

## IMPLICATIONS

SOCIO-ENVIRONMENTAL

FROM ONE

PANDEMIC

PARTNER-

ENVIRONMENTAL

IMPLICATIONS OF

THE PANDEMIC

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## SUMMARY

This study points out that for Humanity to achieve a satisfactory quality of life, it depends on the environment, and it is the duty of public authorities and the community to guarantee and enforce the right to this ecologically balanced environment. The year 2021 has been marked by an avalanche of socio-environmental problems, not only in health, but also in terms of violence, deforestation, politics, among others. And there are more appeals, coming from all over the planet, begging for vaccines to combat the virus that takes lives. The new wave and its variants originating in South Africa, Brazil and the United Kingdom have already reached over 70 countries. Given this condition, this work is part of the study carried out in 2020, with teachers and students and of the current discussions held weekly in the online meetings of the Education and Environment Study Group (GEMA) of the XI campus of the State University of Bahia (UNEB), which aims to study and discuss socio-environmental problems and the coronavirus, in the sisal territory. It is based on a qualitative approach, presenting possible results and final considerations. Thus aiming to provide feedback on GEMA's actions in formal and non-formal spaces in the community.

**Key words:** Socio-environmental Education. Coronavirus. Community. EGG YOLK.

## ABSTRACT

The present study points out that for Humanity to achieve a satisfactory quality of life, it depends on the environment, and it is the duty of public authorities and the community to guarantee and enforce the right to this ecologically balanced environment. The year 2021 has been marked by an avalanche of socioenvironmental problems, not only in health, but in terms of violence, deforestation, politics, among others. And the appeals, coming from all over the planet, pleading for vaccines to fight the lifescavenging virus. The new wave and its variants originating in South Africa, Brazil and the United States

Kingdom, have already reached 70 more countries. In view of this condition, this work is part of the study carried out in 2020, with teachers and students and of the current discussions held weekly in the online meetings of the Study Group on Education and Environment (GEMA) on campus XI of the University of the State of Bahia (UNEB), which aims to study and discuss social and environmental problems and the coronavirus in the sisal territory. It is supported by the qualitative approach, presents possible results and final considerations. Thus, aiming the feedback of GEMA's actions in formal and non-formal spaces in the community.

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## 1. INTRODUCTION

The year 2020 and the beginning of 2021 have left Humanity in shock, scared, worried about the invisible virus that emerged at the end of 2019 in Hubei, China. The avalanche of new variants of the coronavirus, unfortunately, landed on Brazilian soil and the most worrying is the Brazilian variant, which emerged in Manaus. Since its beginning in 2019, this damn virus has crossed borders and reached five continents, showing symptoms and causing the damn disease that inspires care, Covid-19.

Coronaviruses are acellular, small and simple organisms, protected by a protein coat that surrounds the genetic material. It has spread in an astonishing way, and in the municipality of Serrinha - BA, located in the territory of Sisal, where Campus XI of UNEB and GEMA, the group driving this study, are located, it was no different from other parts of Brazil and the world, registering an increase in cases of contamination and death, especially now with the second wave, which we are facing with health services on daily alert about the occupancy of almost 100% of their beds.

The population calls for a complete and quality health service. All existing beings need the environment and natural resources to live in harmony. Scientists warn about the destruction of habitats, which contributes to the proliferation of diseases, as pathogens increase easily and spread to non-human animals and from them to human animals.

Thus, this study was developed with the purpose of promoting dialogue with teachers and students about socio-environmental problems and the new coronavirus, through the application of an online survey, and currently expanding and deepening studies at GEMA's weekly meetings, on the invisible virus, in this avalanche of the second wave, with so many variants. It was based on participant research, with a qualitative approach, with the aim of

awaken those involved about the problems and search for possible solutions, as well as in bibliographical research, with a survey of already published material for reading and supporting the work.

Support was sought in the recommendations of the World Health Organization (WHO), in socio-environmental policies and based on the principles of education, which can contribute to the actions that will be carried out during and after the pandemic with the school and non-school public, as well as stated Sato (2004, p. 17), "we recognize the central role of education in the formation of values and social action". And thus build knowledge that will contribute to the purposes of GEMA in the current context.

## 2 THEORETICAL FOUNDATION

### 2.1 PESTS, PANDEMICS AND SOCIO-ENVIRONMENTAL ISSUES

In the history of humanity, it is nothing new regarding the records of deaths caused by the transmission of infectious diseases, in the 13th and 14th centuries, the Black Death claimed the lives of more than 40% of the European population. Scholars at the time attested that the outbreak was caused by lice and fleas found on clothes, on human bodies and on rats that roamed freely throughout the cities.

Thus, as at the end of the first world war – the Spanish flu, recorded 5% of deaths among the entire world population. Some studies at the time pointed out that in terms of numbers, it was more lethal than the threats of war itself.

The cycle of disease surrounds humanity; Ebola has bats as its probable vector, while dengue and yellow fever have mosquitoes as their transmitters, just as some experts agree that coronavirus has Wuhan bats as its main vector. What is certain is that many suspicions and suspicions were not confirmed. And due to the lack of scientific evidence, the evil cannot be nipped in the bud. Infectious diseases transmitted between non-human animals and human animals represent 60% of infectious diseases in humans. The arguments presented in several studies are reflections of a negligent policy, which aims at capitalism without caring about the causes and consequences that these can generate for the population. As well as, says the Italian philosopher, Giorgio Agamben, when

assert that there is a “parallel between emergency measures motivated by the pandemic, especially social distancing, and totalitarian forms of government, drawing attention to the 'growing tendency to use the state of exception as a normal government paradigm’”.<sup>1</sup> Likewise, wildlife trade does not exist because they are exotic, attractive or aphrodisiacs, but out of necessity: hunger is present in China, as well as in other countries.

