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υπό

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**Τίτλος εργασίας στα αγγλικά:**

**Positive and negative outcomes of readmissions of special psychiatric patient  
groups, in acute psychiatric wards of public psychiatric hospitals**

# Table of Contents

<a href="#">Table of Contents.....</a>	<a href="#">3</a>
<a href="#">Περίληψη.....</a>	<a href="#">4</a>
<a href="#">Abstract.....</a>	<a href="#">5</a>
<a href="#">1.Introduction.....</a>	<a href="#">6</a>
<a href="#">1.1.Aim of the study.....</a>	<a href="#">8</a>
<a href="#">1.2.Material and methods.....</a>	<a href="#">9</a>
<a href="#">2.Review of the Literature.....</a>	<a href="#">10</a>
<a href="#">2.1.Special Psychiatric Patients Groups.....</a>	<a href="#">10</a>
<a href="#">2.1.1.Mental Health.....</a>	<a href="#">10</a>
<a href="#">2.1.2.Classification of mental disorders.....</a>	<a href="#">12</a>
<a href="#">2.1.3.Antisocial and borderline personality disorders.....</a>	<a href="#">14</a>
<a href="#">2.2.Interventions for People who have Co-occurring disorders.....</a>	<a href="#">17</a>
<a href="#">2.3.Recurring Emergency Room Visits.....</a>	<a href="#">19</a>
<a href="#">2.4.Risk factors for Readmission for Acute Psychiatric Hospitals.....</a>	<a href="#">22</a>
<a href="#">2.5.Positive and Negative Outcomes of Readmissions of Special Patient Groups.....</a>	<a href="#">25</a>
<a href="#">3.Discussion.....</a>	<a href="#">27</a>
<a href="#">References.....</a>	<a href="#">30</a>

## Περίληψη

Σκοπός της διπλωματικής αυτής εργασίας είναι να σχολιάσει τα σημαντικότερα σημεία του φαινομένου της περιστρεφόμενης πόρτας των ψυχιατρικών ασθενών σε κλινικές οξέων περιστατικών σε δημόσια νοσοκομεία και σε συνάρτηση με τη διάγνωση τους, να αναδείξει τα οφέλη και τη ματαιότητα των επανεισαγωγών αντίστοιχα. Επιπρόσθετα θα παραθέσει δυναμικές λύσεις αποσυμφόρησης των δομών αυτών στην κατεύθυνση του θεσμού της Ψυχιατρικής μεταρρύθμισης και της ανάπτυξης περισσότερων ειδικών δομών στην κοινότητα. Η μέθοδος που θα ακολουθηθεί είναι αυτή της βιβλιογραφικής ανασκόπησης σε πρωτότυπα άρθρα ιατρικών συγγραμμάτων, συστηματικών ανασκοπήσεων στο διαδίκτυο καθώς και σε επιστημονικά άρθρα, περιοδικά και βιβλία. Τα συμπεράσματα θα παρουσιαστούν από ψυχιατρική σκοπιά, θα σχολιαστούν υπό το πρίσμα των θεμελιωδών αρχών της βιοηθικής και θα ερμηνευτούν με την ωφελμιστική και δεοντολογική ηθική θεώρηση και των διλημάτων που αυτές εγείρουν.

**Λέξεις Κλειδιά:** Φαινόμενο περιστρεφόμενης πόρτας, ειδικοί ψυχιατρικοί ασθενείς, επανεισδοχή σε ψυχιατρικά τμήματα

## **Abstract**

The purpose of this thesis is to comment on the most important points of the phenomenon of the revolving door of psychiatric patients in acute care clinics in public hospitals and in relation to their diagnosis, to highlight the benefits and the futility of re-admissions respectively. In addition, it will list potential solutions to decongest these structures in the direction of the institution of Psychiatric reform and the development of more special structures in the community. The method that will be followed is that of a bibliographic review of original articles in medical journals, systematic reviews on the internet as well as in scientific articles, journals and books. The conclusions will be presented from a psychiatric point of view, they will be commented in the light of the fundamental principles of bioethics and they will be interpreted with the utilitarian and deontological moral theory and the dilemmas they raise.

**Key words:** Revolving door phenomenon, special psychiatric patients, readmission to acute psychiatric wards

# 1. Introduction

Deinstitutionalization is a common and well known strategy in mental health systems in the twenty-first century. Although there is no doubt that the motivation behind the initial thought was to improve the quality of services for psychiatric patients, unpredictable consequences emerged that impact on the development of future mental health policies. Deinstitutionalization led to a huge reduction in the number of acute inpatient psychiatric beds. The intention was that this would be accompanied by the establishment of community-based facilities for both acute care and residential placement. Although this policy succeeded in some countries, most of them failed to establish community-based services. Additionally, with the resultant reduction in the number of acute ward facilities, admission strategies at psychiatric hospitals worldwide needed to be changed. The fact was that only the most severely mentally ill patients could now be admitted to and kept in hospital. Due to the pressure on the available beds, even those patients who were admitted could stay in hospital for only a brief period of time and had to be discharged within some days only after initial admission [1].

