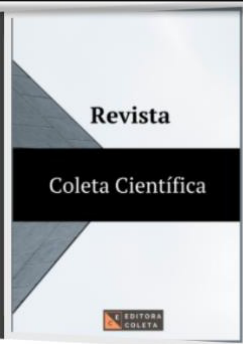
Of course, there are counter-arguments against interdisciplinarity. An is that interdisciplinarity is parasitic and requires the existence of disciplines. The interdisciplinarity “exhausts” the disciplines when it is institutionalized. It's a "sink" what no from the anything the "source" Other Score It's what to reach The interdisciplinarity at practice it is extremely difficult. Creative ideas come in different ways and are not the result of knowledge organization. As a result, knowledge is not can be guaranteed or generated on demand. Other variables, such as "collaboration", "understanding in others researchers", "chemistry personal" and "emotions subjective in goodwill among researchers", have been claimed to play a role in success collective (HANSON 1999, for. 340).

Others dangers, in wake up with Witte and Robitscher (1999), include O "ecumenism intellectual bland", what tend the flatten all your fields in an only language collective or set in procedures. They point O danger in the interdisciplinarity becomes a discipline in its own right, with its own infrastructure bureaucratic. They also observe what the interdisciplinarity have O potential in to be considered superficial, because he can to be "an invitation card The foolishness and conjectures no educated" The Score in legitimize O dilettantism.

How result, interdisciplinarity and disciplinarity they are connected in several ways. Both, it was argued, are restricted The Domains in problems specific. When comes up the interdisciplinarity, at times It's understood in opposition The disciplinarity, in which case a normative discourse is usually present. THE normativity of interdisciplinarity has also been a topic of debate, with some recommending caution. Interdisciplinarity and disciplinarity are, for times, considered how inseparable, with a complementing and making possible The other. the rhetoric gives interdisciplinarity sometimes it was spotted fur cynicism (CHETTIPARAMB, 2007, p.14).

Interdisciplinary knowledge enhances links between disciplines by same time what weakens at divisions disciplinary of work, exposing gaps, encouraging cross-fertilization and creating new areas of emphasis for research of knowledge (KLEIN, 2000, for. 18).

Nissani, (1997, p.2 01) enumerate ten points in an exultation gives interdisciplinarity:



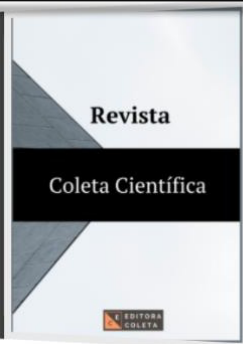
1. The creativity usually requires knowledge interdisciplinary.
2. You immigrants usually do contributions important for you new field.
3. Discipliners often make mistakes that may be better detected per people familiarized with two or most subjects.
4. Some valuable research topics fall into the interstices between disciplines traditional.
5. Many problems intellectuals, social and practical require approaches interdisciplinary.
6. Interdisciplinary knowledge and research serve to remind us of the ideal in unity in knowledge.
7. You interdisciplinary has bigger flexibility in your researches.
8. Most of what disciplinarians' straits, you interdisciplinary often treat each other with O equivalent intellectual in travel in new lands.
9. Interdisciplinary can help bridge communication gaps in gym Modern, helping so the mobilize their huge resources intellectuals in for the sake in an larger rationality social and justice.
10. By bridging the gap between fragmented disciplines, interdisciplinary ones can Perform a paper at defense gives freedom academic.

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#### **4.0. TYPES IN INTERDISCIPLINARITY**

The interdisciplinarity have been characterized in lots of ways with base at way in which it is linked to the disciplines. These categories help make the topic more understandable. The OECD provides the taxonomy of types of interdisciplinarity most used (1972, for. 25-26). They exist four types in interdisciplinarity identified on here.

These they are the following:



1. Multidisciplinary juxtaposition [...] of various disciplines, sometimes without connection apparent in between they, per ex. song + math + story.
2. Multidisciplinary juxtaposition [...] of several disciplines, assumed as more or less less related, eg. math + physics or French + Latin + Greek: "humanities classics" at France.
3. Interdisciplinary [...] an adjective that describes the interaction between two or more different disciplines. This interaction can range from the simple communication of ideas up until the integration mutual in concepts, methodologies, procedures, epistemologies, terminologies and Dice organizers what take. An organization gives search and gives education in a field quite wide. One group interdisciplinary It's compound per people formed in many different fields of knowledge (disciplines) with different concepts, terms, methods and data organized by a common effort working on a common problem with intercom to be continued.
4. Transdisciplinary [...] establishing a common system of axioms for a set-in subject.