The European Environment Agency (AEA) announced that the cities of Brussels, Paris, Madrid and Milan recorded a significant reduction in nitrogen dioxide between the 5th and 25th of March 2020, compared to the same period of the previous year. .

With the closure of industries, factories and commerce, in addition to travel restrictions, even if temporary, to contain the spread of the new coronavirus, the environment scored as a favorite in terms of low rates of pollutant emissions into the atmosphere. For example, the city of São Paulo recorded air pollution reduction rates of around 50%, during the critical period of the pandemic in Brazil.

The United Nations (UN), responsible for promoting environmental conservation and the efficient use of natural resources in the context of sustainable development, in 2016, made available in its United Nations Environment Program (UNEP), the study “Emerging Issues of Environmental Concern”,<sup>two</sup> a chapter of this document was dedicated to demonstrating the relationship between the expansion of zoonoses and the destruction of biomes.

Thus, people around the world had to suddenly start a new way of life, living longer with family members, as well as learning to live and deal with something invisible that has rapid dissemination power, transforming it into a dangerous lethal disease, which is Covid-19.

Confining people at home gave non-human animals the opportunity to breathe better and move freely in their own habitats without being persecuted and stoned. This made it possible to hear the songs, echoes and sounds of animals on every horizon.

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<sup>1</sup>Available in:

<https://www2.boitempoeditorial.com.br/produto/reflexoes-sobre-a-pestes-ensaios-emtempos-de-pandemia-971>.

Accessed on: March 10, 2021.

<sup>two</sup>Available in:

[https://wedocs.unep.org/bitstream/handle/20.500.11822/7664/Frontiers\\_2016.pdf.sequence=1&isAllowed=y](https://wedocs.unep.org/bitstream/handle/20.500.11822/7664/Frontiers_2016.pdf.sequence=1&isAllowed=y).

Accessed on: 22 Feb. 2020.

non-humans. As Martins clearly confirms *et. al.* (2020, p. 6), about human ambition, “the human animal forgot that it was the last arrival in the evolutionary history of the planet. Viruses, for example, have been around for billions of years before humans and bacteria have been here since the beginning of life.”

In the Sisal territory, the presence of birds as well as other animals, which had not been seen for a long time, were once again observed at dawn and dusk in the semi-arid northeast, this proof is shared by the study by Martins *et. al.* (2020, p. 7), when they report about the presence of animals in the “tourist spots, Sugarloaf Mountain and Guanabara Bay”.

It is necessary to act differently in the search for changes and collective protection that guarantee the quality of life for human and non-human species on planet Earth; Humans live in need of hugs, cuddles, smells, affection or even an affectionate handshake, because being around people you like or desire has become difficult.

## 2.2 RE(FLECTIONS) IN TIMES OF PANDEMIC

The human being is characterized by being hopeful and resilient, it is a being that has a high capacity for adaptation in different realities, nothing seemed to be able to stop the human being, however, from the beginning of 2020 a reality was shown totally different from the usual. A pandemic was capable of undoing dreams, plans, goals and even taking lives. Many of the human beings who were hopeful and resilient ended up succumbing in the face of SARS-CoV-2. Santos, warns that:

Suddenly, the pandemic breaks out, the light of the markets fades, and from the darkness with which they always threaten us if we do not prostrate allegiance to them, a new light emerges. The pandemic clarity and the aspirations in which it materializes (SANTOS, 2020, p.10).

So quickly, the cruel virus spread and, as a result, uncertainty, fear and distress were left in the air in the face of reality. What many did not imagine was that the pandemic (which was defined as such by the World Health Organization on March 11, 2020) would last for a long time and lead to millions of fatalities. The Covid-19 pandemic stopped everything, economy, politics, education, entertainment... What didn't stop was the circulation of the virus and people around the world.

world, despite warnings from health bodies. Santos (2020, p. 6). "In each historical period, the dominant ways of living (work, consumption, leisure, coexistence) and of anticipating or postponing death are relatively rigid and seem to result from rules written in the stone of human nature".

The virus began in Wuhan, China, but was not limited to just China. The virus remains on the rise in the United States and alarmingly in Brazil, recording more than 3,000 daily deaths caused by the coronavirus. The current Brazilian reality is more delicate than at the beginning of the pandemic when there was still no vaccine against Covid-19, Brazil continues to be a cause for concern for many global authorities. The vaccination process has begun, but even so, the numbers of infected people and deaths continue to rise, thus causing a collapse in the Brazilian health system. For Reich, *et. al.*(2020, p. 50-51), "the Brazilian case is perhaps the most illustrative of the damage that a government can cause to its population by failing to adopt measures to protect the health and physical integrity of its citizens".

Brazil today finds itself in its worst moment since the pandemic began, all of this because of the omission and lack of a national plan by the executive branch in relation to the spread and lethality of the virus, if sanitary measures were disclosed or reinforced by Of course, the Brazilian scenario would be different.