The inescapable and predictable result has been that some patients who were not yet well stable had to be discharged earlier in order to hospitalize those who were more severely ill. This resulted in frequent readmissions in psychiatric units of the same patients referred to as heavy users and high frequent users and led to the birth of the term “revolving door”, a notion that was first described in the early 70’s following the closure of the psychiatric asylums [2].

Deinstitutionalization is the process of discharging chronic patients from large psychiatric institutions and their placement in the community. At the same time, Social Psychiatry is emerging, as an interdisciplinary approach to the human being, aiming at both research and provision of community therapeutic services, which constitute Community Psychiatry. Community Psychiatry is about providing services to patients within the community, without placing them away from their physical and

social environment and with supporting their active participation in the community. It also supports and promotes the creation of alternative forms of care to asylum, for the psychosocial rehabilitation of the mentally ill [3].

Psychosocial rehabilitation is a process that enhances social functioning for people with disabilities, in order for them to reach a better level of independent functioning in the community. It includes the continuous improvement of social skills and functionality of these individuals, minimizing their disabilities, improving quality of life, quality of care and their independent living in the community [4].

In recent years in Greece, we have been "talking" about psychiatric reform, meaning all the interventions that allow the treatment of mental health problems by supporting a person to remain an active citizen, within his/her family environment, with autonomy, economic activity and social inclusion. Of course, de-assimilation is an essential aspect of psychiatric reform that is not limited only to this. Quality of life and meeting the patients' needs are crucial goals of this movement, which ultimately aims at the deinstitutionalization of chronic psychiatric patients, which in turn implies the reduction or even the abolition of psychiatric asylums. This process gained many devotees mainly in the developed countries of the West, as it was a factor of decisive importance for the developments in the field of psychiatry, but equally there was awareness of the need for a fundamental change in the philosophy of dealing with mental illness [5].

"Revolving Door patients" (RD) indicates mentally ill patients, who are frequently admitted to hospital and remain stabilized and without recurrences for only a short period of time being unable to sustain an independent life in the community. Even in countries with a well orientated outpatient community-based mental health system, a number of patients fall into the RD category. Recurrent admissions to acute psychiatric wards is as a poor outcome, since has a negative impact on patient wellness, quality of life and mortality, as well as increased mental health-related costs. RD is an economic, social and public health issue and its determinants remain poorly explored. In some studies revolving door patients make up over half of all admissions to psychiatric facilities [6].

Schizophrenia and psychotic disorders, bipolar disorder, substance use, alcohol dependence as well as personality disorders are all associated with RD. A crucial issue

that perpetuates the RD phenomenon is deficient therapeutic alliance and treatment discontinuation. There are a number of risk factors that influence and predict the risk for readmissions, such as, poor medication compliance, comorbidities, high number of previous psychiatric entries, age (young individuals are more prone to rehospitalization), poor planning at discharge [6].

Prognostic factors with social impact that can lead to recidivism associated with recurrent psychotic episodes and relapses are patients who are single, separated or divorced, unemployed, and receiving a disability pension. Also, environmental factors can influence the recurrent hospitalization tendency, such as being homeless, living in a residential facility or in urban environment [6].

Many chronic psychiatric patients have no relationships with family and friends and live a solitary life in an uncaring community or are considered a burden by their families which leads to frequent conflicts [6].

Revolving door refers to the expectation that patients will present frequently for readmission over a short period of time. Most of the studies suggest that the number of previous psychiatric admissions is a way to predict the risk of readmission. In a research paper of Zahir Vally and Nasera Cader [7], refers that about one half of patients with severe psychiatric disease are readmitted and the risk of readmission after discharge within one year is 40% with the first month be a crucial predictive factor.

### **1.1. Aim of the study**

The aim of this study is to review all publications on all published publications about the revolving door phenomenon in patients with personality disorders

Alternative therapies and ways of managing this category of patients in the outpatient community care system will be explored

Finally, we aim to provide food for thought on the type of ethical theory and the model of medical practice used in the 21st century in Greece and to what extent psychiatric reform is promoted and correct medical practice is applied.



