



## WHAT IS PROZAC? A DEBATE BETWEEN SCIENCE AND SOCIETY PERSPECTIVE, DURING SARS-COV2

### ¿QUÉ ES PROZAC? UN DEBATE ENTRE LA PERSPECTIVA DE LA CIENCIA Y LA SOCIEDAD, DURANTE EL SARS-COV2

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#### ABSTRACT:

This study will test the efficacy of Prozac in patients that think were sick with COVID-19 virus or any other serious respiration condition is not fun. The SARS-COV2 had and has dramatic effects. This investigation was necessary to prevent serious outcomes, especially suicide. It is a strategy to prevent COVID-19 infection specially. Many people thought that had COVID 19. Patients who are presumptively depression for COVID-19 will be entered into the study and given the option to start the medication Prozac. The testimonies of patients who were treated with Prozac were used after developing a clinical picture of stress, anxiety and depression as a consequence of the confinement of the pandemic. The case will be monitored daily for COVID-19 symptoms and weekly for side effects and tolerance of Prozac. The testimony, in this case, expressed through a first-person interview, offered not only information regarding the perceptions, ideas and meanings of patients prescribed Prozac; but also expressed meanings beyond words. For example: the type of posture, the reactions, sadness, happiness, the same meaning that they gave to their life. The subjects were vicivilized by means of this technique and autonomy, self-confidence, desire to live were fostered.

**Keywords:** Antidepressant, depression, illness, life, physiological complications.

#### RESUMEN:

Este estudio probará la eficacia de Prozac en pacientes que creen que estaban enfermos con el virus COVID-19 o que cualquier otra afección respiratoria grave, o que presumían se contagiarán. El SARS-COV2 tuvo y tiene efectos dramáticos. Esta investigación fue necesaria para evitar resultados graves, especialmente el suicidio. Es una estrategia para prevenir la infección por COVID-19 especialmente en muchas personas que pensaron que tenían COVID 19. Los pacientes con depresión serán ingresados al estudio y se les dará la opción de comenzar con el medicamento prozac. Se utilizaron los testimonios de pacientes que fueron tratados con prozac luego de desarrollar un cuadro clínico de estrés, ansiedad y depresión como consecuencia del confinamiento de la pandemia, el caso será monitoreado diariamente para detectar síntomas de COVID-19 y semanalmente para detectar efectos secundarios y tolerancia de prozac. El testimonio, en este caso, expresado a través de una entrevista en primera persona, ofreció no solo información sobre las percepciones, ideas y significados de los pacientes a los que se les prescribió prozac; pero también expresó significados más allá de las palabras. Por ejemplo: el tipo de postura, las reacciones, la tristeza, la alegría, el mismo sentido que le dieron a su vida. Los sujetos fueron visibilizados mediante la técnica de la narrativa esta técnica y se fomentó la autonomía, la autoconfianza, el deseo de vivir.

**Palabras Clave:** antidepresivo, depresión, enfermedad, vida, complicaciones fisiológicas.

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## 1. INTRODUCTION

Up to ¿what point science can explain the reaches of mind? Which means considering the scientific method and arguments supported in biological process to understand abstract thoughts. Therefore, the mind studies are bigger than concepts as neurons, emotion or perception; that is why the health community is up to build treatments or manage mental illness with pharmacology.

By the way, the society impact it is still a relevant perspective to understand the connection of mind and human. What it means natural principles that explain the process of cause and effect, for example disease and cure, and social and economic effect as trace of neuropsychiatric medications in populations with disorders associated with deficiencies in mental processes. That is why this text aims to analyze the relevance of Fluoxetine or Prozac as an antidepressant, which is useful in an inhibitory action of deficient serotonin (scientific angle), and its consequence in different social approaches.

¿What is the scientific basis of Fluoxetine? The drug also known as prozac, (Rosenteins, 2011:198) "es un antidepresivo clínicamente

no relacionado con los triciclos, que bloquea la incorporación de la serotonina en las plaquetas humanas". It is known that it is a hydrocarbon with derivation of a monocycle conforms by bridges of a carbon molecule at its beginning, without three new chains of a different compound. So that: "Both fluoxetine and its metabolite norfluoxetine act by selectively inhibiting the reuptake of serotonin in the neuronal presynaptic membrane, thereby enhancing the effect of this neurotransmitter" (Word Heald: 2007).

This allows molecules a facility to complete inhibitory functions by reacting the neurotransmitter at brain, which means a neuronal stimulation that in a chemical perspective results in happiness. At the time, this is a scientific argument that can be recognized as a logical support, which arises from a cause-and-effect relationship between chemical concepts to justify the efficiency of the drug.

Hence, the scientific impact on the solution of mental disorders that affect individuals and society in different axes is seen in a positive panorama. This, since, identifying a deficiency in levels of serotonin at the organism and using medicines with



hydrocarbon origin of characteristic 'Selective Inhibitors of Serotonin Reception' to block the reabsorption of this, redirecting it to enhance the electrical communication between neurons (Pérez, Speranza, & Tamosiunas, 2016).