As soon as the pandemic was defined, some people were considered to be at risk, however, nowadays we can no longer just talk about risk groups, given that the virus continues to make victims of all human beings. For Santos (2020):

The etymology of the term pandemic says just that: all the people. It is difficult to understand 'the cruel pedagogy of the virus' when hundreds and even thousands of families mourn the pain of their loved ones, a cry that most of the time is caused by the simple fact of having paid a visit. A pandemic of this scale justifiably causes commotion. Although dramatization is justified, it is good to always keep in mind the shadows that visibility creates (SANTOS, 2020, p. 7-8).

The dramatization of the coronavirus is justified due to its negative results, but it is also worth highlighting that the virus was responsible for bringing to light many social ills that were camouflaged. Racism, hunger, lack of basic sanitation, femicide, violence against women and the lack of many basic social rights. If a careful analysis of the facts is carried out, you will realize that Covid-19 has shown the situations of misery in which

encounter many Brazilian families and that, faced with these weaknesses, these people have become and continue to become the main victims of the virus.

According to Reich, *et. al.*(2020), the coronavirus is capable of claiming a high number of victims and that, in addition, this pandemic shows, however, its great lethality, which may be greater than that of many wars. In the United States, a major world power, for example, in just two months the total number of victims of Covid-19 exceeded the number of Americans killed in the Vietnam War, a war that lasted more than a decade.

Reich, *et. al.*(2020, p. 50), highlights that, "the federal executive branch, in the name of defending economic interests, has done everything it can to boycott social isolation, publicly condemning the governors of states that adopted it". When this disagreement occurs regarding preventive measures against the spread of the virus, it becomes extremely difficult to stop the virus, given that the population most of the time does not know what measures to adopt in relation to the coronavirus, as a large part of the population does not seem to understand the severity of the virus, or even relax.

The human being has become the enemy of the human being himself. Parties with crowds continue to take place, many people ignore the use of masks, do not respect social distancing, nor do they apply alcohol gel and as a result the virus continues its path leaving traces. Denialism has contributed greatly to the increase in deaths, since most Brazilians do not believe in scientific studies and the federal government does not invest in science and when this happens, society in general loses a lot by trying to deny the importance and value of science.

Unfortunately, "to this day, countries like Brazil continue to deny the seriousness of the problem, even though the number of deaths increases daily, and we have gradually become one of the countries with the highest number of infected people" (REICH, *et. al.*, 2020, p.8).

It is known that there is still a lot to be done on everyone's part, and while the vaccine is not available to all Brazilians, it is recommended that people continue to practice prevention measures against the virus: wearing masks, washing their hands frequently and of course, maintain social distancing. The pandemic taught us a lot, and one of these lessons is that we need to take more care of each other, we need to believe and invest more in science, extend our care to animals and give new meaning to our relationship with nature, which also needs our care.

May this terrible virus humanize us more, so that we can love more, understand more, value more. The future is a daily construction, the pandemic with its restrictions is shaping us and revealing that sustainable alternatives are possible and that people adapt to new ways of being and living when necessary and urgent.

### 2.3 GOVERNMENTS IN CONTROL OF COVID-19

We are living in a period in which everything has been transformed into chaos and uncertainty as a result of the coronavirus pandemic and, in the midst of all this, society more than ever places its hope and trust in governments, who have the power to adopt measures to come and control this virus, whose action has destabilized health systems, the world economy and also people's routines.

While the world was concerned about the vaccine, the President of the Brazilian Republic paid little attention to it, what is seen around the world is that several countries have invested and continue to invest in a culture of prevention against the virus, while, in the Brazil has done very little in this regard.

A few political authorities (governors and mayors specifically) have taken scientific recommendations into account and decided to adopt more drastic security measures in an attempt to stop the virus. They adopted lockdown, partial or total closure of borders and establishments considered non-essential, yet these measures are not solving the problem, as these and other measures adopted by state governors and municipal mayors are criticized by the President of the Republic himself and their loyal supporters.

Some governors remain firm in trying to stop the virus, but it is not enough for only governors to do their part, everyone's commitment and involvement is necessary so that this situation is controlled.

In this sense, it is impossible not to bring into discussion the contrary actions that have presented themselves as a major obstacle for many governments, especially state and municipal governments, to effectively perform their role. This is the situation in Brazil, where, in a crisis scenario in which cooperation between all powers is necessary in order to preserve the lives of the population, there is a President of the Republic walking in



opposite direction, thus causing confusion among the population, since while the WHO (BRASIL, 2020) and the Brazilian Ministry of Health (MS) itself advise on some measures already heard previously where the president gives contrary speeches; and in addition to his speeches, his actions reinforce behaviors that contribute to the lives of thousands of people being at risk. Thus, according to Martinset. *al.*(2020, p.4):

The speeches circulating in the news could not be more contradictory. While the World Health Organization - WHO and the Brazilian Ministry of Health are campaigning for social isolation, trying, in every possible way, to contain the uncontrolled transmission of the virus throughout the Brazilian population, suggesting hygiene, physical distancing and isolation measures, the President of the Republic Jair Bolsonaro came out, in front of the Palácio do Planalto, dressed in the shirt of the Brazilian football team, in the middle of a pro-government demonstration, touching people, taking photographs and contradicting all the measures previously mentioned.

It is important to highlight that, it is not just the President of the Republic who goes against the guidelines, there are people who, despite knowing the risks presented by the coronavirus, insist on going out unnecessarily, promoting parties with crowds, not obeying prevention measures and encouraging other people to do not comply with the recommendations made, a reality that is present in several states in Brazil.

