

The relationship between social stigma and suicidal behaviour in patients with first episodes of psychosis

FINAL DEGREE PROJECT

Acute Psychiatry Department

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"The worst part of having a mental illness is people expect you to behave as if you don't." Arthur Fleck

1.ABBREVIATIONS

DSM-5: Diagnostic and Statistical Manual of mental Disorders

XSMA: Xarxa de salut mental i addicions

EIPP: Equips d'Intervenció Precoç a la Psicosi

UHA: Unitat d'Hospitalització d'Aguts

PHIMJ: Parc Hospitalari Martí i Julià

IAS: Institut d'Assistència Sanitària

IdibGi: Institut d' Investigació Biomèdica de Girona

CEIC: Comitè d'Ètica d'Investigació Clínica

INE: Instituto nacional de Estadística

FEP: First Episodes of Psychosis

IQ: Intelligence quotient

CHR: Clinical High Risk

DUP: Duration of Untreated Psychosis

WHO: World Health Organization

IQR: Interquartile Range

DISC-12: Discrimination and Stigma Scale

CDSS: Calgary Depression Scale for Schizophrenia

PANSS: Positive and Negative Syndrome Scale

SUMD: Scale Unawareness of Mental Disorders

BHS: Beck's Hopelessness Scale

BIS-11: Barratt Impulsivity Scale

2.ABSTRACT

Background: Suicide is a human tragedy, according to the WHO it kills 800,000 people a year, or what is the same, one person every 40 seconds. It is one of the leading causes of death in patients who are affected by schizophrenia spectrum disorders, in which the rate of attempted suicide ranges from 10-50%. People who suffered schizophrenia have had suicidal ideation at least once during their pathology, and their estimate suicide rate is 579/100,000. The highest rates were shown in recently diagnosed subjects (≤5 years from diagnosis). Social stigma is the product of several processes of stereotyping, distancing and segregation, degradation labelling, discrimination, which generally occur in a context of asymmetric power. Data available indicates that perceived and experienced stigma as well as self-stigma are phenomena concerning a high percentage of patients with schizophrenia spectrum disorders. An average of 64.5% of patients had perceived stigma, 55.9% had experienced stigma and 49.2% reported alienation (shame) as the most common aspect of self-stigma. This may act as a risk factor of committing suicide in these patients but is still not well studied.

Objective: The main objective of the study is to determine the relationship of the social stigma on suicide behaviours in patients with first episodes of psychosis

Study Design: A cross-sectional observational study that will be carried out in the *Xarxa de Salut Mental i Addicions (XSMA)* of the region of Girona between January 2020 and January 2023

Participant: The study will be formed by patients in first episodes of psychosis considering the diagnosis criteria of DSM-5. When the participants present a first psychotic episode, and they are hospitalized, they will be followed by the referring psychiatrists of the *Equips d'Intervenció Precoç a la Psicosi* (EIPP) or of the *Unitat d'Hospitalització d'Aguts* (UHA), of *Parc Hospitalari Martí I Julià* (*PHMIJ*). The selection will be done chasing a consecutive no probabilistic model.

Key words: suicide, suicidal behaviour, social stigma, schizophrenia, psychotic episode

3.INTRODUCTION

3.1 SCHIZOPHRENIA

The term schizophrenia refers to a pathology that is characterized by presenting positive, negative, cognitive and affective symptoms. It is a chronic and variable disorder (1).

Schizophrenia is one of the most mysterious mental disorders and involves a tremendous cost both in relation to human suffering and in terms of social spending, since it is associated with a disability that interferes with both educational and work performance (2).

It has been seen that patients with schizophrenia have more cardiometabolic abnormalities in addition to inflammatory processes and accelerated aging, which leads to a shortening of their life between 12-15 years (1). They are also 2 to 2.5 times more likely to die at an earlier age than the general population (3).

We must also bear in mind that these patients suffer from stigmatization, discrimination and violation of their human rights (3).

Epidemiology

The prevalence of schizophrenia is between 0.3-0.7% throughout life and is higher in men (1,4). It is estimated that it affects 21 million people worldwide (3). It has a higher incidence in low-level population and in migrants as well as it has been seen that in men there is more precocity in the appearance of the pathology (1,4).

In addition to having a worse response to pharmacological treatment, they have a worse prognosis than women. In case the negative symptoms prevail and are of longer duration the incidence will be greater in men (1,4).

On the other hand, if what prevails is the affective clinic and with short episodes, we will have equivalence between the two sexes and will have a better prognosis than the previous ones (1,4).

Etiopathogenetic

Regarding the aetiopathogenesis of schizophrenia we find both genetic and environmental factors as well as the hypothesis of dopamine and other neurotransmitters, that of neurodevelopment and structural and functional neuroimaging (1).

<u>- Genetic factors:</u> it has been seen that there is a clear component of the pathology that is inherited, and this has more importance than the environment (80% vs. 20%). Studies show that if there are affected relatives there is more probability of suffering from it and it increases the greater the proximity of these (1). If one of the parents suffers it, the probability that the offspring will also do so is 13% and if both are the risk increases up to 20% (5).

<u>-Environmental factors</u>: within this group we find the date of birth, place of birth and seasonal effects as well as infectious diseases, complications during pregnancy and childbirth, substance abuse and stress (5).

One of the best documented risk factors is obstetric complications, which has been found to predict worse academic performance in the offspring of patients with schizophrenia.

The consumption of substances and more specifically that of cannabis is another that has been well studied, and it is known that excessive consumption of this is frequently associated with increased risk of psychosis and cognitive impairment (6).

Other factors that we find within this group are migration, a history of sexual abuse and head trauma (1).

<u>-Hypothesis of dopamine and other neurotransmitters</u>: the main hypothesis on neurotransmitters is that of an imbalance of dopaminergic function as a primary neurochemical alteration (1).

According to the postulates of this hypothesis, there would either be an increase of dopamine or in the amount or sensitivity that would produce the symptoms of schizophrenia (7). The two dopaminergic pathways to be noted would be: the mesolimbic (projected from the ventral segmental area from the mesencephalon to some limbic areas such as the Accumbens, which is part of the reward circuit) where excess dopamine would produce positive symptoms (psychotic state).

The second route would be the Mesocortical (projections from the ventral tegmental area to the ventromedial and dorsolateral prefrontal cortex), which has been related to the regulation of emotion and affectivity, so a deficit in this path would result in negative symptoms and cognitive as: alteration of attention, working memory, executive function, flexibility of thought and affectation of social cognition (1,7).

The proof of this is that antipsychotic medications by blocking the dopaminergic system are effective against delusions and hallucinations but have less effect on cognitive and motivational disability (2).

It has also been shown that there are other neurotransmitters that are involved such as glutamate and serotonin (8).

-Alteration at structural and functional level: with the use of imaging tests we can observe certain abnormalities that occur during the disease. Even so, one that is specific to schizophrenia has not been found, so it is not possible to include them in the diagnosis of it.

Using functional tests such as PET and SPECT it has been observed that there is a decrease in brain metabolism as well as in blood flow (1). MRI has shown that there is a selective reduction in the volume of grey substance of the inferior prefrontal cortex, hippocampus and tonsil in patients with schizophrenia. It has also been seen that over the years there is an increase in ventricular volume (9). There is more correlation between the abnormalities observed in imaging tests with cognitive performance than with the severity of symptoms (10).

<u>-Hypothesis of the neurological development:</u> according to this hypothesis there would be an early "injury" in the developing brain that would be the result of the interaction of genetic and environmental factors with normal processes of development in adolescence or in early adulthood which would be the onset of schizophrenia (11).

It seems that these neurodevelopmental abnormalities could begin in the uterus during pregnancy at the end of the first trimester or at the beginning of the second. These developmental alterations lead to the activation of pathological neuronal circuits that would lead to the apparition of symptoms in adolescence or early adulthood (12). It seems that as the developing brain assumes new and more complex functions the impact of the pathology of neurodevelopment would become evident (11).

Although currently schizophrenia is not included in DSM-5 in the pathologies of neurodevelopment, most researchers have to provide it and include it in this group.

Clinic

Before the first episode of schizophrenia there are usually a series of prodromal signs and symptoms for months or years that are usually diagnosed later.

During the disease, behaviour, thinking, cognitive and motor function will be affected, as well as having a negative impact on their social and work life.

When identifying an episode, what most attracts attention is usually the psychotic symptoms, delusions and disorganization of thought, which concludes in extravagant behaviours that lead to the loss of contact with reality.

There is a large group of patients who will present negative symptoms that will be the most debilitating in the long term.

The difference between positive and negative symptoms is that:

- <u>Positive symptoms</u> reflect the appearance of phenomena that were not present in the past.
- <u>Negative symptoms</u> reflect the loss of previously acquired skills or characteristics.

Table 1. Positive and negative symptoms:

Positive symptoms	Negative symptoms
Hallucinations	Poverty of language and thought
Delirious ideas	Thought blocks
Extravagant or disorganized behavior	Affective blunting or flattening
Catatonia	Social withdrawal
	Carelessness
	Apathy
	Anhedonia
	Abulia

Diagnostic

The diagnosis of schizophrenia is done according to the diagnostic criteria of DSM-5 and it is done by exclusion. Previously in the DSM, there were subtypes to classify, but today are no longer used.

Table 2. Diagnostic Criteria for schizophrenia disorder. Obtained from (4).

- Two (or more) of the following symptoms, each of them presents for a significant portion of time over a one-month period (or less if treated

successfully).	At least	one of them	must be (1), ((2), or	(3):
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1	Delusions.
2	Hallucinations.
3	Disorganized speech (eg. Frequent disintegration or incoherence)
4	Very disorganized or catatonic behaviour.
5	Negative symptoms (eg. Diminished emotional expression or abulia)

- For a significant portion of the time since the onset of the disorder, the level of functioning in one or more major domains, such as work, interpersonal relationships, or personal care, is well below the level reached before the onset (or when it begins in infancy or adolescence, the achievement of the expected level of interpersonal, academic, or occupational functioning fails).
- Continuous signs of the disorder persist for a minimum of six months. This six-month period must include at least one month of symptoms (or less if successfully treated) that meet Criterion A (e.g., active phase symptoms) and may include periods of prodromal or residual symptoms. During these prodromal or residual periods, signs of the disorder may be manifested only by negative symptoms or by two or more symptoms listed in Criteria A present in an attenuated form (e.g., bizarre beliefs, unusual perceptual experiences).

Schizoaffective disorder and depressive or bipolar disorder with psychotic characteristics have been excluded because

- 1 No major maniac or depressive episodes have occurred concurrently with active phase symptoms.
- If mood episodes have occurred during active phase symptoms, they have been present for only a fraction of the total duration of the active and residual periods of the disease.
- The disorder can't be attributed to the physiological effects of a substance (e.g., a drug or medication) or to another medical affliction.
- If there is a history of an autism spectrum disorder or early childhood communication disorder, the additional diagnosis of schizophrenia is only

made as long as the delusions or hallucinations are prominent, in addition to the other symptoms required for schizophrenia, are also present for a minimum of one month (or less if successfully treated).

Prognostic factors

Prognostic factors are included in Table 3.

Table 3. Obtained from (1).

Bad prognosis factors

Male

Early onset

Prolonged period of untreated illness

Severe cognitive impairment

Severe negative symptoms

Treatment

The treatment of schizophrenia is divided into two steps: the acute moment in which the objective will be to suppress the clinic and return to the premorbid level of functioning. For that we will use antipsychotics and the clinic which will improve will be the positive symptoms.

The other part will be the maintenance, here the objective will be to prevent new episodes, considering that almost half of the patients will relapse during the next year (13). In this part of the treatment it is essential to ensure that they comply with the guidelines and the use of prolonged-release medication could be considered.