## **1.2. Material and methods**

For the purposes of this narrative review, all relevant studies were searched using the following databases: PubMed, PsychInfo. Relevant studies (systematic reviews, research articles, meta-analyses, books and documents) were retrieved and screened. Language of search was English and keyterms used for the search were: “Revolving Door in Psychiatry”, “Personality Disorders Readmissions”, “Readmissions in Psychiatry”, “Rehospitalization in Psychiatry”, “Ethics in Psychiatry”, “Heavy users in Psychiatry”. No range of publication date was applied.

## **2. Review of the Literature**

### **2.1. Special Psychiatric Patients Groups**

#### **2.1.1. Mental Health**

The definition of mental health has been a complex challenge is a complex undertaking that has for the scientific community as cultural differences and subjective considerations influence the way in which this concept is perceived. A concept which the social psychologist Marie Jahoda [1] (p. 3) has characterized as "vague, difficult to understand and unclear". In her work, she defines the criteria of mental health conquest [8] (p. 23) as the aspects of self-actualization, i.e., the freedom of the individual to exploit his/her potential to the fullest, autonomy and self-esteem, of resistance to stressors of everyday life, of feeling dominant in the environment and the perception of reality, in which he/she faces and solves his/her problems.

Efforts to define it were intensified, the World Health Organization focused on the serious public health effects of mental disorders. It became clear that mental health is an integral part of health and it is not enough to be defined, simply, as the absence of mental disorder. Mental health describes that state of well-being in which the individual realizes his/her abilities, can cope with the normal stresses of life, can work in a productive and constructive manner and can contribute to his/her community. It affects and is affected by - all aspects of human life. It contributes to well-being, while enhancing productivity, social cohesion and by extension the progress of a society [9] (p. 12).

The above definition does not fully satisfy Galderisi, Heinz, Kastrup, Beezhold, & Sartorius [10], because they do not consider that it takes into account the differentiation in the cultural background and in the political and economic conditions of different societies. They believe that this definition allows negative emotions, as experienced in unpleasant, but normal aspects of life, to be wrongly associated with a lack of mental health. However, they consider the World Health Organization's negative attitude to be positive against the simplistic theory that states the absence of

mental disorder as mental health index, since, according to it, people with a diagnosed mental disorder can present different levels of mental health [11]( p. 12).

For Galderisi and his colleagues [10] (p.231) “mental health is a dynamic internal state of balance that allows individuals to use their abilities in harmony with the universal values of society. Basic cognitive and social skills, the ability to recognize, express and shape their feelings, as well as empathizing with others, flexibility and coping skills of the unpleasant events of life and functioning in social roles and the harmonious relationship between body and spirit, represent important elements of mental health that contribute, to varying degrees, to the state of inner balance”.

In the above definition, universal values refer to respect and care for self and other living things, the recognition that people are interconnected, respect for the environment and respect for everyone's freedom. The dynamic state of internal balance describes the various events in life of a person, some of which lead to the experience of negative emotions, in the destabilization of his/her equilibrium and the need through active search to achieve a new equilibrium. The individual elements are aspects of mental health which develop to a different degree for each person and contribute to achieving the desired balance. Cognitive skills refer to the ability of attention, memory, information organization, problem solving and retrieval decisions, while social skills refer to the ability of verbal and non-verbal communication and interaction with others. Emotional maturity and empathy enable people to interact effectively by understanding the feelings and intentions of others. Flexibility and adaptability facilitate people who are faced with sudden changes in their lives and ease their anxiety about the future. The response to social roles and the involvement in meaningful social interactions are a shield against the unhappiness, while a harmonious relationship between body and spirit reflects the total experience of being a part of the world, which is not separated from the way the body realizes its environment [10].

The World Health Organization defines mental disorder as a clinically significant condition, which includes changes in thinking, mood and a person's behavior, discomfort and impairment of their functionality and which is characterized by a wide range of symptoms [12]. With a stricter definition, the American Psychiatric Association defines mental disorder, “as a syndrome, characterized by a clinically

significant disturbance of cognition, emotional regulation, or behavior of an individual, which reflects a dysfunction of psychological, biological and developmental processes, which govern mental functioning. Mental disorders are usually associated with a significant difficulty or disability in social, occupational or other important activities. An expected or culturally acceptable response to a stressor factor or in a loss, such as the death of a loved one, is not a mental disorder. Socially deviant behavior (e.g., political, religious or sexual) and conflicts, which are mainly between the individual and society, are not characterized as mental disorders, unless the deviation or conflict is the result of a dysfunction of the individual, as previously described' [13] (p.20).

### **2.1.2. Classification of mental disorders**

Mental disorders are classified based on the diagnostic systems, which constitute useful tools of Psychiatry, as their purpose is the scientific documentation of the psychiatric diagnosis and the creation of conditions for it, with an as possible individualized approach to the mentally ill. These systems are the results of years of work and research, of many scientific groups, are amenable to criticism, promote discussion and are revised, as the knowledge surrounding the mental health evolves.