The situation became critical in 2021, much worse than what we experienced in 2020, requiring governments to invest more in public health actions, as well as in research and technology, requiring all nations to expend efforts and coordinate measures, seeking to meet the WHO determinations to combat coronavirus. When referring to delays and political decisions, Negriet. *al.* (2020), state that:

In Brazil, coordination initiatives by the federal government, especially by the Ministry of Science, Technology, Innovations and Communications (MCTIC), are still beginning. The Virus Network - MCTIC Expert Committee was established at the beginning of March 2020, which aims precisely to promote the integration of scientific research and development efforts; define research priorities; articulate and integrate research, development and innovation (PDI) initiatives; and promote the development of technologies for emerging viruses.

Meanwhile, it is observed that the virus does not choose victims, although there is a group of people who are considered more vulnerable and who are part of the so-called "risk" group. Thus, this terrible virus that is ravaging humanity has demonstrated that it is necessary for human beings to truly humanize themselves. The new variants already contaminate a

generation, which scientists did not predict in their studies. This terrible virus that is ravaging humanity has demanded more humanization and love between people.

#### 2.4 COLLABORATION BETWEEN EDUCATIONAL INSTITUTIONS AND STUDENTS

There are several institutions that seek to find the best strategies to avoid crowds, respecting all the guidelines that the WHO, PAHO and the Ministry of Health indicate, they have collaborated through the laboratory and professional resources of the institutions themselves in the development of projects with a view to fighting Covid-19 (SEMESP, 2020).

The approval by the National Education Council (CNE), on April 28, 2020, of the already known guidelines to guide school and HEI managers on the new coronavirus (BRASIL, 2020). It encouraged educational institutions to work hard in the search for strategies to reach students, in addition to the promotions of lives, meetings and meetings, which were already taking place through initiatives of the universities themselves and other educational institutions. At UNEB, this same practice was applied, it is worth highlighting the "Face Shield for Life 3D Project", developed in partnership with the Escola Bahiana de Medicina e Saúde Pública (EBMSP) and the Universidade Federal do Oeste da Bahia (UFOB), which masks were donated to frontline healthcare professionals (UNIVERSIDADE DO ESTADO DA BAHIA, 2020).

Furthermore, UNEB produced educational material in its various departments in digital media format, such as (cards, short videos, video classes, *podcast*, *slideshare*, material in POUNDS). Call center and remote support services. Production of inputs and development of equipment/technology: EPIS, alcohol gel, soaps, public washers, respirators. Holding seminars, meetings, cultural and sporting activities, debates, workshops, festivals via the web. Production of booklets, articles, essays, texts, etc. Financial and legal guidance, psychological support, assistance for the elderly and groups with greater socioeconomic vulnerability, among others. An average of 60 projects in priority areas: education, health and technology (UNIVERSIDADE DO ESTADO DA BAHIA, 2020).

In view of this, it is possible to see that educational institutions have continuously collaborated to combat the new coronavirus, as these collaborations are made of

different ways, but with the same goal. Remembering that it is important to always look for ways for the entire population to have access to this care, as only then can the coronavirus be annihilated.

We are experiencing a moment in which, on a global scale, everyone's life has changed, whether the person is rich or poor and when it comes to students, they are also looking for alternatives, in the possibility of developing academic activities mediated by digital technologies, during this period. of confinement, the normal has become "abnormal", for a few to carry out online activities it is possible, but for the majority, this practice, in addition to being unfeasible, is impossible for each case of the reality of the economic characteristics of the students and also due to the lack of internet network in their home locations.

Since the beginning of confinement, institutions have been providing ways for students to teach and learn, whether from public or private education, providing study materials in *websites, links, lives*, platforms, actions that attract everyone's attention and reinforce the feeling of collectiveness.

It should be noted that many higher education institutions, in the enjoyment of their university autonomy, and following Ordinance No. 374/2020 of the MEC, issued resolutions with a view to bringing forward the graduation (online graduation) of the various institutional courses, as long as they have met all the workload requirements, both in internship courses and mandatory internships.

The confinement has promoted the unity of some people in controlling the coronavirus, such as the students of the Information System course at the Federal Rural University of Pernambuco (UFRP), who created an application, where users can apply without leaving home; at UNEB, campus XI, students of the Pedagogy course, through the Academic Directory, promoted *lives with different themes*; GEMA recommended reading books and articles on socio-environmental issues and Covid-19 and promoted *lives* socio-environmental; students from the Administration course, promoted through Realiza, Empresa Júnior, *lives* regarding the coronavirus, both activities were carried out in accordance with the Department and the respective courses' bodies. According to Portal G1 PR (2020), this period of confinement led teachers from Londrina to create a platform to help students from public and private institutions not to reduce their study routine, thereby offering free courses, as it is not just time of confinement, but also of solidarity.

## 2.5 VACCINE, SCIENCE AND HEALTHCARE PROFESSIONALS

There is already a vaccine in Brazil, it is true, but so far less than ten percent of the population has received at least one dose of the vaccine, however, many people encounter several difficulties in getting vaccinated, there have been cases in which health professionals pretended to administer the vaccine on the patient, when in fact the syringes were empty and, last but not least revolting, we also have the campaign against vaccination that has been disseminated by some people who exercise political powers here in Brazil and even try to undermine the effectiveness of the vaccine .

If for many hope was the last ray of hope, now the vaccine has become hope. However, Brazil was late and delayed in closing agreements with countries that have been producing vaccines since the testing phase and, consequently, is now finding it difficult to acquire enough vaccines to vaccinate 70% of its population.