The pharmacological treatment will be supplemented with psychosocial interventions such as individual psychotherapy, cognitive rehabilitation or work in social skills both in the acute moment and in maintenance.

Early intervention in these patients is crucial and can still prevent the apparition of the pathology in high-risk individuals and in the case of those who have already suffered an episode it improves the results. It has been seen that there is almost unequivocal evidence that schizophrenia patients show some degree of cognitive impairment prior to onset of psychosis (6).

It is recommended to start with cognitive behavioural therapy in order to monitor the transition to psychosis and at the same time control the patient's functional deterioration (14).

The main medications used in schizophrenia are antipsychotics. which reduce positive symptoms but have numerous unwanted side effects (table 4) (15).

All current antipsychotics block dopamine D2 receptors with different degrees of affinity which causes a decrease in the activity of dopaminergic neurons thus reducing positive symptoms (1).

Currently the measures for the control of negative symptoms and cognitive dysfunction are limited (16).

Table 4. Main side effects of antipsychotics. Obtained from: (1).

Main side effects of antipsychotics			
Sedation	Anticholinergic effects		
Parkinsonism	Dystonia		
Akathisia	Neuroepileptic Malignant Syndrome		
Delayed dyskinesia	Endocrine		
Cardiac	Agranulocytosis		

3.2 SUICIDE

Suicide is defined as the self-inflicted death with evidence (either explicit or implicit) that the person intended to die (17).

The latest data available (2017) in the province of Girona provided by the INE indicate that 61 people died as a result of it, of which 77% were males (18). If we look at the data in Catalonia 504 people committed suicide and in the whole country 3679, of which 73% are males (18). Globally every year almost 800 000 people commit suicide, which supposes a "global" death rate of 16 per 100 000, which equates to a death every 40 seconds. Suicide occurs throughout the lifespan and is the second leading cause of death among 15-29 year olds globally (19,20).

It is very difficult to find a single reason why people commit suicide. However, most cases occur in circumstances of impulsiveness and at that time having access to certain means, such as firearms or pesticides, can lead to suicide (20).

There are many factors that intervene in suicidal behaviour among which we highlight social, cultural and psychological reasons, but the stigma associated with both mental disorders and suicide itself leads to many not using the help they need when feeling unable to do so. Although the evidence that many of these deaths are preventable, suicide is not among the highest priorities of governments and policy makers (20).

The suicide risk must be considered as a continuum that includes:

- <u>Suicide attempt</u>: self-injurious behaviour with a nonfatal outcome accompanied by evidence (either explicit or implicit) that the person intended to die.
- Aborted suicide attempt: potentially self-injurious behaviour with evidence (either explicit or implicit) that the person intended to die but stopped the attempt before physical damage occurred.
- <u>Suicidal ideation</u>: thoughts of serving as the agent of one's own death.
 Suicidal ideation may vary in seriousness depending on the specificity of suicide plans and the degree of suicidal intent.
- <u>Suicidal intent</u>: subjective expectation and desire for a self-destructive act to end in death.
- <u>Lethality of suicidal behaviour</u>: objective danger to life associated with a suicide method or action. Note that lethality is distinct from and may not always coincide with an individual's expectation of what is medically dangerous.
- <u>Deliberate self-harm</u>: wilful self-inflicting of painful, destructive, or injurious acts without intent to die (17).

The long-term risk in subjects with psychiatric disorders goes from 3.4% to 6.2% increasing as the number of mental disorders does (21). It is estimated that 90% of people who committed suicide could have been diagnosable from a mental illness, and approximately 60% of them are related to depressive disorders. Other psychiatric conditions related to this are substance abuse, schizophrenia and personality disorders (22).

3.2.1 Suicide assessment

A psychiatric evaluation is the essential element of the suicide assessment process (17). During the psychiatric evaluation the objectives will be:

- 1. Identify specific factors and characteristics that can modify the consumption to be able to do so in acute and continuous interventions
- 2. Approach the patient to establish a safe environment both in the acute moment and for the future treatment
- 3. Develop a differential diagnosis to be able to influence the treatment planning even more.

The information required is summarized in **Table 5**. The evaluation will vary depending on the place and capacity or disposition of the patient when granting the information and the availability to access previous contacts with the patient or other sources such as other mental health professionals medical or family records. The sources of information can be different in addition to the patient himself/herself, we will include the support network of the patient (family and friends) and other health professionals who know him, he could also enter the personal group of community residence or members of the patient's military command.

Documenting the suicide assessment is essential. The most common is that both the evaluation of suicide and its documentation occur after an initial evaluation or in the cases of patients in treatment, when suicidal ideas or behaviours arise or a dramatic and unforeseen improvement in the condition of the patient. In the cases in which the revaluation is hospitalized, it also occurs with changes in the level of precautions or observations, when the passes are issued or in the evaluation for discharge. In addition to the documentation of patient information, it is also convenient to do so with the family or other significant people.

Table 5. Characteristics evaluated in the psychiatric assessment of patients with suicidal behaviour (17).

Current presentation of suicidality

- o Suicidal or self-harming thoughts, plans, behaviours, and intent
- Specific methods considered for suicide, including their lethality and the patient's expectation about lethality, as well as whether firearms are accessible
- Evidence of hopelessness, impulsiveness, anhedonia, panic attacks, or anxiety
- Reasons for living and plans for the future
- Alcohol or other substance use associated with the current presentation
- o Thoughts, plans, or intentions of violence toward others

Psychiatric illnesses

- Current signs and symptoms of psychiatric disorders with particular attention to mood disorders (primarily major depressive disorder or mixed episodes), schizophrenia, substance use disorders, anxiety disorders, and personality disorders (primarily borderline and antisocial personality disorders)
- Previous psychiatric diagnoses and treatments, including illness onset and course and psychiatric hospitalizations, as well as treatment for substance use disorders

History

- Previous suicide attempts, aborted suicide attempts, or other selfharming behaviours
- Previous or current medical diagnoses and treatments, including surgeries or hospitalizations
- Family history of suicide or suicide attempts or a family history of mental illness, including substance abuse

Psychosocial situation

 Acute psychosocial crises and chronic psychosocial stressors, which may include actual or perceived interpersonal losses, financial difficulties or changes in socioeconomic status, family

- discord, domestic violence, and past or current sexual or physical abuse or neglect
- Employment status, living situation (including whether or not there are infants or children in the home), and presence or absence of external supports
- Family constellation and quality of family relationships
- o Cultural or religious beliefs about death or suicide

Individual strengths and vulnerabilities

- o Coping skills
- Personality traits
- Past responses to stress
- Capacity for reality testing
- Ability to tolerate psychological pain and satisfy psychological needs

3.2.2 Suicide and schizophrenia

Suicide is one of the leading causes of death in patients who are affected by schizophrenia spectrum disorders, in which the rate of attempted suicide ranges from 10-50% (23,24). Suicide ideation is a predictor of suicide and one of the basis of the suicide prevention in schizophrenia (25). People who suffered schizophrenia have had suicidal ideation at least once during the course of their pathology, and their estimate suicide rate is 579/100,000 (26). Being the risk of suicidal death during their life estimated about 5%, which is significantly higher than the general population risk of suicide (27). The highest rates were shown in recently diagnosed subjects (≤5 years from diagnosis) (26). Compared with the general population it has been seen relatively higher risk in younger age groups of patients with schizophrenia (28).

In addition, suicide risk is twice as high at the onset of illness than in the later course (29). Although these rates are higher than in general population they are lower than others affected by another mental illness (26). A fact we should take into account is that there has been a reduction of suicide in patients with schizophrenia as well as in general population, but the gap between them has increased in recent decades (30).

Even though suicide is a cause of death in these patients there are more common natural causes of death than unnatural, with cardiovascular disease and cancer being the most common ones (28). However looking for the specific causes of death in this same study it was seen that suicide was the one which caused more deaths in males and cardiovascular disease in females (28). Even if suicide is more common in schizophrenia the real number dying from it is low, which shows that suicidal behaviour is independent to the main psychotic disorder and the importance of other external risk factors. Of these we could mention personality traits as aggression and impulsivity and gender, genetic and environmental factors (31). Assessing suicide risk of an individual is a very hard task in everyday work due to the compilation of factors involved in the process of suicide and the limitations in predictors. All attempts have produced numerous false negatives and far too many false positives to be useful in identifying which schizophrenic patients need extraordinary suicide prevention precautions (32). It is necessary to study to get tools which can work as predictors to assess prevention. However few clinical suicide assessment tools live up to reasonable expectations (33).

Risk factors of suicide in schizophrenia

The point of greatest risk of suicide in patients with schizophrenia is considered to be during the first year of the disease (34). Most suicides occur in this period of the disease (35). Although it must be taken into account that the risk is considered high at any time during the course of the pathology (36). This risk is considered to be especially high in relation to hospitalization, it is estimated that about one third occur within the week after discharge (37) so it will be imperative to assess the risk at admission and carry out adequate follow-up and treatment at hospital discharge.

1- Suicide attempt

The history of suicidal behaviour is considered the main risk factor for committing it (38) and having it significantly increases the risk in patients with schizophrenia (39–41).

The prevalence of the suicide attempt ranges from 20 to 40% (42) and the methods used are more frequently violent and lethal with respect to the general population which denotes greater intention to die (37,43).

2-Affective disorder: depression

The presence of derangement disorder is one of the leading causes of death by suicide (44). In addition, more than half of the patients could be diagnosed with depression at the time of suicide (41). We must bear in mind that intermittent depressive disorders are a common comorbidity in patients with schizophrenia (56). As a trigger for suicidal behaviour in vulnerable patients (43) and the fact that they have a history of them presents a strong association (39).

In the prodromal phase of the disease depressive symptoms were associated with suicidal tendencies during the next 12 months (45). These are also associated with the risk of lifetime as well as of the present (46,47) with higher rates both in the first episode and in future relapses of psychosis (48,49). Therefore, early intervention on depression at this time in the pathology is crucial to minimize ideation and attempts and thus death by suicide, since this period is considered high risk of suicide (50).

So, it is very important to assess the symptoms of depression and in case there is to treat it. The problem is that it can often go unnoticed because it is confused with the negative symptoms of schizophrenia or due to neuroleptic side effects (51).

The sense of hopelessness is an important risk factor in coexistence of depression or in itself (48,52). Another author has found that hopelessness was associated with suicidal ideation in people with FEP and this symptom acted like suicide predictor (50).

3- Comorbid use of substances

Substance abuse is a common comorbidity among patients with schizophrenia, about 50% have a disorder related to substance abuse at some time in their life (31). Drug abuse greatly increases the risk of suicide (39).

Regarding alcohol abuse, although data is inconclusive, there is stronger evidence suggesting that alcohol abuse is a predictor of suicide (53).

Alcoholism is found in one fifth of patients with schizophrenia who died from suicide, and the highest values were found in middle-aged men (36).

Another substance that is of very frequent consumption within this group of patients is cannabis. Above all it is related in the first episodes of the disease and is related to a lower age of onset of non-consumers and those who abuse alcohol (54).

The comorbidity of substance abuse could have consequences of the type of non-compliance with medication and abandonment of treatment (55), loss of control, economic problems and violence. In addition, it has also been related to impulsivity and suicide (56). It has been seen that patients with severe mental illness who had substance abuse have higher rates of anxiety, depression and hallucinations, more days of hospitalization and more likely to present themselves as hostile and aggressive (57). There is also association with violent crimes and substance abuse (46).

4.- Psychosocial factors

Within the personal and social factors, we find numerous risk factors.

Cognition and education

A high IQ has been associated with higher risk (58,59). A high level of education as well as a high cognitive functioning are associated with higher risk in FEP patients (24,39,50,60) which could be explained by the fact of perceiving a greater loss due to the disease. It may be because patients with higher education feel more stigmatized and ashamed when they develop a mental disorder (61) and this leads to a higher suicide risk (62).