As consequence, according to literature its able a management of depressive disorders, obsessive compulsive disorders and bulimia. In this way, it is possible to understand the scope of a reuptake process (redirection of the impact of the neurotransmitter) applied to medicine to have an immediate effect related to mental, emotional and physiological complications (Word Heald, 2007).

Moreover, to what extent the positive effects on drug application may involve compensation methods and adverse consequences? Ergo the benefits in patients treated with fluoxetine in relation to adverse effects and experimental approach.

Research that addresses the study of the behavioral effects of fluoxetine in ... animals subjected to stressful situations have shown an improvement in behavior after chronic treatment with this drug ... in rats subjected to the paradigm of fear conditioned by

electric shock ... a decrease of the time they remain immobile ... after previous exposure to a cat ... fluoxetine reduces the amount of vocalizations emitted by rat and guinea pig pups in the maternal separation test, which measures the anxiety level of exposed pups (Oyarzabal, 2007).

With the aforementioned appointment, it can be seen how, in a scientific method during the experimentation phase, animals such as mice were adapted to similar contexts such as human beings, to recreate an environment related to social concerns and stress; where electrical sensors quantify the neuronal synapse in the energy exchange, evaluating the variables before and after the application of the drug. A fact that in the twentieth century with pioneering neuropsychiatric pharmacology, was questionable and unorthodox, (Healy, 2012). Likewise, contraindications such as anxiety, nervousness, sleep disorders, fatigue, asthenia, sweating, tremor, anorexia, diarrhea, dizziness, vertigo and nausea; have been related to experimentation in animals and a bias based on the dosage of the drug (Rosenteins, 2011). In other words, adverse symptoms related to limitations seen in



experimentation have an impact on the image.

Furthermore, at the end of the 20th century, after various contexts such as the Vietnam War, Afghanistan, the massive registration of serial murderers, and even the post-traumatic stress that the population suffered; the sciences associated with mental health reaffirmed its importance. Due to this, interest is put in the ability of pharmacology to respond to these social conventions. Afterwards Prozac has a leading role, which, however, was questioned in several trials because of the facts mentioned in the previous paragraph. Noting: "efectos secundarios que observa en los pacientes a... finales de los años ochenta... incrementa el riesgo suicida en las primeras semanas de tratamiento lo decide un tribunal de Kentucky y no la Comunidad científica" (Soto & Villareal , 2015).

This quote reflects a controversial position between the advantages of a cure with continuous dosing and guided by a doctor, as opposed to the social precepts based on the fear of suicide. Therefore, it can be seen how, to some extent, society from a community perspective can, in some contexts, overcome the Scientific Academy.

However, how viable is the application of a logical judgment from social precepts, but not from the scientific argument?

Finally, the present trial was able to explore different perspectives that arise around Fluoxetine; demonstrating how the social impact is not completely independent of the scientist to validate its application. Initially, a scientific argument could be seen that explains the impact of 'Selective Serotonin Reception Inhibitors' for the use of this neurotransmitter in the synapse and its result: "happiness". In other words, starting from a molecular justification to treat mainly depression, obsessive compulsive disorder.

Later, another scientific aspect was taken into account, such as methodology, to address a limitation in experimentation due to the difficulty of recreating human emotions in animals. This calls into question the overall efficacy of the drug, creating a debate about contraindications as a result of the inability to fully interpret brain processes and their functional or personality consequences. On the other hand, reference was made to the impact of the context and society to validate scientific knowledge, this means evaluating the efficacy of a drug not only taking into account the scientific and



logical argument; but taking into account the needs of society. Therefore, a relationship between science and society to evaluate the quality of a medicine becomes evident.

Since December 2019, SARS-CoV-2 has been spreading around the globe. More than seven million infections have been registered worldwide, and more than 400,000 people have died from the disease. When treating severely ill patients, Remdesivir is still the only drug option that has been shown to have a positive effect on the course of the disease (Maximilians, 2019). The zoonotic coronavirus SARS-CoV-2 and the resulting COVID-19 pandemic impressively show the global threat potential of a newly emerging pathogen. More than one million people have died so far from the current outbreak, and the proportion of infected people was estimated to reach more than 10% of the global population, with still unknown fatality rates. Because of the pressing burden on national health systems and economic losses, safe and efficient treatment strategies are urgently required. Developing a vaccine is a high priority. However, the rigorous testing and

extensive clinical trials are time-consuming processes (Baldin, Cotelli, & Guarino, 2020).

Disasters, including earthquakes, wildfires, terrorist attacks, and infectious disease outbreaks, are catastrophic events that expose individuals to stress, disrupt community routines and dynamics, undermine infrastructure and businesses, and result in economic losses for a significant period (Kuntz, 2019).

Other substances that are ideally more effective are therefore urgently sought after, and scientists around the world are working hard to pinpoint them. However, the problem is that new drugs have to undergo various stages of clinical trials before being approved for use on patients, which is a very time-consuming process.