The first cases were treated as viral pneumonia, as very little was known about the pathogen, much less that it was the beginning of the spread of a disease that would become a global health challenge.

In addition to existing vaccines, new vaccines are currently being investigated and produced, with a view to combating new variants of the virus, as well as attempts and efforts to discover specific treatments and medicines, with tests through clinical trials, which prove the its effectiveness. In this sense, the WHO is coordinating efforts to develop vaccines and medicines to prevent and treat Covid-19 (OPAS/BRASIL, 2020).

Such investigations allowed scientists to discover that the new type of coronavirus has an incubation period, and that even people who do not show symptoms can transmit the disease.

It is known that it takes years to develop a vaccine, but in the case of the new coronavirus, there was a real race to contain the disease. This is thanks to advances in science and technology, which have enabled scientists and laboratories to accelerate testing on non-human animals, and also on humans. Once the testing stages have been completed and vaccinations have begun, they continue to be slow in most countries, with Brazil being no different, despite the fact that in recent days it has advanced a little in the pace of vaccination and,

today it ranks fourth in vaccination in the world ranking of the most populous countries in the world.

Although some experts are skeptical about a quick solution. The work of scientists in different countries has constituted a solid network of information, placing science at the forefront of government decisions and this is very important.

According to the World Health Organization, around 180 vaccines against Covid-19 have been developed by several countries. It is worth mentioning that Brazil has become a major global laboratory for vaccine testing.

Some laboratories have published research on the constitution of types of vaccines, namely: Vaccines with viruses: use the virus itself (weakened or inactive) to stimulate the body to produce antibodies; Genetic vaccines: use genetic instructions (DNA or RNA), so that the body itself produces copies of some virus protein, thus stimulating a response from the immune system; Viral-vector vaccines: use another virus, which is genetically modified to produce viral proteins in the body and provoke an immune response. To do this, viruses are weakened and do not cause disease; Protein-based vaccines: use a protein from the virus or a part of it, or even proteins that imitate something in the structure of the virus, such as its external coating, to provoke an immunological response in the body.

It is known that it takes up to 10 years to develop an effective vaccine. However, with the advancement of science, technology and the mobilization of the international scientific society, this process was accelerated. Well, scientists are in a hurry to save human lives. Sato *et. al.*(2020, p.14) state that:

Humanity has already faced many pandemics, but this is unprecedented, as it takes place in an unprecedented economic and political context. There are new variables at play, despite all the advances in technology and science, social and environmental inequalities have created a gap between human beings who have access to health through treatments and medicines and others who do not.

According to Silva and Lopes (2020), Covid-19 points to other possibilities of “pandemic imaginary” in the anthropocene, which are not just the resigned wait for the “next plague”, with medical, sanitary and technological devices increasingly “prepared” and efficient to face a threat of human extinction that is always reiterated, but not fulfilled, like an end that is always postponed. Healthcare professionals are aware of everything that happens in a hospital,

polyclinic, Emergency Care Unit (UPA), Family Health Unit (USF), Family Health Program (PSF) and Basic Health Unit (UBS), caring for and supporting those most in need, when they seek care in one of these locations of medical assistance. Currently, these professionals are fighting a tough battle against this invisible agent, which threatens public health, holding people hostage (GAUCHAZH, 2020). They are on the front line of the problem, risking their own lives for others, making great efforts and fearful of being infected.

According to the team from the Occupational Medicine Service at Hospital de Clínicas de Porto Alegre (HCPA), the situation has been seen by many as a war scenario, as the entire society is affected, not by the virus, but by the measures taken to prevent its spread. large-scale dissemination. "The disease that ravages the planet does not distinguish between young and old, men and women, rich and poor" (GAUCHAZH, 2020).

However, many professionals report that the fear is not exactly of being infected, but that its contamination poses a risk to many people who are in their lives, around them, whether at home, in friendships, at work, because despite Although they are health professionals, they are, first and foremost, human beings, and what prevention measures are necessary to actually overcome this terrible pandemic.

Hope certainly has a prominent place in people's lives, and it is through it that they find strength daily to face difficulties. Hope from the verb hope and not the verb wait! Thus, Sato *et. al.*(2020, p. 13) say that:

It is necessary to reinvent the experience of being in this world in a simpler and more supportive way. In fact, the experience of solidarity and compassion are fundamental pillars of the human experience, since the earliest times of civilization, in various societies and this time requires us to remember these experiences (SATO, *et. al.*, 2020, p. 13).

### 3 METHODOLOGY

Due to the peculiarity of the topic, this study opted for the following types of research: bibliographic which "is the most common in academic studies, as it uses written sources such as books, newspapers, magazines, reports, articles and other documents" (BARBOSA, 2006, p. 57) and the participant who "requires researchers and members of the investigated situation to interact, it is not possible to carry out prior planning" (ALVES, 2007, p. 57). Study of

qualitative approach, according to Richardson (1999, p. 79), "in addition to being an option for the researcher, it is justified, above all, because it is an appropriate way to understand the nature of a social phenomenon". Data collection began in existing documents and in the 40 surveys applied, with those involved in the study. Data processing was carried out and organized in a simple way using the Microsoft Office Program (Word, version 2016). The procedure comprised the following steps:

Step 1: took place in the second half of March 2020, in the online meeting with GEMA components, shortly after the publication of the Rectory Ordinance suspending all face-to-face activities across the entire UNEB campus. From this decision, GEMA, the Junior Enterprise of the Administration course, the collegiate bodies and the management, began to establish contacts and dialogues with teachers and students, at which time readings, films, series were recommended, with a view to not losing focus on studies, the point of balance, harmony, encouraging relaxation, providing security;