Insight

Insight, the patient's awareness of his illness and the need for treatment as well as the consequences of the disease has been associated with a higher risk of suicide if it is related to hopelessness (63). Although there are some authors who point out that a good knowledge of the disease with interventions aimed at it can reduce the risk of suicide (63). In fact, it has been seen that early perception increases the risk but a good perception after one year (due to psychoeducational interventions) decreases the risk, which can indicate that the

perspective is qualitatively different at the time of diagnosis than at the year of treatment. Early compression can lead to a negative change in self-image or awareness of the consequences of having a mental disorder and the stigma you carry with it (25).

Others

Adherence to treatment that is also related to disease awareness is crucial to reduce both the risk of suicide and suicide itself (64), so the lack of adherence is an important risk factor (39).

Social factors such as living alone or in a family and the experience of a recent loss have also been seen to be associated with a higher risk, so having social support such as the family is considered a protective factor (65).

In most cases, there is concern about loneliness (66), and there is more risk in patients who are afraid of losing their social position or partner due to illness (61). The risk of death due to an unnatural cause is reduced by up to 90% when there is family involvement in the first contacts with mental health care services (67). It would also be useful to be able to integrate families and caregivers into the FEP intervention programs (60).

5.- Characteristics of the illness

Psychotic symptoms & suicide risk in schizophrenia

As previously explained, schizophrenia is a pathology characterized by its heterogeneity and the variety in the presentation of clinical symptoms. Of these, depression and hopelessness that, although not the predominant symptoms of the picture, are important risk factors, as explained above.

Symptoms such as agitation or motor restlessness and how anxiety and fear of mental breakdown (39) of depression have been associated with suicide.

Regarding the positive symptoms of schizophrenia, it has been found that the greater the number of positive symptoms, the greater the risk of suicide (58) as well as the association of suicide attempts in the context of hallucinations (31).

Psychotic Symptoms in FEP and Suicide

There is no consistent evidence that negative symptoms can increase suicidal experience in CHR (24). In fact, there are authors who point out that the most prominent negative symptoms such as deficits in emotional expressivity may have a diminished ability to present motivational anguish, which can reduce the feeling of hopelessness and with increase it the suicidal ideation (50). Some authors found that people with suicidal ideation in the prodromal phase have more symptoms both positive and negative than those who did not present ideation (25).

In conclusion, the risk factors in schizophrenia seem to be less related to the typical symptoms of psychosis such as delusions and hallucinations but more to depressives such as hopelessness and worthlessness (39).

Age of Onset

The relationship between the appearance of psychotic symptoms and the risk of suicide is complex. A study conducted in a psychiatric unit for adolescents indicated that most suicide attempts were from patients diagnosed with disorders of the schizophrenia spectrum (25). Studies indicate that the age of onset is an independent factor for suicide, with a risk that increases 1.1% per year (60,66). People who experience a subsequent onset of psychosis have more difficulty accepting it since psychosis interferes with their functioning and previous careers (66).

Duration of Untreated Psychosis (DUP)

The longest DUP is one of the risk factors most frequently recovered in schizophrenia (68). Patients from communities without FEP early detection programs had a higher risk compared to those from "early detection communities", which led to the conclusion that early detection would reduce DUP and the rate of suicidal behaviours (68).

3.3 STIGMA

Stigmatization, understood as a product of several processes of labelling, stereotyping, distancing and segregation, degradation and discrimination, which generally occur in a context of asymmetric power (69).

Data available indicates that perceived and experienced stigma as well as self-stigma are phenomena concerning a high percentage of patients with schizophrenia spectrum disorders. An average of 64.5% of patients had perceived stigma, 55.9% actually had experienced stigma and 49.2% reported alienation (shame) as the most common aspect of self-stigma (70).

Stigma in a mental disorder begins with the labelling of the person suffering from the symptoms of a mental disorder. For this reason, the DSM text avoids the use of expressions such as schizophrenic or alcoholic and uses the phrases of an individual with schizophrenia or an individual with alcohol dependence (71).

Human beings tend to label and classify things and people, and in many cases, this label carries a stigma towards the person. This complex social phenomenon that we summarize under the term stigma does not only affect patients with a mental disorder (72). The concept is also literally applicable to dozens of circumstances ranging from urinary incontinence, leprosy, cancer and mental illness (73).

3.3.1 Public stigma

It is defined as the "reactions of the general public towards a group based on the stigma on that group" (74) and that appears when society approves negative stereotypes and discriminations towards those people such as people affected by a disease mental and that produces person and structural discrimination and consequently its damage.

We label different groups existing in society according to the different characteristics they have. These characteristics may not allow its discriminatory labelling, as is the case of having one-foot size or another, or the colour of a car. However, others that refer to personal traits such as skin colour, sexual orientation or economic income are often related to one's social appearance (74).

The stigma suffered by people diagnosed with a mental illness varies depending on each mental disorder. The social attitudes towards people with schizophrenia are not exactly the same as those related to other syndromes or disorders, such as anxiety or depression (47). Stigma is related to simple traits,

which can be easily identified and related to different types of individuals that society considers to be potentially dangerous: foreigners, sick people, criminals, etc. Specifically, the three aspects that go together and reinforce each other in stigma and that differ in their cognitive, emotional and behavioural aspects stigma are (72).

- a) **Stereotypes**, all those generally wrong beliefs, that a large part of the population has towards a certain social group and end up conditioning the memory and the characteristics of the individuals of the affected group. The result that stereotypes give is that they are very easily known by society and therefore, the population is aware "of the stereotyped group and the expectations towards them" (74). That there is a stereotype does not mean that everyone agrees that they are adequate or not.
- b) **Prejudices**, emotional tendencies, normally negative, whose characteristics are subject to stereotyped beliefs. Many times, the prejudices are tied to people without knowledge and information that can justify what they say, they simply rely on benevolent information thus causing a reinforcement of negative stereotypes and consequently, they feel negative emotions towards these people. ("It's true! All people with mental illness are violent!") (74).
- c) **Discrimination**, development of both positive and negative actions, which involve social distance ("they" versus "us").

Stereotypes affect, within mental disorder, mainly people with serious mental disorders considering, at least, in Western countries these: dangerous, unpredictable, strange, incurable and guilty of their disease. All these ideas are associated with concrete feelings, prejudices, fear or rejection while also transmitting pity or piety, although most of the time maintaining distances with people who suffer mental disorder. This distancing would lead to the third aspect studied where there is a decrease in contact with individuals emphasizing that they are different from us thus creating two imaginary social groups.

Thus, when labelled, unconsciously there is a separation between "us" and "them." This causes society to automatically understand that "we" are not the same as "they", that is, we are different. In the case of mental illness there is a continuous labelling since, for example, when an individual is diagnosed with

schizophrenia and this is known for their environment, they are referred to as a "schizophrenic" instead of referring to it as "a person suffering from schizophrenia." However, when we take this labelling to people suffering from, for example, cancer, the deterioration that this type of disease can entail is not labelled nor is the person either and society will not refer to it as a "carcinogenic" person but as a person suffering from cancer. Therefore, the person diagnosed with cancer will remain immersed in society and consequently will be one of "we", instead, the person suffering from schizophrenia will become directly one of "them." With this exemplification, we can realize that depending on the way we use our language it can end up being a dangerous source of promoting stigma.

3.3.2 Self-stigma

Self-stigma occurs when the components of this stigmatized group turn these negative attitudes towards themselves (74). This stigma consists of the same elements as public stigma. At the moment that a person accepts the stereotype that has been awarded and makes it their own, self-esteem comes into play: "self-prejudice involves negative emotional reactions, especially low self-esteem and negative self-efficacy" (74). In many cases, people suffering from mental illness end up failing in what they propose because of the self-discriminatory behaviour to which they are subjected. The self-stigma is given by the same stigmatized group, thus, those people who suffer from mental illness are aware of the stereotypes to which they are tied and therefore, end up thinking that they are useless people for society. Nevertheless, there are many people who suffer from mental illness that are not defined by the stereotypes and prejudices that these people suffer and consequently do not suffer from self-stigma.

Many people who are discriminated against and suffer from public stigmatization do not experience self-stigma, while others do (75). The determining factor of one or another situation is self-esteem: thus, on the one hand, there are people with low self-esteem who are taken and affected by a negative view of the mental illness, thus causing the self-stigmatization of the person. On the other hand, there are people with high self-esteem who suffer from a psychiatric disability and are not affected by society's standards, which leads to strengthening. Normally, people accept stigma because they believe it

is justified and legitimate, appearing negative feelings that involve the individual's belief in not being worthy of having achieved the goals of his life. This leads to shame, social withdrawal and demoralization (72). If they consider the public stigma as illegitimate and unfair, they will have a reaction of outrage which leads to the strengthening of the people who aim to claim to ask for improvements in care and better quality of services. In the special case of mental illness, three special aspects must be included (74).

- Differentiate the self-stigma that causes the decrease in self-esteem,
 with the decrease in self-esteem that occurs in different mental disorders.
- The reaction to stigmatize depends on the severity of the psychotic episodes.
- The reaction to stigmatization that is given by the environment depends on how the person with mental illness perceives this stigma.

In addition, self-stigma and strengthening are related to the fact of making public the mental illness that an individual may have causing a decrease in benefits (increase in self-esteem and have less stress by not having to keep the disease secret) and an increase in costs (social disapproval). That the person is aware of the benefits and costs of revealing his mental illness will lead to the step of making his illness public to his environment or not. Society only speaks and knows the mental illness of violent patients, the psychically ill homeless, refractory to treatment... while society does not know the fact that many people in this society, such as truck drivers, secretaries, teachers, lawyers, doctors and even politicians, suffer from a mental illness, respond to treatment and work and function in society successfully, like any other citizen (74).

There is emerging literature that supports the hypothesis that stigma is a variable that contributes to suicidal tendencies (76). First, in different population studies, it is observed that in those places where shame and low self-esteem are lower, the number of suicides is also lower. In a qualitative study among people with a mental disorder and a history of suicidal crises, most individuals confirmed that stigma had caused them a worse feeling at that time. On the other hand, according to studies, the fact that a person lives with a mental disorder increases statistically, significantly, the possibility that the individual suffers at some time in his life a self-injurious act. Therefore, the risk of suicides

in these people is 4 to 25 times higher than in people who do not have any mental disorder. In addition, there is an increase in the chances of a suicidal act if there is comorbidity (77). Thus, suicidal behaviour is not a random behaviour, but it has long been observed that it was related to different social, psychological and social factors. Biological (78). This behaviour is a fatal outcome that is associated in approximately 90% of cases with the presence of a mental disorder (79) and that of all these 25% were in mental health treatment. In the last year, and 40% had been treated in primary care prior to the suicide act (80). This data suggest that the stigma and discrimination suffered by people with mental illness "are also factors associated with suicidal tendencies" (81).

4 JUSTIFICATION

Suicide is a human tragedy that shows us the deep malaise that the person who commits it is suffering, representing the only way out of an existential problem in the face of the impossibility of finding other effective means of help (82).

The data is overwhelming, according to the WHO, suicide kills 800,000 people a year, or what is the same one person every 40 seconds (20). In addition to the direct cost of living, it causes numerous damage to family members and friends, generating anxiety and feelings of guilt for an incomprehensible fact for them.

Its cost is enormous being the fourth cause in importance of loss of potential years of life (20).

Schizophrenia is the third cause of death by suicide after affective disorders and substance abuse and in turn suicide is one of the leading causes of death in patients with schizophrenia (23,24,44). Especially in recently diagnosed subjects (≤5 years from diagnosis)(26) and younger patients (28).