## **2. METHODOLOGY**

The study includes fifteen narratives of clinical diagnostic. This study is based on a small town of Ecuador. The project population includes the population living in the city. The control cohort consisted of people who used Prozac drugs for fifteen days during 2019 were excluded. While reading the material found in the narrative. We



forged our research questions. Based upon the research questions, we wanted to consider how best to approach them. It was necessary made those: Rationale of the Study: The rationale of this study grew out of general concern for the perceived rigor and quality of qualitative research. There was a general focus on what is perceived to be reliable and valid knowledge. It includes a conceptually rich methodology. where the methodology is analytically more rigorous coding, detailed step-by-step procedure clearly outlined, verification of data analysis, etc (Johnson & Christensen, 2014).

“From a very young age I have felt abandoned. I was barely six years old, my mother left me in the care of my grandmother, I have never heard from her again. When I eighteen, I made a commitment, I have a girl. Despite being an accountant, I have always felt that I am less than my husband, I look fat and useless, that's why I got depressed and decided to visit the doctor who advised me to treat a psychiatrist. I have been feeling fine consuming 20 milligrams of Prozac by fifteen days. The pandemic happened and it made me depressed again. I was afraid of getting infected, so I decided to take my life. My

husband saved my life, but more than him, the drug Prozac”. (Woman)

“At sixteen I had surgery on a fear of the brain, apparently it was fine, but the only girlfriend I had left me, since then I have been very depressed. My treating doctor transferred me where a psychiatrist was doing well. But in this time of confinement I have become so depressed that I wanted to kill myself. My mother avoided it and we visited my psychiatrist, I submitted to prozac for fifteen days. At first I had dizziness but I managed to stabilize myself and I am calm” (Young).

“I have felt neither sadness nor joy for what is happening to me. Before the pandemic, a lot of things were stolen from my apartment; I sat and watched, nothing more. I have not been able to sleep. Through social networks, I contacted someone who was in charge of giving psychological first aid. We talked several times and I contacted a doctor, he evaluated me and prescribed Prozac for fifteen days in a dose of twenty milligrams. At first I felt strange, today I am well receiving therapy and general medical attention”. (Adult)



Interviews: Interviews are a very common methodological approach within narrative research. They provide a way for the researcher and participant to engage in rapport to capture the testimony and provide meaning of that testimony. This provided the primary means by which I would conduct my narrative component of this study (Riessman, 2008).

The three narratives compile the stories of a sample of fifteen patients given Prozac that coincide in age and gender ranges. Especially in symptoms of anxiety, depression, fear of dying and at the same time wanting to die as an escape from being infected and finally those who seem that nothing is wrong.

### **3. RESULTS**

Pathak, Jena, & Sanjay (2013:192) "Qualitative research focuses in understanding a research query as a humanistic or idealistic approach. It is the process of collecting, analyzing, and interpreting non-numerical data, such as language. Qualitative research can be used to understand how an individual subjectively perceives". That investigation included both a qualitative part that was narrative in design as well as a philosophical part that

was epistemological in conception. Following the pilot study, it became clear that this approach allowed for great depth to understanding and evaluating narrative. It also enabled me to gain practical experience conducting narrative patients, if even in part, which enhanced my own understanding of the area and enabled me to provide a deeper evaluation than otherwise (Johnson & Christensen, 2014).

Finally, the present trial was able to explore different perspectives that arise around Fluoxetine; demonstrating how the social impact is not completely independent of the scientist to validate its application. Initially, a scientific argument could be seen that explains the impact of 'Selective Serotonin Reception Inhibitors' for the use of this neurotransmitter in the synapse and its result: "happiness". In other words, starting from a molecular justification to treat mainly depression, obsessive compulsive disorder.

### **4. DISCUSSION**

There were relationship investigation between the methods were differences for example Amitai, Chen , & Bari (2018:2) "Although serotonin-specific reuptake inhibitors (SSRIs), and in particular



fluoxetine, have revolutionized the treatment of depressive and anxiety disorders, there is a sizable minority of patients who do not improve during the course of treatment". In this exploratory study the measurement of personality in psychiatric settings may contribute to the understanding of treatment response and have clinical utility.

Molla, Sohel, & Shutter (2020:2) Prozac or "Fluoxetine is FDA-approved for major depressive disorder (age eight and older), obsessive-compulsive disorder, panic disorder, bulimia, binge eating disorder, premenstrual dysphoric disorder, bipolar depression, and treatment-resistant depression when used in combination with olanzapine. It also has several non-FDA approved indications".

This project aims to reduce the serious outcomes of COVID-19 infection by preventing or inhibiting the cytokine storm associated with organ failure, respiratory failure and death. Participants will be monitored daily for COVID-19 symptoms and weekly for side effects and tolerance of Prozac (Mccullumsmith, 2020). That investigation included both a qualitative part that was narrative in design as well as a

philosophical part that was epistemological in conception. The narratives compile the stories of a sample of patients given Prozac that coincide in age and gender ranges.

## **5. CONCLUSIONS**

This investigation was necessary to prevent serious outcomes, especially suicide. It is a strategy to prevent COVID-19 infection specially. Many people thought that had COVID 19. Patients who are presumptively depression for COVID-19 will be entered into the study and given the option to start the medication Prozac. The testimonies of patients who were treated with Prozac were used after developing a clinical picture of stress, anxiety and depression as a consequence of the confinement of the pandemic.

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