Step 2: during the second half of April 2020, specific readings were carried out on coronavirus and the environment in books, articles, leaflets, bulletins, newspapers, consultations with *websites* etc.;

Step 3: in the last days of the second half of April 2020, the survey was created and applied to thirty students from the Administration, Geography and Pedagogy courses, ten students from each course and ten more teachers, totaling a sample population of forty participants;

Step 4: in the first fortnight of May 2020, the survey was sent online to the forty participants who were willing to participate in the study;

Step 5: receiving the survey in the second half of May 2020;

Step 6: reading and processing the survey during the second half of May 2020 and the first half of June 2020, based on the analysis of each participant's records, which is described in the results of this study; These data, plus the bibliographical consultation, lives, lectures, seminars, weekly GEMA meetings, and current information about the coronavirus and its variants, allowed the construction of this article;

Step 7: dissemination of results to participants and the community; Step 8:

fundamental basis for GEMA's actions with the school and the community, upon the return of face-to-face activities. Culture circles, conversation circles,

lectures, short courses, workshops, theater, TV and radio programs, storytelling, experiences and educational ecological games, socio-environmental competition, simulations, distribution of educational booklets and leaflets that will be created with the theme: education, viruses and socio-environmental health; construction of conceptual maps, dialogical gatherings, parody, cordel literature, panels, crosswords, word searches.

#### 4 RESULTS

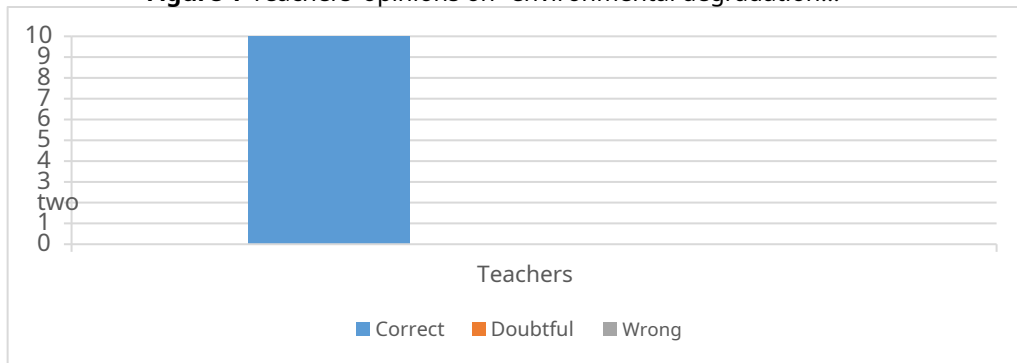
The devastating virus emerged in Wuhan, China, in 2019, and in a short space of time crossed borders and conquered the world, reaching most countries on five continents. According to the WHO (2021), only fifteen (15) countries were not affected by the coronavirus, they are the least populated countries in the world and are located on remote islands. It is worth mentioning that the damage caused by the virus in Italy, the United States, Russia, China, Spain, France, the United Kingdom, Germany, etc. It was scary. This tragedy did not exempt Brazil, which today is going through a serious and very worrying situation, in second place in the world in number of deaths and infected cases, with record records in several Brazilian cities.

The suspension of the semester ended up becoming a motivating factor for researchers to reinvent themselves in the context of replanning their activities, establishing contacts by sending messages, poetry, music, promoting *lives*, these with the most varied themes, such as: coronavirus, distance learning, remote activity, interpersonal relationships, isolation, distance learning curriculum, increase in domestic violence, health and environment, humanization, among others. All of this as a breath of fresh air at a time of so much uncertainty.

The analysis of the survey began with the teachers, who, when asked about the statement: "environmental degradation affects and causes imbalance in various forms of life and, consequently, produces risks and harms to collective health" (Figure 1).



**Figure 1**-Teachers' opinions on "environmental degradation..."



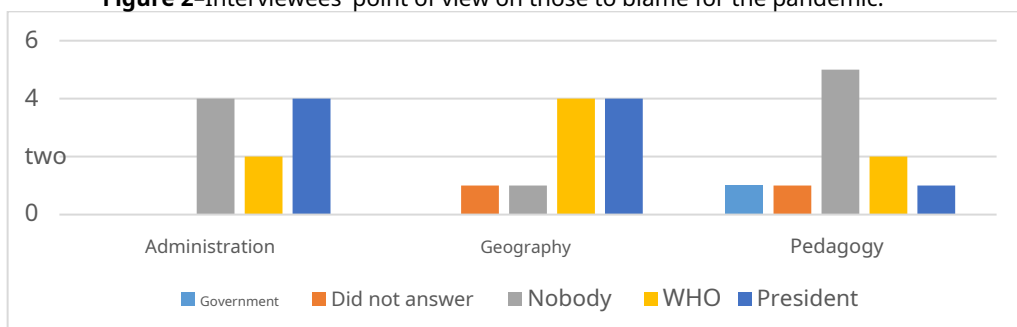
Source: research data.

The teachers share what scientists, researchers and environmentalists from around the world report about the degradation of the environment over many years, through devastating practices such as deforestation, burning, and the ancient tradition of using pesticides, germicides, such as , Dichloro-Diphenyl-Trichloroethane, the well-known DDT, which is applied in agriculture, with the purpose of eradicating and combating insects/pests, causes poisoning, not only of insects, but also of the soil, fish, rivers, birds and man himself, as shown by research by scientist Christa Knapper, from the University of Vale do Rio dos Sinos:

The presence of residues of chlorinated insecticides - which are widely used in soybean, rice and wheat plantations - in the soils where the earthworms were collected. Coincidentally, it is this same type of cancer that is responsible for the majority of cancer patients in Porto Alegre (CARVALHO, 1989, 25-26).