Among the known risk factors for suicide in schizophrenia in addition to the closeness of the diagnosis and age, we also have sex, with suicide being more frequent in men (18). We know that drug abuse and major comorbid depressive disorder are the main risk factors, but there is still a lot to learn in this area. In addition, we know that suicide for doctors represents a therapeutic and preventive failure, since about half of the victims had consulted their primary care physician in the month prior to their death and three out of four had done so during the previous year (83).

We also know that suicide is preventable, and it is for this reason that it is urgent to expand our knowledge on this subject, in order to create the necessary tools to prevent it.

Social stigma is the consequence of labelling processes, stereotypes, distancing and culminates in segregation, degradation and discrimination (69). It affects up to 64.5% of patients with schizophrenia (70) and may represent one risk factor, but until now it has been insufficiently studied (84). Even so, it has been seen that it is relevant and is related to hopelessness, loneliness and low self-esteem (70). That is why we will carry out this study that will lay the

foundations for the next studies generating the hypotheses that will be the guide for future studies.

In addition, thanks to this knowledge we can not only avoid suicides, but we will act fully on one of the factors that most affects patients with mental disorders in general and schizophrenia, which is the feeling of exclusion. So, if we can achieve the tools to act on social stigma, we will not only be preventing suicide but also improve their quality of life.

5.OBJECTIVES

5.1 MAIN OBJECTIVE

Determine the relationship of the social stigma on suicide behaviours in patients with first episodes of psychosis

6. METHODOLOGY

6.1 STUDY DESIGN

This investigation is designed as a cross-sectional observational study. It will be carried out in the *Xarxa de Salut Mental i Addicions* (XSMA) in the Girona region (Annex 4) between January 2020 and January 2023.

6.2 STUDY POPULATION

The study will be formed by patients in first episodes of psychosis considering the diagnosis criteria of DSM-5. When the participants present a first psychotic episode, and they are hospitalized, they will be followed by the referring psychiatrists of the *Equips d'Intervenció Precoç a la Psicosi* (EIPP) or of the *Unitat d'Hospitalització d'Aguts* (UHA), of *Parc Hospitalari Martí I Julià (PHMIJ)*.

6.3 INCLUSION AND EXCLUSION CRITERIA

6.3.1 Inclusion criteria

- First episodes of psychosis considering the criteria of the DSM-5 who are registered in the community of Girona.
- Individual and legal tutors who agree to participate in the study by understanding and signing the informed consent (Annex 1).

6.3.2 Exclusion criteria

- Individuals who have associated affective disorders established by DSM-5 criteria.
- Individuals suffering from neurodevelopmental disorders established by DSM-5 criteria.

6.4 SAMPLE SELECTION

Participants will be selected when the referring psychiatrist of Emergencies establishes that it is an FEP. The selection will be done following a consecutive no probabilistic model.

People with inclusion and exclusion criteria will be chosen to participate in the study. They will be informed about the objective of the study. The information document for the study (Annex 2) will be delivered. Those who want to participate in the study, will be given the informed consent (Annex 1) to be duly signed and will be visited for data collection.

6.5 SAMPLE SIZE

Our study population will be first episodes of psychosis. According to the data of schizophrenia incidence in our environment, which is 15,2 per 100,000 inhabitants the annual incidence of FEP (85) in Girona region will be 115 cases a year, taking into account that there are 761,632 inhabitants in this province (86). So, if we accumulate 2 years of incidence, we finally have 230 cases.

$$\frac{761.632*15.2}{100.000} inhabitants*2 years = 230 patients$$

Taking data of other studies, we know that the prevalence of stigma is 64,5% and that the suicidal behaviour varies in a range of 20-40%. So accepting an alpha risk of 0.05 in a bilateral contrast with 85 subjects in the first group (not exposed) and 145 in the second (exposed), the power of the hypothesis contrast is 100% to detect how statistically significant the difference between 0.35 of the first group and the 0.7 of the second.

6.6 STUDY VARIABLES AND DATA COLLECTION

6.6.1 Study variables

Response variable

Suicidal behaviour: confirmation of the attempt will be made by a psychiatrist considering the item 8 of the Calgary scale. The psychiatrist of the hospitalization unit who performs the patient's admission (Emergency service or UHA) will inform the referring psychiatrist about this.

Depending on whether the behaviour occurs or not, this variable will be presented as a dichotomous qualitative variable:

- Yes: if participant answers with punctuation of 3 in the scale.
- No: if participant does not meet the criteria explained above.

Explanatory variables

Explanatory variable of interest

Social stigma: The participants during the interview will be evaluated to determine the level of social stigma they are suffering using the DISC-12 scale.

Depending on whether they are stigmatized or not, this variable will be presented as a dichotomous qualitative variable:

• Yes: if the result is 2 or more

No: if the result is under 2

Other explanatory variables

Socio-economic variables: Education. Parents education and occupation. Will be presented as politomic qualitative.

Symptoms of depression: It will be evaluated through the Calgary Scale of depression in schizophrenia. This variable will be presented as a quantitative discrete variable depending on the answers in the questionnaire.

Positive symptoms: they are indicators of the state of psychosis. Will be expressed as quantitative discrete variable. They will be measured using the PANNS scale.

Consumption of drugs: By the consumption during the last year of other drugs such as alcohol, opiates, cocaine or amphetamines. Will be expressed as a dichotomous qualitative variable (Yes/No).

Frequency of drug use: By the consumption of other drugs (cited above). The variable will be expressed as qualitative ordinal, considering the following groups: absence of consumption, daily consumption, once a week/month/year consumption.

Insight: Measures the degree of knowledge of the disease he suffers. It will be measured using the SUMD we will be expressed as a dichotomous qualitative variable (Yes/No).

- Yes: if the average of the punctuation of the items is below 3.
- No: if the average of the punctuation of the items is 3 or above.

Treatment adherence: Measures to what degree the patients are complying with the prescribed therapy. It will be measured by interviewing the patient. It will be expressed as a dichotomous qualitative variable (Yes/No).

Family support: Measures the degree of support that the patient presents with respect to their environment. It will be valued by interview. It will be expressed as a dichotomous qualitative variable (Yes/No).

Hopelessness: It will be measured by Beck's scale of hopelessness. It will be expressed as a politomic qualitative variable:

Minimal: 0-3

• Mild: 4-8

Moderate: 9-14

Severe: 15-20

Impulsivity: It will be measured by the Barratt impulsivity scale. We will be expressed as a sa a quantitative discrete variable.

6. 7 MEASURING INSTRUMENTS

6.7.1 Discrimination and Stigma Scale (DISC-12)

Discrimination and Stigma Scale ("2008 The INDIGO Study Group) (84) allows a detailed evaluation of the perception of discrimination of the individual in very specific areas of daily life. The DISC is a scale based on an interview that assesses experiences of discrimination related to mental health ("being treated unfairly") in key areas of daily life and social participation that include work, marriage, parentality, housing, leisure and religious activity. The DISC has been designed for people with mental disorders.

This instrument is based on an interview and requires the patient to provide an example of each question, if in doubt, to be sure of the answer. The DISC-12 scale assesses stigma and perceived and anticipated discrimination in people with mental disorders. The instrument contains a total of 32 items and is composed of 4 subscales:

 Unfair treatment (evaluates experiences of discrimination of the person studied, 21 items).

- Self-limitation (assesses early discrimination considering the extent to which the individual has limited their participation in social areas, 4 items).
- Overcoming stigma (explore what strategies the patient has to deal with stigma, 2 items).
- **Positive treatment** (evaluates the possibility of experiencing positive discrimination because of your illness or treatment, 5 items).

All items are scored using a 4-point Likert scale that ranges from "nothing" to "much." Higher scores in all or in each subscale indicate greater stigma.

6.7.2 Calgary Depression Scale for Schizophrenia (CDSS)

Calgary Depression Scale for Schizophrenia (CDSS) (87) is an instrument specifically developed to assess the level of depression in schizophrenia, both in the acute phase and in deficit states, while trying to distinguish it from positive, negative and extrapyramidal symptoms that can exist.

It is a 9-item scale, focused primarily on the cognitive symptoms of depression, with a symptomatic intensity graduation of 4 points (absent, mild, moderate, severe). It must be administered by a clinician, after a structured interview and requires prior standardization. For the first 8 the scale itself facilitates the questions for exploration, while the ninth is an observational item for which no specific questions are provided. All items incorporate operational criteria for severity score.

It provides a total severity score of depression, which is obtained by adding the score in each item (from 0 to 3). The scoring range is 0-27. There are no criteria to categorize the severity of depression, being used as a continuous measure of symptomatic intensity. It is valid for any phase of the disease.

To identify the absence / presence of depression, the authors recommend as a cut-off point the score > or = 5. This cut-off point is considered adequate to identify patients at high risk of presenting comorbidity of the depressive type; However, the diagnosis of depressive disorder must be confirmed by the relevant clinical examination.

We will use this scale to assess the symptoms of depression and item 8 specifically for suicidal behaviour.

6.7.3 Positive and Negative Syndrome Scale (PANSS)

The PANSS (88) is considered a useful test to assess severity of symptoms and monitoring of response to treatment. It is a test consisting of 30 items that are scored from 1-absent to 7 considerable presence. It is composed of 4 subscales.

- 1. PANSS-P-Positive (7 items)
- 2. PANSS-N-Negative (7 items)
- 3. PANSS-PG-General Psychopathology (16 items)
- 4. PANSS-C-Compound (Subtract positive negative symptoms)

Development of the interview.

- 1. The patient is encouraged to talk about his illness and his vital situation
- 2. Evaluation of exposed symptoms
- 3. Existence and severity of symptoms
- 4. Assess areas in which the patient has been reluctant throughout the interview, evaluating the patient's conceptual organization.

Patients with a predominance of positive or negative symptoms are categorized using the compound:

- Positive subtype:> 0
- Negative subtype: <0

6.7.4 Scale Unawareness of Mental Disorders (SUMD)

This scale (89) assesses the awareness of the mental disorder. It is a standardized interview that is scored through an interview with the patient.

It consists of three general items to assess the awareness of having a mental disorder, awareness of the effects of drugs and awareness of the social consequences of mental disorder. In addition, there are 17 items that evaluate specific symptoms. From each item of the 17, the degree of awareness and attribution that the patient makes of it is explored.

Two subscales appear; the awareness of symptoms, which is the average of the sums of the scores according to the number of items scored, and the

attribution of the symptoms, which is the average of the scores of the symptoms

that have been evaluated by having the patient awareness of them.

Five test scores are obtained, one for each scale of the three general items, one

fourth for the conscience subscale and one fifth for the attribution subscale.

Both the scores of the general items and those of the symptom scales range

between 1 and 5, so that the higher the score, the less awareness of the

disorder or incorrect attribution.

The 3 items should always be assessed, while the 17 symptoms are only

assessed if they are present. In addition, attribution should be assessed only if

the person shows total or partial awareness of the symptom, that is, if he has

scored between 1 and 3.

It is possible to say that the symptoms of which no conscience is expressed

cannot be assessed in its attribution, in this way the attribution subscale is

partially dependent on that of conscience.

6.7.5 Beck's Hopelessness Scale (BHS)

The BHS (90) was built to assess pessimism in patients with suicidal risk. Beck

and his collaborators built an instrument based on pessimistic statements about

the future that were selected from the descriptions made by the patients.

The scale is composed of 20 propositions definable by true or false that assess

the scope of the negative expectations regarding the immediate and long-term

future. The answers are added to give a score ranging from 0 to 20, with a cut-

off point of 9 or 10 according to the population in which it was validated.

Items that indicate hopelessness are scored with 1 point, and those that do not

indicate it are scored with 0 points. The scores provide a measure of the

severity of hopelessness:

Minimal: 0-3

Mild: 4-8

Moderate: 9-14

Severe: 15-20

35

The main objective of the scale is to measure hopelessness.