In 2013, the American Psychiatric Association issued the 5<sup>th</sup> version of the diagnostic DSM system [13], a useful tool for diagnosing mental disorders during clinical practice. Since its first edition in 1952, which recognized 106 mental disorders, separated into three major categories, the psychoses, the neuroses and behavioral disorders, currently describes 541 recognized disorders, which are categorized as follows:

1. Neurodevelopmental disorders
2. Spectrum of schizophrenia and other psychotic disorders
3. Bipolar and other disorders
4. Depressive disorders
5. Anxiety disorders
6. Obsessive compulsive and related disorders
7. Trauma-related disorders

8. Dissociative disorders
9. Physical symptoms and related disorders
10. Eating disorders
11. Disorders of excretion
12. Sleep disorders
13. Sexual dysfunctions
14. Gender dysphoria
15. Dissociative disorders, impulse control and conduct disorders
16. Substance-Related Disorders and Addiction
17. Neurocognitive disorders
18. Personality disorders
19. Paraphilic disorders
20. Other mental disorders

As diseases that need further investigation, before recognizing them among the mental disorders, the syndrome of weakened psychosis, depressants episodes of short-term hypomania, persistent complex grief disorder, online gaming disorder, caffeine use disorder, suicidality behavior, non-suicidal self-injury and neurobehavioral disorder related to prenatal alcohol exposure, are also recorded.

The ICD (International Statistical Classification of Diseases and Related Health Problems) diagnostic system began to be widely used in the context of World Health Organization, in 1994, in order to minimize the burden caused by the existence of disease. It is used by all Greek agencies of health sector, for the identification, treatment and monitoring the prevalence of diseases and related health problems, in compliance of the patients' medical file, in issuing guidelines, in research and in improving health services. In the 5<sup>th</sup> chapter mental disorders are classified as mental and behavioral disorders, which are categorized as follows [14]:

1. Organic mental disorders, including symptomatic ones

2. Mental and behavioral disorders due to use of psychoactive substances
3. Schizophrenia, schizotypal disorder and delusional disorders
4. Mood disorders (emotional disorders)
5. Neurotic, anxiety-related and somatoform disorders
6. Syndromes manifested in behavior and related to disorders of physiological functions and physical factors
7. Personality and behavioral disorders of adults
8. Mental retardation
9. Disorders of normal development
10. Disturbances of behavior and emotion with onset usually at childhood and adolescence
11. Unspecified mental disorders

In the process of application, the 11<sup>th</sup> edition of the International Statistical Classification of Diseases and Related Health Problems, was released in 2019. In the 6<sup>th</sup> chapter, for the mental and neurodevelopmental or behavioral disorders, it approaches the DSM-5 standards for mental disorder's categorization, without however the two systems to be harmonized perfectly. For example, in ICD-11 the gaming disorder which refers to video games is already classified as a mental disorder, as well as the prolonged bereavement disorder, whereas acute anxiety is no longer considered as a mental disorder. The term transsexualism of the ICD-10 is abandoned, while gender dysphoria is not used, like in the DSM-5. ICD-10 uses the term gender nonconformity, which, however, is not classified as mental disorder.

### **2.1.3. Antisocial and borderline personality disorders**

The idioms of personality become a disorder of the personality when standards of thinking and behavior are extreme, rigid and maladaptive. They can cause serious disturbance in the person's life and are usually associated with significant mental tension for the individuals themselves or for others. Personality disorders usually begin in childhood and they last throughout adulthood. The prevalence of personality disorders is not exactly known and differ for the different disorders. Borderline

personality disorder occurs in about one in 100 individuals. Studies in the community shows almost equal prevalence between genders although in clinical population is more common in women, while Antisocial Personality Disorder is five times more common in men as in women. Although a person's personality is difficult to change, people suffering from personality disorders can, if they accept appropriate treatment and support, to have a productive and full life [15].

There is a wide range of personality disorders. All these disorders include an invasive pattern of behavior, which means behavior and thought characteristics are evident in almost all aspects of the person's life. There are three groups of personality disorders: the eccentric disorders, the dramatic emotional or unstable disorders and the anxious or fearful disorders [16].

The specific disorders are the following:

**Paranoid personality disorder** is characterized by a strong suspicion and mistrust towards others, resulting in other people's incentives to be interpreted as malicious.

**Schizoid personality disorder** has as its main characteristic the disconnection of the individual from the social relations and the limited range of emotional expression in interpersonal relationships.

**Schizotypal personality disorder** has as a dominant element the social and interpersonal deficiency and is characterized by intense discomfort and decreased interpersonal skills. It is also characterized by disturbances of thought and perception and from eccentric behavior.