The present study was developed with teachers and students from the Administration, Geography and Pedagogy courses at UNEB's XI campus. And what about students, when they are questioned about who is or are to blame for the pandemic? They contested as shown in figure 2.

**Figure 2**-Interviewees' point of view on those to blame for the pandemic.



Source: survey data

It is known that there is no one person to blame for spreading or producing the virus, as has already been well reported by the media. There is dispute over the date on which the first case of the disease occurred and which was treated as a simple “little flu”, and later with the complications of some infected people, it was identified as SARS-CoV-2.

The suggestions from teachers and students differ, but also converge in the following aspects: education, health, social, cultural, economic, political, religion, among others, as shown in table1.

**Table 1-**Suggestions from teachers and students participating in the study regarding care and prevention against coronavirus.

CATEGORY	PARTICIPANT 1	PARTICIPANT 2
STUDENT ADMINISTRATION	“Follow the recommendations of the WHO and the MS, seeking to maintain social isolation, even though we cannot due to the work of many Brazilians who are involved in essential activities.”	“Unfortunately, many still don’t believe it, despite seeing the chaos the world is in and several people dying without having chronic diseases, without being part of the risk group.”
STUDENT GEOGRAPHY	“Read a book, learn a new recipe, listen to music, watch films/series, try to make the most of these moments with those who are in isolation with you.”	“Seeking calm and psychological balance, I say from experience: the beginning of all this really shook me psychologically.”
STUDENT PEDAGOGY	“That governments in the three spheres use the media, as well as social networks, with the intention of raising awareness among the population of the importance of respecting the criteria recommended by the WHO and other health professionals”.	“Only leave the house if it is really necessary and there is no other way, wear a mask, avoid crowds, don’t have parties with friends, wash your hands thoroughly, use alcohol gel.”
TEACHER)	“I suggest continued education actions, focusing on the importance of social isolation, hygiene habits, use of masks, among others, as essential for us in education.”	“Calm, patience, affection, physical mobility, hydrating the body, lots of faith and prayer.”

Source: research data.

The answers and suggestions presented by the participants corroborate the comments of the theorists that underlie this study. They also point out possibilities and paths to be followed in times of pandemic.

The hope of a face-to-face return in 2021 was also a pure illusion, as the uncertainties, doubts and insecurities in the face of the cruel virus remain and only with the population vaccinated will non-essential face-to-face services in the area of education gradually return to their full potential. offers, taking precautions and rigorous planning. UNEB continues with remote teaching, as well as holding seminars, meetings, TCC defenses,

participation in events, among other academic activities, with a view to inter, multi and multidisciplinary actions.

## FINAL CONSIDERATIONS

Public health in Brazil has been marked by consecutive administrative reorganizations, establishing standards and guidelines throughout its historical process. And with the appearance of the coronavirus in February 2020, it did not affect the Brazilian authorities when it came to decision-making for containment and precautionary planning, even though they knew how serious it was for the population. We went through bad times in the peak months of the disease in 2020 and in the middle of 2021, everything is repeated perhaps with greater severity and concern, due to the emergence of new variants and cases of contagion registered in children, youth and adults.

The start of vaccination, even if late or at the right time, brings a little encouragement, as the vaccine exists and is in fact the only security and hope in guaranteeing the preservation of life. Given the existing complexities and controversies, these are important for the challenge and advancement of science, as this is not irrefutable and its complexity cannot be treated by a dogmatic view.

It is important to pay attention to good examples of innovative ideas and policies, in a process of expansion and execution of good initiatives, thus being able to curb the collapse that is bordering on Brazilian health services. The lack of these policies compromises the quality of life of the current and future generations and natural resources.

In view of this need, GEMA members will continue studying and researching and, together with the University and the curricular components: Environmental Education, Education and Health, Environmental Management and Environmental Analysis, will work more intensely in extension and intervention activities; as well as preparing documents, articles, booklets, texts and information leaflets, among other information, about the coronavirus, its variants, Covid-19, as well as other health and socio-environmental topics to be socialized and implemented in schools and the community.

Faced with such a scenario, changes that, in fact, culminate in a new attitude of the human being are necessary, measured from the perspective of a collective, supportive and

humanitarian, with a view to building a more balanced, harmonious society in terms of social, educational and environmental aspects.

Unfortunately, a pandemic had to happen for humanity and especially non-human species to achieve moderate levels of socio-environmental balance and harmony for survival in their own habitats. As Giorgio Agamben rightly emphasizes, “when the plague is declared over, if that ever happens-, I don't think that, at least for those who have maintained a minimum of lucidity, it will be possible to go back to living as before”.

## REFERENCES

ALVES, M. **How to write theses and monographs**: a step-by-step guide. 2nd ed. Rio de Janeiro: Elsevier, 2007.

BARBOSA, D. **Research Manual**: study methodology and monograph preparation. São Paulo: Expressão & Arte, 2006.

BRAZIL. Ministry of Education. National Education Council. **CNE approves guidelines for schools during the pandemic**. Available at: <http://portal.mec.gov.br/component/content/article/12-noticias/acoes-programas-e-projetos-637152388/89051-cne-aprova-diretrizes-para-escolas-durante-a-pandemic?Itemid=164>. Accessed on: 13 May. 2020.