6.7.6 Barratt Impulsivity Scale (BIS-11)

The 11th version of the Barratt Impulsivity Scale (91) is one of the most widely used instruments for the assessment of impulsivity.

The application is self-administered. It consists of 30 issues, grouped into three subscales:

- Items Cognitive Impulsivity: 4, 7, 10, 13, 16, 19, 24 and 27
- Items Motor Impulsivity: 2, 6, 9, 12, 15, 18, 21, 23, 26 and 29
- Unplanned impulsivity items: 1, 3, 5, 8, 11, 14, 17, 20, 22, 25, 28 and 30

Each of the questions has 4 possible answers (rarely or never, occasionally, often and always or almost always) that score as 0-1-3-4, except for inverse items (1, 5, 6, 7, 8, 10, 11, 13, 17, 19, 22 and 30) that do it the other way around (4-3-1-0).

The total score is the sum of all the items and those of the subscales the sum of those corresponding to each of them. The total score has greater value than that of the subscales.

7. STATISTICAL ANALYSIS

7.1 DESCRIPTIVE ANALYSES

The qualitative variables will be summarized by proportions, except the frequency of drug use that as the quantitative variables will be summarized by the mean, standard deviation, median and interquartile range (IQR), depending on whether their frequency distribution is symmetric or asymmetric respectively.

The relationship between suicide and social stigma is assessed through contingency tables. These tables will also stratify for the rest of the variables. When the variables are quantitative, they will be categorized into quartiles.

7.2 BIVARIATE INFERENCE

The relationship between suicide, which I consider the response variable, and stigma, considered the explanatory variable of interest, will be checked by chi-square and Fisher's exact test if the expected frequencies in any cell were less than 5.

These analyses will be repeated, stratifying by the rest of the variables. When the variables are quantitative, they will be categorized into quartiles.

7.3 MULTIVARIATE ANALYSIS

The relationship between suicidal behaviour and stigma will be adjusted in a logistic regression controlling for all other explanatory variables.

8. WORK PLAN AND CHRONOGRAM

8.1 WORK PLAN

The study will be carried out from January 2020 to January 2023. Four annual meetings for coordination will be programmed, in which the research team will communicate the data obtained. The research project will be composed by the next phases:

8.1.1 Stage 1: Preparation of the study (4 months)

The primary research will handle this first phase with the redaction of the protocol and the presentation to the *Comité de Etica de Investigación Clínica* (CEIC).

8.1.2 Stage 2: Coordination phase (2 months)

During this phase of the study, the protocol will be presented to the rest of the research team participants through a meeting that will aim:

- To standardize the criteria
- To design the different phases of the study
- To implement the different questionnaires.

In addition, the main researchers will designate a reference psychiatrist for each of the centres that make up the study: *UHA*, *EIPP Gironès-Pla de l'Estany*, *EIPP Garrotxa-Ripollès*, *EIPP Selva interior*, *EIPP Selva Marítima*, *EIPP Garrotxa Ripollès*, *EIPP Alt Empordà and EIPP Baix Empordà*.

These will be responsible for informing the rest of the professionals who will participate thus ensuring a good transfer of information.

8.1.3 Stage 3: Participant's recruitment and collection and conservation of data (24 months)

The patients with FEP will be proposed to participate in the project by the referring of the *UHA* or the different *EIPP*s. They will inform the participants of the clinical, legal and ethical aspects of the research through the information document for the study and the informed consent forms will be given to each participant.

Once the patients are admitted and agree to participate in the study, they will conduct structured interviews in which the study data will be collected, and the resulting scales will be passed.

At the end of the follow-up in July 2022, patients will be classified into two groups. One group will be made up of patients who have not had suicidal behaviour and others who have. Taking this data, we will procedure to the statistical analysis.

8.1.4 Stage 4: Statistical analysis, and final evaluation (4 months)

All data obtained from all the scales will be compared and depending on the results of the suicidal behaviour we will make two groups in which we will compare the difference on the social stigma taking in to account all the cofounding variables. The results obtained will be analysed by statisticians and finally evaluated by the main researchers of the study.

8.1.5 Phase 5: Publication and dissemination

Main researchers will write a final report and will be responsible for publishing it in different scientific journals and exposing it in national (*Congreso Nacional de Psiquiatría*) and international (CINP international meeting) congresses.

8.2. CHRONOGRAM

STAGES	TASK	STAFF						CAL	END	AR					
OTAGEO	171011	017111		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	Elaboration of the protocol	Main researchers	2020												
Stage 1			2021												
	Presentation to the CEIC	All research team	2022												
			2020												
Stage 2	Coordination meetings	All research team	2021												
			2022												
	Patients recruitment Data	Referring	2020												
Stage 3		psychiatrists	2021												
	collection	Clinic psychiatrists	2022												
	Statistical analysis	Statisticians	2020												
Stage 4			2021												
	Final evaluation	Main researchers	2022												
			2020												
Stage 5	Publication and dissemination	Main researchers	2021												
			2022												

9.ETHICAL AND LEGAL CONSIDERATIONS

This Project will be carried out in compliance with the ethical principles established by The World Medical Association in the Declaration of Helsinki, signed in 1964 and last revised in October 2013.

This protocol will be presented to the IdibGi's CEIC for evaluation and approval, prior to the initiation of the investigation.

According to Ley Orgánica 15/1999, de 13 de Diciembre, de protección de Datos de Carácter Personal and in accordance with the recent Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016, the study will guarantee the confidentiality of all the data obtained during the investigation.

Articles included in Ley 41/2002, de 14 de Noviembre, Básica reguladora de la autonomía del paciente y de derechos y obligaciones en materia de información y documentación clínica, will be considered and therefore, before including the patients in the study, they will be informed of the clinical, ethical and legal considerations and the informed consent should be given to them.

The authors declare no conflict of interests

10. STUDY LIMITATIONS

There are some limitations that may interfere with the results of this study. They should therefore be considered:

- The first limitation to be considered in this study is the type of study selected, a cross-sectional observational study. For this reason, our objective will be just generating hypothesis for future studies. To know the true association and causality of social stigma and suicidal behaviour we should conduct a cohort study.
- As suicidal behaviour is influenced by numerous factors that correlate
 with each other in order to avoid confusion bias, we have tried to identify
 all confusing variables and introduce them into our statistical analysis of
 the data in order to minimize this bias. However, we cannot control the
 confusing variables that we don't know, so this could lead to confusion
 bias between the relationship of suicidal behaviour and social stigma.
- We consider that depending on the observer who performs the interviews
 for data collection, it may cause some subjectivity in addition to obtaining
 different results. For this reason, we have chosen the psychiatrists of
 each unit who will perform this test, in order to reduce this bias as much
 as possible. Therefore, professionals will be instructed at the beginning
 of the study to create a consensus throughout the research team.
- Regarding external validity it will be difficult for the results to be extrapolated to other places outside of western Europe because the health systems are very different and there is not so much social support for patients with psychiatric disorders.
- Patients are selected according to their access to the XSMA, which
 would imply a selection bias because a part of the population with FEP
 would not be included and the sample would not represent the whole
 population.
- In addition, the variable of social stigma cannot be obtained from participants who have committed suicide and the lack of data is also considered a limitation.

11. FEASIBILITY

The XSMA of the IAS is the public network of the Girona region specialized in mental health of the reference population (761,947 inhabitants). It is involved in two areas: community care and hospital care. These centres will be in permanent contact.

The study participants will be selected by the Emergency services and the EIPP from the different areas of Girona. When these patients present a FEP, they will be admitted to the UHA.

In order to avoid the loss of communication and to avoid mistakes as much as possible, it is extremely important that there is good coordination between the different services. This will be possible thanks to the database model that XSMA works with.

In addition, we have the participation of different psychiatrists working at the IAS, who already have a great deal of experience in this field. They will combine their healthcare work with the active participation of this study, at no additional cost.

Regarding the sample, according to the estimated data, we have obtained a statistical power of 100%, which is a high figure that reinforces the result obtained. The sample calculations have been obtained from the incidence of FEP quantified by the Generalitat de Catalunya.

The participation of more hospitals will not be necessary, since the XSMA will assume all the cases that may occur, as it is the reference unit of the population of Girona.

As for the budget, we can add that it has been adjusted as much as possible considering that it is an observational study and its purpose will be to generate a hypothesis and future studies must be done to ensure the knowledge which we want to achieve.

For all this, we consider that this study is feasible on the availability of the sample, the professionals involved and the estimated budget.

12. BUDGET

EXPENSES	COSTS(€)
Staff	
Statisticians (80 x 35€/hour)	2.800€
Scales' copyright	
DISC-12	0€
CDSS	0€
PANSS	0€
SUMD	0€
BHS	0€
BIS-11	0€
Material	
Printing of documents	300 €
Other consumables	1.300 €
Publication and dissemination	
Publication in open access journal	2.550 €
Conferences (3 investigators)	
Inscription (700x3)	2.100€
Travelling (300x3)	900€
Accommodation (200x3)	600€
TOTAL	10.550€

The budget doesn't include material such as computers and balances, which are already available in the different services that participate in the study.

Psychiatrist and psychologist who attend the study members from the different services of the XSMA, will not receive financial compensation for their work in the research. In addition, the meetings that will be carried out throughout the investigation, will take place at the UHA. For this reason, no additional costs have been added for the rental of halls.

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15. ANNEXES

ANNEX 1. INFORMED CONSENT

\cap	NS		ITI	N/		JT.	INI		\cap) N /	ı۸	т
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CONSENTIMENT INFORMAT
Títol de l`estudi: The relationship between social stigma and suicidal behaviou n Frist Episodes of psychosis
Jo (Nom y cognoms):
Afirmo que:
 He llegit la fulla informativa sobre l'estudi que se m 'ha entregat He pogut fer totes les preguntes necessàries per resoldre els dubtes que tenia respecte l'estudi He rebut tota la informació necessària sobre l'estudi He entès la informació proporcionada sobre la meva participació a l'estudi He estat informat per l'investigador
Amb tot això present, ACCEPTO voluntàriament participar en l`estudi.
Firma del participant i tutor legal Firma de l`investigador
,dede 20

ANNEX 2. INFORMATION DOCUMENT FOR THE STUDY

FULL D'INFORMACIÒ PER AL PARTICIPANT

Principals investigador: Joseba Ugedo Alzaga i Domènec Serrano Sarbosa Títol de l'estudi: The relationship between social stigma and suicidal behaviour in Frist Episodes of psychosis

Benvolgut, benvolguda,

Agraïm el seu interès en l'estudi el qual el convidem a participar. La seva col·laboració és de gran ajuda per a poder desenvolupar de manera adient el projecte. A Continuació, li exposem detalladament els motius del present estudi, així com tots els detalls que necessita conèixer. Si us plau, llegeix atentament tota la informació, i no dubti en consultar qualsevol aspecte amb la persona que li entrega el document quan ho consideri necessari

Generalitats del projecte

L `estudi serà dut a terme per un grup de psiquiatres de la Xarxa de Salut Mental i Addicions de Girona, en un període de temps aproximat de 2 anys. El projecte de recerca ha estat valorat i aprovat pel Comitè d` Ètica d`Investigació Clínica de l`IdibGi.

Objectius i finalitats de l'estudi

L'estudi tindrà com a objectiu principal l'objectiu de l'estudi és determinar l'efecte de l'estigma social sobre la conducta suïcida en pacients amb primers episodis de psicosi

Participació

La seva participació en l'estudi és totalment voluntària. El participant és lliure d'abandonar l'estudi si així ho desitja en qualsevol moment, sense necessitat de justificacions i sense que aquesta decisió afecti a la seva assistència sanitària. La participació en aquesta investigació és totalment gratuïta i no s'obtindrà cap compensació econòmica en relació a la participació.