**Antisocial personality disorder** has as a dominant characteristic the contempt for the rights of others.

**Histrionic personality disorder** has as its main characteristic the excessive emotionality and attention seeking.

**Narcissistic personality disorder** makes the individual to express actions of greatness (in one's imagination or in his/her very conduct). It is characterized by the need for admiration and the lack of emotional understanding.

**Avoidant personality disorder** is characterized by social inhibition, feelings of inadequacy and hypersensitivity to negative reviews.

**Dependent personality disorder** has as its main characteristic the intense and excessive need for the person to be taken care of by others, which leads to submissive and dependent behavior, as well as in fear for separation from others.

**Obsessive-compulsive personality disorder** is characterized by intense engagement of the individual with the order, by perfectionism and mental and interpersonal control, to the detriment of flexibility, open communication and efficiency.

**Borderline personality disorder** has as a dominant characteristic the instability in interpersonal relationships, in the image that people have of themselves, in their emotional disposition and control of their impulses. Understanding borderline personality disorder is particularly important because it is likely to be misdiagnosed as another mental disorder, especially as mood disorder. People suffering from borderline personality disorder are likely to have the following symptoms:

- Extreme mood swings.
- Anger that doesn't match the circumstance or difficulty in controlling their anger.
- Chronic feelings of emptiness.
- Repeated suicide behavior, gestures or threats, or self-harm behavior.
- Impulsive and self-destructive behavior.
- History of unstable interpersonal relationships.
- Persistently unstable image or sensation. of themselves.
- Fear of abandonment.
- Periods of insanity and loss of contact with reality [16].

Personality disorders often occur simultaneously with other mental illnesses. The harmful use of alcohol and drugs often coexists with personality disorders, especially with borderline personality disorder. This is something that makes the management more complex, and it is important for the person to effectively control alcohol and other drug use. Many people who suffer from personality disorders either do not ask for help at all, or only after many years of mental tension. This contributes in the lack of knowledge we have about the causes of the antisocial and borderline personality disorders and how they develop. It seems that there are different risk factors related to



the various types of personality disorders. Nevertheless, as for the mental illnesses in general, the causes seem to be a complex combination of hereditary, biochemical, individual, family and environmental factors [17].

## **2.2. Interventions for People who have Co-occurring disorders**

The variety of treatments for personality disorders is ever expanding. The kind of treatment to be given depends on the type of personality disorder. Many personality disorders correlate with other mental illnesses, but the specific behavior is usually more durable and long term. For example, obsessive-compulsive personality disorder correlates with schizoid personality disorder and schizophrenia and avoidant personality disorder correlates with social phobia. For this reason, similar and suitable therapeutic approaches must be used [18].

For borderline personality disorder, the main therapeutic approach is psychological treatments. Dialectical behaviorism therapy (DBT) is one form of cognitive behavioral therapy, which aims to address mood instability and impulsiveness. It teaches people how to manage their emotions and how to learn new ways of reacting to other individuals and towards the various situations. An important goal of the treatment for people with borderline personality disorder is the management and control of suicidal and self-harming behavior. DBT seems to be effective in putting under control the suicidal behavior [19].

Although our knowledge about the effective treatment of personality disorders is still in progress, the early diagnosis resorts to therapy treatment in the most effective way. Suffering from a mental disorder individuals' family and friends, can often feel confused and mental intensity. The support and training, as well as the best understanding of these issues from the supporting social group, is an important part of the therapeutic approach [20].

Dealing with stimulant and mental abuse of suffering patients, with self-or hetero-destructive behavior is a core problem in psychiatry. Both the prediction and the control of violent behavior are often precarious and fail with usually dramatic consequences [21]. All the experts agree that behavioral techniques of de-escalation, with the ultimate goal of calming the agitated patient and gaining a degree of trust and cooperation, are the goals of interventions [22].

Often many clinicians consider involuntary treatment and other restrictive methods to be the safest and most effective intervention for excitable and dangerous patients. Restrictive techniques, such as isolation and mechanical immobilization of mentally ill patients, continue to be an area of concern and controversy among mental health professionals, while at the same time they are related to high rates of physical and mental trauma for both patients and staff. Despite multiple problems entailed by these practices, they continue to be applied in emergency departments, psychiatric departments and special wards in psychiatric hospitals or general hospital sectors [22].

Because of these problems, both regulatory authorities and groups of users and caregivers of the mentally ill, are pushing towards the reduction and elimination of restrictive measures [23]. In Greece there are no mandatory guidelines applicable to all mental health placements [24].