BRAZIL. Ministry of Health. **WHO guidelines for preventing Covid-19**. Available at: <https://sbpt.org.br/portal/covid-19-oms/>. Accessed on: 6 May. 2020.

CARVALHO, CG de. **Nature calls for help**. 2nd ed. Cuiabá: Verde Pantanal, 1989.

CORONAVIRUS: teachers create a platform to help public school students who are going to take the entrance exam. **G1 PR Portal**. Available at: <https://g1.globo.com/pr/nortenoeste/noticia/2020/03/30/coronavirus-professores-criam-plataforma-para-ajudarestudantes-de-escolas-publicas-que-vaoprestar-vestibular.ghtml>. Accessed on: 3 May. 2020

MARTINS, ECD; CRUZ, EP; SANTOS, SF Multispecies imaginations about the new coronavirus. **Libertarian Studies Magazine**(REL). Rio de Janeiro: UFRJ, v. 2, p. 2-4, n. 3, 2020. Special Edition no. 1.

NEGRI, F. de; ZUCOLOTO, G.; MIRANDA, P.; KOELLER, P. **Science and technology in the face of the pandemic**. Ipea, 2020. Available at: <https://ipea.gov.br/cts/pt/central-deconteudo/artigos/artigos/182-corona>. Accessed on: May 5th. 2020.

WHO. **15 countries in the world have not yet registered cases of Covid-19.** Available at: <https://agenciabrasil.ebc.com.br/internacional/noticia/2021-01/oms-15-paises-no-mundoaindano-registraram-casos-de-covid-19>. Accessed on: 2 April. 2021.

PAHO/BRAZIL. **Fact Sheet**–COVID-19 (disease caused by the new coronavirus). 13 May. 2020. Available at: [https://www.paho.org/bra/index.php?option=com\\_content&view=article&id=6101:covid19&Itemid=875](https://www.paho.org/bra/index.php?option=com_content&view=article&id=6101:covid19&Itemid=875). Accessed on: May 15th. 2020.

HEALTH PROFESSIONALS report what it's like to be the first front line in the fight against the coronavirus pandemic. **GAUCHAZH.** Available at: <https://gauchazh.clicrbs.com.br/saude/noticia/2020/03/profissionais-da-saude-relatam-como-e-ser-aprimeira-linha-de-combate-a-pandemia-do-coronavirus-ck80nfyab06hk01pqwcc2j85q.html>. Accessed on: May 8. 2020.

REICH, E.; BORGES, M. de L.; XAVIER, R.C. **Reflections on a pandemic.** Florianópolis: Néfionline, 2020.

RICHARDSON, R.J. **Social search:** methods and techniques. São Paulo: Atlas, 1999.

SANTOS, B. de S. **The cruel pedagogy of the virus.** Coimbra, Portugal: Almedina, 2020.

SATO, M. **Environmental education.** São Carlos – SP: Rima, 2004.

SATO, M.; SANTOS, D.; SANCHEZ, C. **Virus:** simulacrum of life? Rio de Janeiro: GEA-, UNIRIO / Cuiabá: GPEA, UFMT, 2020.

SEMESP. **Higher education in the fight against Covid-19.** Available at: <https://www.semesp.org.br/ies-contra-a-covid-19/>. Accessed on: 23 June. 2020.

SILVA, AFC da; LOPES, G. The Coronavirus pandemic and the Anthropocene. **Rev Hcsm,** 2020. Available at: <http://www.revistahcsm.coc.fiocruz.br/a-pandemia-de-coronavirus-e-oantropoceno/>. Accessed on: May 5th. 2020.

UNIVERSITY OF THE STATE OF BAHIA. **Covid-19:** UNEB is part of a working group to produce 3D protective masks for healthcare professionals. Available at: <https://portal.uneb.br/uneb-integra-grupo-de-trabalho-para-producao-de-mascaras-contracovid-19-para-profissionais-de-saude/>. Accessed on: 13 May. 2020.

UNIVERSITY OF THE STATE OF BAHIA. **UNEB calls on students to combat Covid-19 in a telemedicine task force.** Available at: <https://portal.uneb.br/noticias/2020/03/20/uneb-convoca-estudantes-para-combate-ao-covid-19-em-forca-trabalho-de-telemedicina/>. Accessed on: 13 May. 2020.



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## PRESENTATION

Issue number 4 of 2021 of the Multidisciplinary Scientific Journal O Saber – RCMOS is launched, maintaining its editorial flow and consolidating responsibility with the scientific community.

The publication of this edition still comes in the midst of the Covid-19 pandemic in which everyone is anxiously awaiting the day when everyone is vaccinated. Without a doubt, we live in a time of change, in which access to collections, documents, archives, libraries had to be reinvented with the implementation of systems that overcome distance barriers, adding to the effort to scientifically disseminate data, information and knowledge.

Our workdays governed by the routine of our homes and the constant search for adequacy of information systems, do justice to the recognition that our scientific journal remains committed to ensuring that the dissemination of knowledge strengthens its foundations.

With relevant contributions from the authors, this edition is made up of 15 articles and 2 dissertations that address different themes. We highlight the collective merit evidenced by the commitment of the editorial team and authors who submit their articles, contributing to maintaining the periodicity and quality of RCMOS.

To the team, authors and readers, my sincere thanks. Good reading.

Aline Ferreira