Confidencialitat i protecció de dades

S'aplicaran las mesures per tal de garantir la confidencialitat de les seves dades en compliment de la Llei Orgànica 15/1999 i el nou reglament de la Unió Europea 2016/679. Per això, les dades seran recollides i gestionades de manera anònima i només s'utilitzaran amb fins d'investigació. També es garantiran els articles descrits a la Llei 14/2007 d'investigació biomèdica.

Resultats i beneficis de la investigació

El participant està en el seu dret de ser informat dels resultats obtinguts de la investigació, així com es respectarà la seva voluntat de no ser informat en cas que així ho desitgi. Els resultats derivats de la investigació, podran beneficiar a les persones afectades d'aquest deteriorament cognitiu i serviran de base per a futures investigacions

ANNEX 3: MEDICAL INFORMATION FULL

FULL D'INFOR	RMACIÓ MÈ	DICA		
EIPP:	COD	PARTICIPANT:		Data://
Telèfons de co Mare:		cipant:	Pare	9:
Dades PERSO	NLAS:			
Gènere:	Mascu	lí	Fem	není
Data de naixen	nent (DD/MI	Л/AAAA):/_/_	 	
Ètnia: Cauc	càsica 🔲 /	Africà Negra	Asiàtica [Magrebí Altres
Alçada(cm):	· · · · · · · · · · · · · · · · · · ·	Pes	(kg):	
Antecedents f	amiliars:			
-		iare estan diagn uizofrniforme o p		trastorn psicòtic (ex
Pare S	i 🔲	No		
Mare S	i 🔲	No		
Antecedents p	oatològics:			
Historial mèdic	:			
Antecedents t	òxics			
De la droga q any?	ue apareix	a continuació, q	uines ha con	sumit durant el darre
Alcohol:	Si	☐ No		
Cànnabis:	Si	☐ No		
Opiacis:	Si	☐ No		
Cocaïna:	Si	☐ No		
Amfetamines:	Si	☐ No		

(En cas de resposta afirmativa en la pregunta anterior) Quin ha estat el seu consum?
Alcohol: Un cop/dia Un cop/Setmana Un cop/mes Un cop/any
Cànnabis: Un cop/dia Un cop/Setmana Un cop/mes Un cop/any
Opiacis: Un cop/dia Un cop/Setmana Un cop/mes Un cop/any
Cocaïna: Un cop/dia Un cop/Setmana Un cop/mes Un cop/any
Amfetamines: Un cop/dia Un cop/Setmana Un cop/mes Un cop/any
Dades sociodemogràfiques del PERSONALS:
Quin es el nivell màxim d'estudis que has finalitzat?
Sense estudis primaris Estudis secundaris Títol universitari
Quina es la teva situació laboral actual?
En actiu Situació d´atur Feines de la llar
(En cas de que s'hagi marcat la casella anterior: en actiu) Quina ocupació laboral?
Director, gerent, professional universitari
Ocupacions intermèdies, autònom
Treballador manual
Dades sociodemogràfiques dels seus PARES
Quin es el nivell màxim d'estudis finalitzats per part dels seus pares?
Pare:
Sense estudis primaris Estudis secundaris Títol universitari
Mare:
Sense estudis primaris Estudis secundaris Títol universitari
Quina es la situació laboral actual dels seus pares?
Pare:
☐ En actiu ☐ Situació d´atur ☐ Feines de la llar
Mare:
En actiu Situació d'atur Feines de la llar

(En cas de que s´hagi marcat la casella anterior: en actiu) Quina ocupació laboral tenen els seus pares?
Pare:
Director, gerent, professional universitari
Ocupacions intermèdies, autònom
Treballador manual
Mare:
Director, gerent, professional universitari
Ocupacions intermèdies, autònom
Treballador manual

ANNEX 4. XARXA DE SALUT MENTAL I ADDICIONS

The Xarxa de Salut Mental i Addicions (XSMA) of the Institute d'Assistència Sanitaria (IAS) is the public network of the Girona regions specialized in mental health care for the reference population (750.000 inhabitants).

This network has a total or partial hospitalization services, located in PHMIJ (Salt) and also community care services.

Concerning to hospital care, we find:

- Unitat de Referéncia en Psiquiatria infantil i juvenil (URPIJ): Is a unit for people under 18 years old. Is specialized in acute episodes in situations of crisis. It has 10 beds
- Unitat d'Hospitalitzaciò d'Aguts (UHA): This unit is for people over 18 years old who have had a crisis situation, which due to its severity require an intensive short term treatment. It has 42 beds.

For community care, we have:

- Equips d'Intervenció Precoç en la Psicosi(EIPP): The objective of this unit is to detect early those people who present a psychosis or risk of developing it, in addition to carrying out a comprehensive treatment depending on the needs of the person.
- Centres de Salut Mental Infant i Juvenil (CSMIJ): Offer specialized attention to infants and adolescents from 0 to 18 years old with mental health problems and/or addictions. Children and adolescents who, due to the complexity of their disorder, need more specialized attention that cannot be resolved from the primary care centers. Treatment includes family members while coordination with the school and other services involved.
- Centres de Salut Mental d'Adults: They are a free public service that offers specialized attention to people over 18 years old with psychiatric pathology and/or behavioral disorders, from a multidisciplinary and community perspective.

These organizations are at: Selva interior and Selva marítima, Ripollés, La Garrotxa, Baix empordà, Alt Empordà, Gironès-Pla de l'Estany.

ANNEX 5. BECK HOPELESSNESS SCALE

Escala de Desesperanza de Beck	Verdadero	Falso
1. Espero el futuro con esperanza y entusiasmo	V	F
2. Puedo darme por vencido, renunciar, ya que no puedo hacer mejor las cosas por mí mismo	V	F
3. Cuando las cosas van mal me alivia saber que las cosas no pueden permanecer tiempo así	V	F
4. No puedo imaginar cómo será mi vida dentro de 10 años	V	F
5. Tengo bastante tiempo para llevar a cabo las cosas que quisiera poder hacer	V	F
6. En el futuro, espero conseguir lo que me pueda interesar	V	F
7. Mi futuro me parece oscuro	V	F
8. Espero más cosas buenas de la vida que lo que la gente suele conseguir por término medio	V	F
9. No logro hacer que las cosas cambien, y no existen razones para creer que pueda pasar en el futuro	V	F
10. Mis pasadas experiencias me han preparado bien para el futuro	V	F
11. Todo lo que puedo ver por delante de mí es más desagradable que agradable	V	F
12. No espero conseguir lo que realmente deseo	V	F
13. Cuando miro hacia el futuro, espero que seré más feliz de lo que soy ahora	V	F
14. Las cosas no marchan como yo quisiera	V	F
15. Tengo una gran confianza en el futuro	V	F
16. Nunca consigo lo que deseo, por lo que es absurdo desear cualquier cosa	V	F
17. Es muy improbable que pueda lograr una satisfacción real en el futuro	V	F
18. El futuro me parece vago e incierto	V	F
19. Espero más bien épocas buenas que malas	V	F
20. No merece la pena que intente conseguir algo que desee, porque probablemente no lo lograré	V	F

ANNEX 6. DISCRIMINATION AND STIGMA SCALE

Escala de Discriminación y Estigma (DISC-12)

Versión 03/06/09

Instrucciones para que el entrevistador lea al paciente

(Nota al entrevistador: Por favor utilice el siguiente párrafo para presentarle la escala al paciente y ofrezca una mayor explicación si es necesario)

La discriminación y el estigma aparecen cuando se trata a las personas de forma injusta porque se las considera distintas a los demás. Las preguntas de esta entrevista van dirigidas valorar cómo la discriminación y el estigma le han afectado a usted por su diagnóstico de enfermedad mental.

La entrevista consta de cuatro secciones. Cada sección va dirigida a analizar cómo le han tratado o qué ha hecho usted en diferentes situaciones:

- En la primera sección, le preguntaré sobre los momentos en los que le han tratado injustamente por su diagnóstico de enfermedad mental.
- En la segunda sección, le preguntaré sobre los momentos en los que <u>usted ha</u>
 dejado de hacer cosas por temor a la reacción de los demás ante su
 diagnóstico de enfermedad mental.
- En la tercera sección, le preguntaré sobre cómo ha superado el estigma y la discriminación debidas a su diagnóstico de enfermedad mental.
- En la cuarta sección, le preguntaré sobre los momentos en los que se le ha tratado mejor de lo normal debido a su diagnóstico de enfermedad mental.

En cada sección de la entrevista, le preguntaré si cada suceso: no ha ocurrido nunca, si ha ocurrido alguna vez, bastantes veces o muchas veces. También le pediré que me dé algunos ejemplos sobre ello.

(Nota al entrevistador: elija el periodo de tiempo adecuado y adapte si es necesario el párrafo que viene a continuación).

Para cada pregunta, por favor piense acerca de acontecimientos que le hayan ocurrido en cualquier época de su vida desde que sufre problemas de salud mental/durante los últimos 12 meses/durante (especificar el periodo de tiempo).

POR FAVOR TENGA EN CUENTA (!) que para los estudios ASPEN e INDIGO-Depression se operará en un periodo de 12 meses. Por ello, para cada pregunta del DISC-12, ¡piense por favor acerca de acontecimientos que hayan ocurrido en los pasados 12 meses (por favor especifique el periodo de tiempo)!

A continuación encontrará una ficha con las opciones para cada respuesta que debe utilizar a lo largo de la entrevista (dé al participante las opciones de respuesta – ver al final del documento).

Escala de Discriminación y Estigma DISC 12 © 2008 Grupo de estudio ASPEN / INDIGO. Contacto: Prof. Graham Thornicroft, Institute of Psychiatry, King's College London. Email: graham.thornicroft@iop.kcl.ac.uk

	(Instrucciones para que el entr n esta sección me gustaría preguntarle ace nera injusta o diferente a otras personas con la salud mental (durante los últimos preguntas. Deberá elegir una respuesta	erca de la a causa 12 meses	s veces q de prob s). En est	ue le han tra lemas relac a sección ha	cionados ny 32
1.	¿Le han tratado de forma injusta a la hora de hacer o mantener amistades?	Nunca	Alguna vez	Bastantes veces	Muchas veces
	No aplicable □				
Dé	un ejemplo:			The second	
2.	¿Le han tratado de forma injusta a la hora de mantener relaciones con sus vecinos? No aplicable	Nunca	Alguna vez	Bastantes veces	Muchas veces
Dé i	un ejemplo:				
3.	¿ Le han tratado de forma injusta cuando ha salido con alguien o en sus	Nunca	Alguna vez	Bastantes veces	Muchas
	relaciones íntimas (excluyendo el trato por parte de su cónyuge/pareja, ya que se cubre en la pregunta 6)	0			
	No aplicable □				
Dé	un ejemplo:		C.F.	0.5	
4.	¿Le han tratado de forma injusta en cuestiones relacionadas con la	Nunca	Alguna vez	Bastantes veces	Muchas
	búsqueda de alojamiento o vivienda? (incluyendo la indigencia				
	No aplicable □			_	
	un ejemplo:			-	177