The Special Control Protection Committee of the Rights of Persons with Mental Disorders of the Ministry of Health and Social Solidarity, has issued instructions regarding "Restrictive measures during psychiatric hospitalization". According to the recommendations of the committee [25]:

- The psychiatrist is present at the act of restriction
- Nurse every 15 min visits the immobilized patient and checks the vital signs, fluids balances, diuresis, etc.
- A psychiatrist visits the patient hourly and re-evaluates the feasibility of the extension or not of the restriction
- In addition to updating the file of the hospitalized patient, a restriction notebook is maintained in each department, which is updated to any case of restriction.

Agitation in the emergency room concern two categories of patients

#### 1. Patients voluntarily coming to the emergency room of the psychiatric hospital

- This category of patients refers to psychotic patients, who react violently when the physicians' intention for treatment is announced to them, or patients (usually substance abusers - alcohol or other toxic substances -) who behaviourally try to manipulate achieve admission. It is worth mentioning that people with a history of

substance addiction/abuse and related disorders behavior, are not normally admitted in psychiatric hospitals in Greece.

- Shift nurses are used to managing patients in this category, but are often supported to paramedics. Infrequently, nurses from other departments or the Police are called to assist. For these patients the procedure which governs the conditions of enforcement of restrictive measures is provided by relevant circular of the Ministry of Health and Welfare [25].

## 2. Patients brought by the Police in execution of a public prosecutor's order for psychiatric examination

This category of patients is characterized by the accompaniment of the Police, which usually help to deal with agitation. So, as a rule, no additional staff support is required on duty. The patients of this category are often captive, and the handcuffs are not removed until the medical specialist recommends accordingly (usually after forming an opinion about the potential aggression/dangerousness of the patient – as far as this is possible) or after the patient is given rapid tranquilisation [25].

### 2.3. Recurring Emergency Room Visits

In Greece it was observed that a large percentage (70%) of patients was hospitalized only once, but 30% were readmitted at least once, with the most frequent number being two hospitalizations [26]. In a previous study in the same department the rate of readmissions did not present a significant difference, as it reached 28% of total hospitalizations [27]. In a four-year survey of Portugal, it emerged that 10% of psychiatric hospitalizations had frequent readmissions, as 29% of all hospitalizations were readmissions [28]. In a retrospective study at Bolu Izzet Baysal Mental Health Hospital, it was recorded that of the total of 504 patients, 112 were readmissions. More specifically, 7 out of 9 patients with first involuntary hospitalization were re-hospitalized involuntarily, while only 3 out of 103 patients with first voluntary hospitalization were hospitalized unintentionally [29]. This phenomenon is also observed in other studies internationally, i.e., the possibility of repeated involuntary hospitalization is equal to or greater than that of voluntary hospitalization [30].

In Greece voluntary psychiatric hospitalization showed a higher rate of readmissions than involuntary admissions. This phenomenon can perhaps be justified by closer post-discharge follow-up in those involuntarily admitted. This results in early detection of relapse signatures by the community clinical team and the opportunity to achieve voluntary admission, thus early avoiding psychiatric hospitalization [31]

According to the international literature, the rate of readmissions reflects the severity of the mental disorder, the individual characteristics of the patient, the environmental factors but also the lack of scale policy and national health systems, indicating the weakness of each state for efficient and quality care of the mentally ill in the community [32].

In Greece, no extensive research has been done, but in a related article, the data show that the average length of stay during involuntary psychiatric hospitalization, mainly for teenagers, was 10 days for the five-year period 2010-2014, while for the five-year period 2005-2009 it was 14 days [33]. In research in Portugal, the average duration of hospitalization was 20 days, while in Turkey, a clinic survey accounted for 24 days of length of stay with voluntary hospitalization and at 28 days in involuntary hospitalization [28] [29]. In research in Santos, Brazil, it was shown that involuntary psychiatric hospitalization had a significantly increased number of days of stay in the psychiatric unit and especially the involuntary hospitalization after a court order. It was reported that on average patients with involuntary psychiatric hospitalization stayed 142 days in the unit, while patients hospitalized for any other reason, they remained about 35 days [34] .

We can also investigate the most frequent diagnosis of hospitalized patients. The largest percentage belonged to psychotic disorders spectrum, followed by affective disorders, with respective percentages of 45% and 25% [29] [35] [36]. Main correspondence is that of psychotic spectrum disorders with involuntary psychiatric hospitalization, as it is a risk factor for forced hospitalization. The evidenced from international literature reports that almost 67% of involuntarily hospitalized patients, suffer from disorders that belong to psychotic spectrum, while voluntarily hospitalized patients suffer in a higher percentage 38% of those in the emotional spectrum [29] [30]. Research in Germany has shown that the therapeutic approach to

schizophrenic patients on long-acting injectable antipsychotics, states effectiveness, reducing relapse, hospitalization and overall rates costs in the health sector [37].