Categorization is provided by Boisot (1972). It distinguishes between events "gross" and "legalized", what he describes how "The materialization of contact in between at things". The first is a phenomenon that has not yet been fully described. The second type of phenomenon is the one that has been explained. Boisot classifies interdisciplinarity in three categories with base in this conceptualization central. These are you following:

1. Linear interdisciplinarity: it occurs when the raw phenomena of a discipline are legalized per laws in other discipline.
2. Structural interdisciplinarity: it happens when "the interactions between two or more disciplines lead to the creation of a body of new laws forming the framework foundation of an original discipline that cannot be reduced to the formal combination of its generators, but it complies with the definition criteria we have suggested above"[de an discipline] (for. 94).
3. interdisciplinarity restrictive: occurs When no there is interactions in between at subjects. Nonetheless, disciplines are put into play for a field application, in which "each restrictive discipline imposes technical, economic or humans at others" (for. 95).

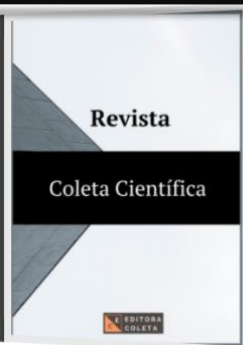
Six shapes in interdisciplinarity are identified per Heckhausen (1972, for. 87-89). At sequence in maturity, are Dice at Following order:



1. interdisciplinary indiscriminate: It consists in "enterprises encyclopedics" what end up in "confusions curriculum". On here, studies introductory courses to various fields are designed to counteract disciplinarity. It primarily provides vocational training for pre-college practitioners, but it is also found when an "imperialist" discipline asserts that other subjects are "helpers".
2. Pseudo-interdisciplinarity: This it happens When subjects what share the same analytical tools, such as mathematical models or computer, are considered interdisciplinary. Topics how recognition in patterns, game and decision theory and models of social action can constitute the topics per quite From which and for quite From which The integration It's claimed.
3. interdisciplinary help: occurs When O method used per an discipline produces data that have an "index value" for another discipline at its skill level. integration theoretical. O use transdisciplinary in methods constitutes an auxiliary interdisciplinarity. These can be "lasting" or "transient". If the level in integration theoretical no for Reached, he can to take The criticism and revision causing more sophistication and the development of a more interdisciplinary advanced.
4. interdisciplinary composed: occurs When many different subjects are gathered to apply different techniques in a problem-solving effort. This one type of interdisciplinarity is engaged in technological instrumentality, where a hierarchical sequence of well-defined goals is pursued that can to change a system "person-environment" or same innovate a.
5. Supplementary interdisciplinarity: occurs when disciplines from the same area develop an overlap partial in certain Subjects. At overlays occur per an correspondence in between levels theoretical in integration. However, beyond this specific category, there may not be a overlap. Overlay is seen, recognized and established to provide a more complete picture of the subject. This type of interdisciplinarity exists in the borders of subjects.
6. Unifying interdisciplinarity: occurs when there is a consistency between two subject disciplines, levels of theoretical integration and methods. For example, in areas Where The biology hits The physics.

As can be seen, there are a variety of approaches to categorizing and classify the notion of interdisciplinarity, which led to a more deep in how Is it over there he can to emerge.

Any emphasis on the pursuit of knowledge cannot be excluded a priori. (LEIS, 2001). The important thing is the development of knowledge in all its shapes. Any approach no he can to be eliminated of effort scientific multidisciplinary, just as philosophy cannot exclude science or vice versa. THE illusion that knowledge grows within clearly delimited positions and that all genuine investigations must have a single correct solution, with the remaining being anything beyond in mistakes, It's regrettably quite ordinary at the Western thought (Berlin, 1991). This deception leads to a dead end in the knowledge. It is foolish to argue that something must be empirical to be true, or that it must be interpretive (and even intuitive in certain circumstances) to be real. Our work no he must to be visa how an choice in between approaches



competitors in knowledge, but yea how an synthesis in options complementary.