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5.	¿Le han tratado de forma injusta a lo largo de su educación?	Nunca	Alguna vez	Bastantes veces	Muchas veces
	(pregunte por enseñanza primaria, secundaria, Universidad o formación profesional)				
	No aplicable □			ļ.,	
Dέι	un ejemplo:				
6.	¿Le han tratado de forma injusta en asuntos relacionados con su	Nunca	Alguna vez	Bastantes veces	Muchas veces
	matrimonio o divorcio? (incluyendo parejas civiles, de hecho, pregunte sobre la habilidad para encontrar pareja o cónyuge, sobre problemas durante la relación, acuerdos de divorcio)				
	No aplicable□				
Déι	un ejemplo:				
7.	¿Le ha tratado de forma injusta su familia? (pregunte sobre su familia de origen, padres, hermanos/as, y otros parientes, al igual que los hijos. Se excluye el trato por parte del cónyuge o pareja ya que se cubre en la pregunta	Nunca	Alguna vez	Bastantes veces	Muchas veces
S	¿Le ha tratado de forma injusta su familia? (pregunte sobre su familia de origen, padres, hermanos/as, y otros parientes, al igual que los hijos. Se excluye el trato por parte del cónyuge o pareja ya que se cubre en la pregunta 6)	3	vez	veces	veces
7.	¿Le ha tratado de forma injusta su familia? (pregunte sobre su familia de origen, padres, hermanos/as, y otros parientes, al igual que los hijos. Se excluye el trato por parte del cónyuge o pareja ya que se cubre en la pregunta 6) No aplicable	3	vez	veces	veces
7.	¿Le ha tratado de forma injusta su familia? (pregunte sobre su familia de origen, padres, hermanos/as, y otros parientes, al igual que los hijos. Se excluye el trato por parte del cónyuge o pareja ya que se cubre en la pregunta 6)	3	vez	veces	veces
7.	¿Le ha tratado de forma injusta su familia? (pregunte sobre su familia de origen, padres, hermanos/as, y otros parientes, al igual que los hijos. Se excluye el trato por parte del cónyuge o pareja ya que se cubre en la pregunta 6) No aplicable	3	vez	veces	veces
7.	¿Le ha tratado de forma injusta su familia? (pregunte sobre su familia de origen, padres, hermanos/as, y otros parientes, al igual que los hijos. Se excluye el trato por parte del cónyuge o pareja ya que se cubre en la pregunta 6) No aplicable un ejemplo:		vez Alguna	veces Bastantes	veces Muchas
7.	¿Le ha tratado de forma injusta su familia? (pregunte sobre su familia de origen, padres, hermanos/as, y otros parientes, al igual que los hijos. Se excluye el trato por parte del cónyuge o pareja ya que se cubre en la pregunta 6) No aplicable un ejemplo: ¿Le han tratado de forma injusta al buscar un empleo? (esto significa la búsqueda de un trabajo a tiempo parcial o a tiempo completo y		vez Alguna	veces Bastantes	Muchas veces

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9.	¿Le han tratado de forma injusta a la hora de mantener un empleo?	Nunca	Alguna vez	Bastantes veces	Muchas veces
	No aplicable □				
Dé u	in ejemplo:	W	3	4	ž
-					
10.	¿Le han tratado de forma injusta al utilizar el transporte público? (pregunte sobre la utilización de abonos de	Nunca	Alguna vez	Bastantes veces	Muchas veces
	sobre la utilización de abonos de transporte, el trato por parte de pasajeros, conductores, etc)				
63	No aplicable □	0	er e		
Dé u	ın ejemplo:				
		7-	145		S
11.	¿Le han tratado de forma injusta a la hora de conseguir ayudas sociales/pensiones de discapacidad? (pregunte sobre la solicitud de ayudas, nivel de beneficios, ayuda económica)	Nunca	Alguna vez	Bastantes veces	Muchas veces
	No aplicable □				
Dé u	in ejemplo:	ii.	710		
					
12.	¿Le han tratado de forma injusta en sus prácticas religiosas? (pregunte sobre	Nunca	Alguna vez	Bastantes veces	Muchas veces
	su asistencia a la iglesia, otros miembros o líderes de la iglesia)				
	No aplicable □				
Dé u	in ejemplo:	Å-	Ac -	3	1
-					_
13.	¿Le han tratado de forma injusta en su vida social? (pregunte por su	Nunca	Alguna vez	Bastantes veces	Muchas veces
	socialización, afiliación a clubs locales o sociedades, asistencia a eventos, actividades de ocio y hobbies)				
	No aplicable □	65	20 7		

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14.	¿Le ha tratado de manera injusta la policía? (pregunte sobre cualquier contacto con la policía a causa de problemas relacionados con la salud mental u otras razones) No aplicable	Nunca	Alguna vez	Bastantes veces	Muchas veces
Dé u	n ejemplo:				-
15.	¿Le han tratado de forma injusta al acudir al médico por problemas de	100000000000000000000000000000000000000	Alguna vez	Bastantes veces	Muchas
	acudir al medico por problemas de salud física? (pregunte sobre el trato recibido por dentistas, enfermeras, servicios de urgencia, etc.) No aplicable				
Dé u	n ejemplo:	e de la			
16.	¿Le ha tratado de forma injusta el personal que trabaja en salud mental?	Nunca	Alguna vez	Bastantes veces	Muchas veces
	(pregunte sobre el trato y el comportamiento recibidos por parte del personal, y por sentimientos de desprecio y humillación al establecer contacto con el personal de salud mental)		0		
	No aplicable □				

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17.	¿Le han tratado de forma injusta en relación al respeto por su intimidad?	Nunca	Alguna vez	Bastantes veces	Muchas veces
	(pregunte por la intimidad en el hospital y en lugares de la comunidad, por ejemplo correo privado, llamadas telefónicas y /o antecedentes médicos o criminales).				
	No aplicable □				
Dé u	un ejemplo:				
18.	¿Le han tratado de forma injusta en	Nunca	Alguna	Bastantes	Muchas
	relación a su seguridad personal? (pregunte por algún posible asalto o abuso físico y/o verbal)		vez	veces	veces
	No aplicable □				
Déι	un ejemplo:	7	*	<u> </u>	A
19.	¿Le han tratado de forma injusta a la hora de formar una familia o tener	Nunca	Alguna vez	Bastantes veces	Muchas veces
	hijos? (pregunte sobre el comportamiento por parte de profesionales de la salud, amigos y familiares, al igual la forma en la que se les trató a ellos o a sus parejas durante el embarazo o parto).				0
	No aplicable □				
Déι	in ejemplo:			L	
					- 4
20.	¿Le han tratado de forma injusta en su rol como padre/madre? (pregunte por el	Nunca	Alguna vez	Bastantes veces	Muchas veces
	comportamiento de otros padres, profesores, familia, o personal de salud mental)	D			
	mental)	1		•	
	Mental) No aplicable □				

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Bastantes Muchas ¿Ha sido rechazado o excluido por las Nunca Algun personas que están al corriente de su a vez veces veces enfermedad mental? No aplicable Dé un ejemplo:_

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7

cos	(Instrucciones para que el entre En esta sección me gustaría preguntarle so las importantes para VD por temor a la rea agnóstico de enfermedad mental. Hay 4 elija una respuesta para o	obre las v acción de pregunta	eces que otras pe	ha <u>evitado</u> ersonas ani a sección, p	te por su
22.	¿Ha evitado Vd. solicitar empleo a causa de su diagnóstico de enfermedad	Nunca	Algun	Bustantes veces	Muchas
	mental?	П	п	п	
Děu	in ejemplo:				
23.	¿Ha evitado Vd. estudiar o solicitar formación superior a causa de su diagnóstico de enfermedad mentai? No aplicable □	Nunca	Algun a vez	Bestentes veces	Muchas veces
		п			п
Déu	in ejemplo:			* 11	
24.	¿Ha evitado Vd. tener una relación Íntima a causa de su disconéstico de	Nurios	Algun a vez	Bastantes veces	Muchas
	enfarmeded mental? No aplicable			0	
De u	un ejemplo:		-	100	
25.	¿Ha ocultado o escondido a otras personas su diagnóstico de enfermedad	Nunes	Algun a vez	Bostonies veces	Muchas
	mental? No apticable				
Déar	in ejemplo:				

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(Instrucciones para que el entrevistador lea al paciente)

9

	"En esta sección me gustaría pregunta relacionados con el estigma y la discrimin <u>enfermedad mental</u> (durante ay <u>2 preguntas</u> en esta sección, por favor	ación <u>deb</u> e los último elija <u>una</u>	idos a su os 12 me	u diagnóstic ses).	co de
26.	ellas. ¿Ha hecho amistades con gente fuera	Nunca	Algun	Bastantes	Muchas
	de los servicios de salud mental?	-	a vez	veces	veces
	No aplicable □				
De u	un ejemplo:		·		
27.	¿Le ha sido posible emplear sus habilidades personales o las técnicas	Nunca	Algun a vez	Bastantes veces	Muchas veces
	que le hayan enseñado los profesionales de afrontamiento contra el estigma y la discriminación?				
	No aplicable □	20	63	265	
form M tra son Hay	(Instrucciones para que el entre esta sección me gustaría preguntarle sobrema más positiva por su diagnóstico de na más positiva significa cualquier ocasión le gustaría saber si ha recibido algún trato tado antes de desarrollar su problema de tratadas las personas sin ningún diagnósi últimos 12 n 5 preguntas en esta sección, por favor el	enfermed en que le favorable salud men tico por en neses).	es en las lad ment hayan d en comp ital o en d ifermedad	que le han t al. El ser tra ado un trato aración a có comparación d mental, (du	tado de especial, imo era a cómo urante los
ellas		14.0		15	
28.	¿Le ha tratado su familia de forma más positiva? (Incluya familia de origen, hijos, parientes, cónyuge).	Nunca	Algun a vez	Bastantes veces	Muchas
4.5 2.6	No aplicable □				
Déι	in ejemplo:				

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29.	¿Se le ha tratado de forma más positiva al solicitar ayudas sociales/pensiones	Nunca	Algun a vez	Bastantes veces	Muchas veces
	de discapacidad?				
	No aplicable □	- CA		313-7	S 8
Dé u	ın ejemplo:				
	4	/YI			g-
30.	¿Se le ha tratado de forma más positiva al solicitar alojamiento?	Nunca	Algun a vez	Bastantes veces	Muchas veces
	No aplicable □				
Dét	ın ejemplo:		*	*	
	VI 175		1000		
31.	¿Se le ha tratado de forma más positiva en sus actividades religiosas?	Nunca	Algun a vez	Bastantes veces	Muchas veces
	No aplicable □				
Déu	ın ejemplo:	*	55		
32.	¿Se le ha tratado de forma más positiva en su empleo? (pregunte en la búsqueda de empleo, en el mantenimiento del puesto de trabajo, etc)	Nunca	Algun a vez	Bastantes veces	Muchas veces
	No sellecte El				
	No aplicable □	1		1	

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ANNEX 7. CALGARY DEPRESSION SCALE FOR SCHIZOPHRENIA

CDSS ESCALA CALGORY PARA LA DEPRESIÓN IN LA ENQUADRICINA

Entrevistador: haga la primera pregunta tal y cómo esta escrita. Utilice según su criterio preguntas complementarios o actoraciones. El período de tilengo comprende los dos últimos cemoras, a menos que os estipula pero.

N.B.: El última hare, 94, de boco en la observado durante rada la entrevista.

1. DEPRESIÓN.

¿Como describiris su estado de ánimo durante las des últimas comanas?

¿Pla estado animado o se ha encontrado muy deprimido o decado úblinamente?

By los dos últimos semanos, ¿Cubycos seces se ha semblo (vicor que propios palabras) ol dio? ¿Todo el dio?

D. Autophte.

1. leve	Express clores triorece o deservino el ser proguntado.
2. Moderate	Claro ànimo deprimido que persiste más de la mitad del tiempo en las dos últimas semanas, presente disniamente.
3, Severo	Marcado ánimo deprimido que perside más de la mitad del Sempo en las dos últimas cemanas, que interfiere en el normal funcionamiento policomotor y social.

2. DESEPERANDA:

40 orange surface in 2.