Readmissions undoubtedly have a significant impact on the patient, but at the same time they present an extraordinary cost that they derive from health piggy bank, as beyond the hospitals, the person does not continue in stage of recovery. This finding led to studies aimed at the limitation of readmissions and the promotion of recovery procedures. Large research carried out in European contexts (Austria, Finland, Italy, Norway, Romania and Slovenia), presented the actions that support the daily life of the mentally ill and help in recovery of their functionality and autonomy. Those actions can be psychoeducation programs, with the collaboration of an interdisciplinary team and various services that can organize management strategies, psychosocial interventions. Through those interventions, the reintroductions are significantly reduced and the individual is steadily driven to recovery. Of course, these actions must start during the first psychiatry hospitalization [38].

Results of reliable research, presented that for the mentally patients' other issues are more important to them than their admission to a psychiatric unit. The effective communication and the relationship of trust with the staff of the unit, the complete information about the course of their health, medication, cooperation and their shared opinion during their treatment planning, both during hospitalization, as well as after their discharge from the unit and finally, respect for their rights, their individual freedoms and dignity, play the most important role for their recovery [26].

Due to the unprecedented period experienced by humanity, it is also worth noting research concerning the voluntary and involuntary hospitalizations related to COVID-19, as the pandemic is a significant factor in log data. It was observed, therefore, in Italy that 40 days after the start of the pandemic and compared to previous periods, there was a visible reduction in voluntary hospitalizations, while involuntary hospitalizations did not show some significant. As for the diagnoses, the only categories that did not show a decrease were those of anxiety disorders and neurocognitive disorders. It has been found that large-scale pandemics have significant influence on voluntary psychiatric readmissions, as people with mental disorders fear and avoid hospital facilities, because of the transmission of the virus [39].

## **2.4. Risk factors for Readmission for Acute Psychiatric Hospitals**

The main reason for the readmission of patients to acute psychiatric hospitals is the lack of community mental health services. Statutory mental health services include community rehabilitation services, hospital diversion programs, mobile crisis units, inpatient treatment services, as well as community services for special population groups, such as victims of traumatic experiences, children, teenagers and the elderly. Community mental health services are not based in hospitals, but have close collaboration with psychiatric hospitals. They work best to the extent that they are linked to primary care services as well as informal community care delivery systems. Some of the staff of these services must be highly skilled in mental health. In many developing countries, it is not easy to find highly skilled personnel, which limits the availability of such services [40].

Well-staffed and adequately funded community mental health services offer many people with serious mental disorders the opportunity to continue living in the community, thus promoting social integration. The high degree of satisfaction provided by these services is linked to the easy accessibility, the minimal possible stigma associated with seeking help and the reduced possibility of human rights violations. Good quality services that offer a wide range of benefits to meet diverse needs require adequate funding and staffing [41].

Another reason for readmitting patients to psychiatric hospitals is the manifestation of violent behavior and the threat to the safety of the patients' caregivers and family. In other words, special psychiatric hospitals mainly provide long-term care services. In many parts of the world, they are either the only or a related element of related services. They absorb most of the human and financial resources for mental health in many countries, which is a serious barrier to the development of alternative services in the community. Psychiatric hospitals are commonly associated with inadequacies in the effectiveness of their interventions. This is due to a combination of factors such as inadequate clinical care, violation of human rights, institutional nature of care and lack of rehabilitative activities [42].

Risk factors for readmission in a research study in South Africa, appear to be: number of previous psychiatric hospitalization, severity of the disease, period of time without relapse, compliance with drug treatment, detailed and well-organized discharge, age group, comorbidity. Findings suggest that readmission rates among patients with severe mental illness are high (diagnosis of schizophrenia and other psychosis, diagnosis of substance dependence that more often is related with affective component) [7]. The number of previous psychiatric admissions is a factor that can predict future relapses. 50% of patients admitted have had previous psychiatric hospitalization, and about less than one half of patients require hospital treatment within 1 year of discharge. The most critical period of time is 1 month after discharge. Patients faced comorbidity have twice risk for relapse per year compare those with a single diagnosis. Furthermore, patients with poor medication compliance have a high rate of readmission. Protective factor against future readmission is the detailed planning at discharge. Age appears to be a factor that affects readmission. Younger patients used to be readmitted more frequent. In the other hand, older patients were more cognitively impaired and thus less responsive to cognitively based interventions and that can lead in readmission [7].