In that sense, OK to remember The proposal in Bernstein (1983) in what O Knowledge must be empirical, interpretive and critical at the same time. That suggestion is fully in line with the reality of multidisciplinary practice. Beyond Furthermore, we can now consider that knowledge and teaching are, by definition, O result in a effort interdisciplinary, particularly at the context in an change cultural what he can to help in that effort.

### **THE GUISA IN CONCLUSION**

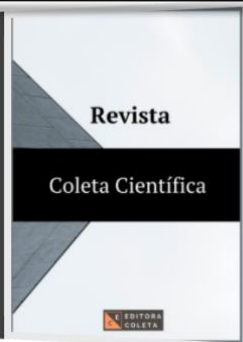
O study gives interdisciplinarity still It's incipient, no offering safety theoretical and methodological approach for those who feel attracted to develop a work of this magnitude. There is unanimity how much The lack in understanding of theme, The difficult approach to be understood and applied, involving variables that are outside the control because they depend on the construction of a collective work and, in this situation, not only involving knowledge, but also intersubjectivities, or it is, O process at the level of relations interpersonal.

At divergences and comments in some writers emphasize O method in what interdisciplinarity is defined. Interdisciplinarity, for them, is the fruit of science, whose knowledge integration takes place in the internal structures of the individual when he knows his object of study, instead of relying on the metaphysical plane, on the subject's will. Interdisciplinarity would be a process of transferring what is created and known to an individual's internal structures rather than a deliberate effort connected with the creation of a group project (GATTÁS; FUREGATO, 2006, for. 327).

Interdisciplinarity was seen as an attitude by all, an approach professional what included The capacity in collaboration, respect The diversity, opening for you others, desire in engagement, conversation, humility and daring. At the study interdisciplinarity, these trends are complementary realities and not exclusive. Some authors get more animated in their speeches, giving the impression that the process is completed by the convergence of favorable factors, from the desire in experience an form innovative in to lead with O knowledge and your application at the world gives life, in an relationship no hierarchical. , and at construction of work in in conjunction with their networks of connections; there are some authors who get more excited in their testimonies, giving the impression that the process is completed by the convergence of favorable factors, from the desire to experience a innovative in to lead with O knowledge and your application (GATTÁS; FUREGATO, 2006,for. 327).

With base at the what was presenting, we can claim what The interdisciplinarity can be described as a point of intersection of activities with various logics (disciplinary and interdisciplinary). It's about finding a balance in between analyze fragmented and synthesis what it is most easy in understand (JANTSCH; BIANCHETTI, 2002). Have what to lead with The search in a half term in between O reasoning rational, instrumental and subjective (LENOIR; HASNI, 2004). Per end, it says





respect not only to the collaboration, but also to the performance individual (KLEIN, nineteen ninety).

Interdisciplinarity must be prepared at the university as a field of teaching. It is important to foster this experience by facilitating new configurations and presentations, as well as establishing conditions and processes that help in the understanding of events that occur inside her. That mentality takes the university to seek non-traditional forms of articulation, such as divisions within faculties, departments and disciplines. Perhaps, in the future, they will evolve to multidisciplinary and flexible courses where students can choose their own route in between at several vocations what they are made available.

The topic is timely, interesting and little known in practice, therefore, it needs to be considered in depth. Transformations, deconstructions and reconstructions of what is typically presented are necessary to adhere to an interdisciplinary project. The process of learning to learn and learning to live together is implied in that. For all those who are attracted to its practice, it continues being a challenge. This process requires respect, openness to others, a desire to participate, collaboration, tolerance, conversation, humility and bravery.

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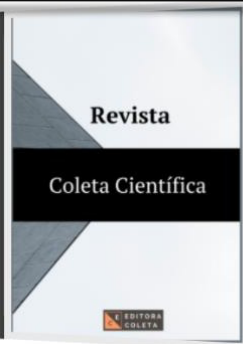
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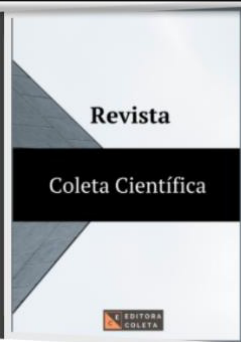
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