¿Ve sigún futuro o por el contrario ha perdicio sigo la experanza?

ilitay aun alguna racon para deguir luchando o se ha dado por venesdo?

O busense

1. Gayer	Sentimiento de desegueranza en las dos últimas semanas, pero aún contenta derta grado de esperanse en el futuro.
2. Moderado	Semimiento moderado de desesperanos, persistente en las dos últimas semanas; puede ser persuadido para reconocer la posibilidad de que las sesas pueden ir mejor.
5. Severa	Persistente y angustico oconimiento de desesperança.

S. SAUA AUTOESTINA:

¿Cuill es la apinión que tiene de si mismo en comparación con les demás?

¿Se cleane mejas, no con bueno o como los deredo?

Se dance inferior o incluse in still

C. Autente.

L tnon	Cierta inferioridad; no suficiente como para sentirse inúcil.
2. Moderade	El sujeto se siente mútil, pero menos del 50% del tiempu.
5. Sevens	El pujeto se sierrie inútil miso del 30% del tiempo; si se la contracta puede cambrar de aptirior.

IL. IDEAS AUTORREFERENCIALES DE CULPA-

¿Tiene la rendación de que le culpan de algo o incluso de que le acusan erroneamente? ¿De que? (No incluir las culpas o acusaciones juntificables. Escluir los deficios de culpa)

D. Ausgette.

L leve	El sujeto se siente culpublikando, pero no ecucado, y menos del 50% del tiempo.
2. Moderate	Sertimiento persistente de que le culpubilican y/o con sentimiento ocusional de estar acusado
5. Severo	Persistente sent miento de estar acusado. Guando se le contrasta, reconoce que esto no es sei

5. CULPA PATOLÓGICA:

. Tiende a culpabilitarse por pequeñas cosas que haya podido hacer en el passido?

"Cree que lid, se merece estar con presoupado por ello?

0 Ausente.

1 Leve	El sujeto se sulpotilito por siguno foito menor, pero menos del 50% del tiempo.
2. Moderado	El sujeto se siente culpable habitualmente (más del 50% del tiempo) por actos pasados,
	ouys importancia exagers.
5. Severs	El pujeto diente habitualmente que se la debe sulpar de todo lo que ha ido mai, induso
	sungus no see por responsibilidad suya.

6 DEPRESIÓN MATUTINA

Cuando na estado deprimido durante las dos últimas semanas, ¿Ha notado que la piepreción fuese peor en algún memorito concreto del éle?

0. Ausente	No so he encontrado deprimido.
1. lave	Depresión pero sin variación diuma
2. Moderado	Degresión espansamente referida como peor por la mañana
3. Severa	Degresión marcadomente peor pur las mañaros, con pérdida de rendimiento, que majora por la tando.

7. DESPERTAR PRECOS:

¿Se despilerts más temprano de la que es normal para unted?

¿Cubritto veces a la semana le acurre?

G. Ausente	Nii hay despertar pressu
I leve	Occidengimente (más de dos seces por cemana) de despilenta 1 hora o más anoso de la hora normal o que el despertador.
1 Moderada	A menudo (más de 3 veces por semans) se despierto 1 hora o más antes de la hora normal o que el despertador.
5. Severe III	Se despierts d'ariaments il hors a más antes de la normal.

8. 50KGDKD

"It's sentido que no merece to pero vivir?

¿Ha tenádo la hentación de acabar con todo?

¿Qué ha persails que poshía hacer?

Lo ha Regado a intentant

0 Assente

Lileve	Persymientos frequentes de muerte, u assistantimente ideas de suicidia.
2. Mosterado	Ha considerado el issistido, con un plan, pero no ha realizado tentativa alguna.
3 Severa	Interio de saltidio con intencionalidad letal (p. ej. Se induyen las tentativas hustradas
(Flancholt)	por descubrimiento socidental o empleo de métodos ineficaces)

9. DEPRESIÓN DESERVADA:

Borodo en las observaciones del espluador durante la expresista.

La pregunta "¿Tiene ganar de liorar?" utada en momentos deberminados de la entrevista puede proporcionar información (ell allefecto.

O Assesse:

I. lave	 El sujeto de muestro triche y ofligido induco durante portes de lo entrevisto efectivamente novime.
I. Moderado	El sujeto se muestra triste y elligido durante toda la entrevista, con una vos monécona y está flundo e a juumo de llorar en ucasiones.
3. Sevens	El pujeto se soficia con los temas angusticose, suspira frecuentemento y llona objectumente, a está permunenciemente en un estado de sufficierno, il el evolución está seguno de ous está presente.

ANNEX 8 POSITIVE AND NEGATIVE SYNDROME SCALE

Psicopatologia general (PANSS-PG)	Puntuación directa:			4	Percentil: 4 5 6 7			
16. Evitación social activa	-1	2	3	- 4	5	- 6	7	
15. Ensimismamiento	1	2	3	(4)	5	6.	7	
Control deficiente de los impulsos	1	2	3	- 4	5	6	7	
3. Trastornos de la volición	1	2	3	4	5	6.	7	
Ausencia de Insight	(E)	2	3	- 4	5	6	7	
1. Atención deficiente	1.	2	3	- 4	5	6	7	
0. Desorientación	110	2	3	4)	5	6	7	
9. Pensamientos inusuales	1	2	-3	4	5	6	7	
8. Falta de colaboración	1	2	3	4	5	6	7	
7. Enlentecimiento motor	1	2	3	4	5	6	7	
6. Depresión	1.	2	- 3	- 4	5	- 6	7	
5. Manierismos/posturas	110	2	3	4	5	6	7	
4. Tensión motora	11	2	3	4	5	6	7	
3. Sentimientos de culpa	1	2	3	- 4	5	6.	7	
2. Ansiedad	(4)	2	3	(4)	5	6:	7	
Preocupación somática	1	2	3	- 4	5	6	7	
Escala compuesta (PANSS-C)	Puntus	ación directa	Ľ		Percentii			
7-1	1	2	-3	4)-	5	6.	7	
Sicala negativa (PANSS-N)	Puntuación directa:			Percentil:				
7. Pensamiento estereotipado	1	2	3	- 4	5	6	7	
6. Fluidez de la conversación	-1-	2	3	4	5	6.	7	
5. Pensamiento abstracto	1	2	3	40	5	6	7	
Retraimiento social	-1	2	3	4	5	6	7	
3. Contacto pobre	40	2	3	4)	5	6.	7	
2. Retraimiento emocional	1.1	2	3	4	5	6	7	
1. Embotamiento afectivo	1	2	-3	- 4	5	6	7	
Escala positiva (PANSS-P)	Puntus	ación directa	C;		Percentii	0		
7. Hostilidad	(4)	2	-3	141	5	6	7	
6. Suspicacia/perjuicio	1	2	3	4	5	6	7	
5. Grandiosidad	46	2	3	4)	5	6	7	
4. Excitación	1	2	3	- 4	5	6	7	
3. Alucinaciones	211	2	- 3	4	5	6.	7	
2. Desorganización conceptual	1	2	3	40	5	6	7	
1. Delirios	1.	2	3	4	5	6	7	

ANNEX 9 UNAWARENESS OF MENTAL DISORDERS

Conciencia de poseer un trastorno	ftem no relevante Conciencia Conciencia intermedia S. No hay conciencia			
 Conciencia sobre los efectos de la medicación 	Item no relevante Conciencia Conciencia intermedia No hay conciencia			
 Conciencia de las consecuencias sociales del trastorno 	Conciencia Conciencia intermedia No hay conciencia			
	Puntuación total de los 3 ítems:			
ta. Conciencia de poseer alucinaciones	4h. Atribución de las alucinaciones a la enfermedad			
Item no relevante Conciencia Conciencia intermedia No hay conciencia	Item no relevante Arribución Arribución intermedia No hay atribución			
Sa. Conciencia de poseer delirios	5h. Atribución de los delirios a la enfermedad			
Trem no relevante Conciencia Conciencia intermedia No hay conciencia	Item no relevante Atribución Atribución intermedia No hay atribución			
la. Conciencia de poseer trastornos del pensamiento	6b. Atribución de los trastomos del persamiento a la enfermedad			
Item no relevante Conciencia Conciencia intermedia No hay conciencia	Item no relevante Atribución Atribución intermedia Atribución intermedia Atribución intermedia			
7a. Conciencia de poseer embotamiento afectivo	7b. Atribución del embotamiento afectivo a la enfermedad			
Item no relevante Conciencia Conciencia intermedia No hay conciencia	O. Item no relevante L. Atribución C. Atribución intermedia S. No hay atribución			
Sa. Conciencia de poseer anhedonia	8b. Atribución de la anhedonia a la enfermedad			
Them no relevante Conciencia Conciencia intermedia No hay conciencia	O. Item no relevante I. Atribución 2. 3. Atribución intermedia 4. 5. No hay atribución			
9a. Conciencia de poseer asociabilidad	9b. Atribución de la asociabilidad a la enfermedad			
Item no relevante Conciencia Conciencia intermedia	fiem no relevante Arribución Arribución Arribución intermedia			
5. No hay conciencia	No hay atribución			

ANNEX 10: BARRATT IMPULSIVITY SCALE

Instrucciones: Las personas son diferentes en cuanto a la forma en que se comportan y piensan en distintas situaciones. Ésta es una prueba para medir algunas de las formas en que usted actúa y piensa. No se detenga demasiado tiempo en ninguna de las oraciones. Responda rápida y honestamente. (Entrevistador; Lea cada oración al respondiente y marque la contestación. Si la persona no entiende la pregunta, plantéela de la forma que está entre parentesis). Raramente Ocasionalmente A Siempre o о пинса enudo casi siempre (1) (4) (0) (3) 1. Planifico mis tareas con cuidado 2. Hago las cosas sin pensarlas 3. Casi minca me tomo las cosas a pecho (no me perturbo con facilidad) 4. Mis pensamientos pueden tener gran velocidad (tengo pensamientos que van muy rápido en mi mente) 5. Planifico mis viajes con antelación 6. Soy una persona con autocontrol 7. Me concentro con facilidad (se me hace fácil concentrarme) 8. Ahorro con regularidad 9. Se me hace dificil estar quieto/a por largos periodos de tiempo 10. Pienso las cosas cuidadosamente 11. Planifico para tener un trabajo fijo (me esfuerzo por asegurar que tendré dinero para pagar por mis gastos) 12. Digo las cosas sin pensarlas 13. Me gusta pensar sobre problemas complicados (me gusta pensar sobre problemas complejos) 14. Cambio de trabajo frecuentemente (no me quedo en el mismo trabajo por largos períodos de tiempo) 0 15. Actúo impulsivamente 16. Me aburro con facilidad tratando de resolver problemas en mi mente (me aburre pensar en algo por demasiado tiempo) 17. Visito al médico y al dentista con regularidad 18. Hago las cosas en el momento que se me ocurren 19. Soy una persona que piersa sin distraerse (puedo enfocar mi mente en una sola cosa por mucho tiempo) 20. Cambio de vivienda a menudo (me mudo con frecuencia o no me gusta vivir en el mismo sitio por mucho tiempo) 21. Compro cosas impulsivamente 22. Yo termino lo que empiezo 23. Camino y me muevo con rapidez 24. Resuelvo los problemas experimentando (resuelvo los problemas tratando una posible solución y viendo si funciona) 25. Gasto efectivo o en crédito más de lo que gano (gasto más de lo que gano) 26. Hablo rápido 0 27. Tengo pensamientos extraños cuando estoy pensando (a veces tengo pensamientos irrelevantes cuando pienso) 28. Me interesa más el presente que el futuro 29. Me siento inquieto/a en clases o charlas (me siento inquieto/a si tengo que oir a alguien hablar por un largo periodo de tiempo) 30. Planifico para el futuro (me interesa más el futuro que el presente)