Most of the readmitted patients seem to be male than female. The patients age range, 17 to 83 years with slightly younger patients at index admission. A significantly larger proportion of patients who were readmitted were divorced, single or widowed. In addition, the group of patients who were readmitted contained a significantly higher proportion of individuals who were unemployed, received social assistance or had secondary school education. Persistence of symptoms and difficulty coping were each cited as the predominant reasons for readmission, followed by difficulties with relationships and medication noncompliance. Diagnosis was significantly associated with readmission. Although many patients had comorbidity, schizophrenia was the most frequent diagnosis of the readmitted patients, followed by personality disorder, mood disorder and schizoaffective disorder. A history of aggression and behavioral problems were also significantly associated with readmission [43].

In a German study [44], referral to a hospital outpatient clinic in case of a crisis was associated with an increased risk of readmission, while referral to a general practitioner was associated with a reduced risk. This is always related to physician judgment, i.e., patients with a poor prognosis and high risk of readmission were

preferentially referred to hospital outpatient departments, while those with a favorable prognosis were referred to general practitioners. Therefore, it may be worth considering that intensive treatment in hospital outpatient departments may be less effective in preventing readmission than outpatient treatment by general practitioners. After all, this has been mentioned, referring to the proper preparation of community doctors. After all, the available evidence suggests that intensive psychosocial support outside the hospital prevents readmissions [44].

In the same study [44] they analyzed the impact factors on the process of rehospitalization after discharge, taking into account individual careers of patients. Length of period named as TIC (time in the community) is comparing with rehospitalizations. A comorbidity with any substance-use disorder (F1) was associated with an accelerating effect on rehospitalization. Affective disorders (F3), neurotic and somatoform disorders (F4) as well as behavioural syndromes (F5) were connected with longer TIC episodes and therefore less frequent readmissions. Age at discharge and higher education level were estimated as protective factors associated with longer TIC episodes. Aspects of a patient's social situation after discharge influence the risk of rehospitalization. Patients who are living in an urban surrounding used to have higher risk of rehospitalization. Although patients who are living in an institutional facility have a lower risk for rehospitalization. Patients' social functioning at the time of discharge displayed a protective effect for re-hospitalization in all models, as well as employment. Involuntary hospitalization could be associated with delayed and less frequent rehospitalization. Referral to a general practitioner was associated with longer TIC episodes, and referral to the hospital's own outpatient clinic with significantly shorter TIC episodes [44].

Cases of comorbidity and substance dependence increase readmission rates. A study looking at readmission rates over 4 years reported 57% for those with only a diagnosis of alcohol dependence, 64% for those with alcoholic psychosis, and 70% for those with a comorbid psychiatric disorder [45]. Another study reports lower readmission rates (41, 50, and 52%, respectively) among new substance abuse patients (those with no inpatient substance abuse or psychiatric episodes in the four years prior to the readmission episode) [46]. Therefore, older patients with more recent onset of substance abuse problems may have a better prognosis than those with younger age but chronic substance abuse difficulties. Furthermore, these studies highlight the



importance of distinguishing late-onset and early-onset substance abuse as an assessment marker for the chosen treatment program [46]. Providing adequate hospital care with appropriate treatment of the addiction problem with contemporary stabilization of the patient's psychiatric condition is a suggested intervention to address the readmission rate, particularly for patients with alcohol and substance abuse. Also, the promotion of a good social support network for patients discharged due to substance abuse is emphasized here, which can help reduce the risk of readmission. In addition, interventions for patients at risk of readmission that focus on assessing needs and promoting psychological support of the social network could be effective in improving the quality of life of patients with serious mental disorders, including substance use and psychotic disorders related with alcohol [47].

In developed countries, the process of deinstitutionalization during the last three decades has resulted in a decrease in the number of patients in psychiatric hospitals, however, this is not accompanied by the necessary provision of community mental health services, which will shoulder the monitoring and rehabilitation of the patient [48]. Primary health care is not closely linked to the development of mental health services. For example, depression, although a common problem in primary care, is still under-recognized or under-treated by medical professionals in many developed countries [49].

## **2.5. Positive and Negative Outcomes of Readmissions of Special Patient Groups**

In the case of violent patients returning to psychiatric emergency rooms, we referred to restraint techniques. The economic cost of the health professionals involved in the implementation of the restrictive measures has been poorly estimated, with most studies demonstrating that the restricted patients significantly increase the cost of hospitalization [23] [50]. The absence of clear guidelines in Greece, results in adverse events during restrictive techniques to be relatively frequent, while in some cases they result in the death of the restricted patients [51]. In any case, restrictive methods are a traumatic experience for both patients and the staff members involved, while at the same time the training of the staff in de-escalation and stimulation management

techniques are extremely limited [52]. The reality, however, is that internationally they are often used as methods of control and enforcement, medication compliance, acceptance of the disease and the control of hospitalization. Although the extent of their use is strongly disputed, they remain widespread in structures other than psychiatric ones [53].

The return to the psychiatric hospital (or the Revolving door syndrome) is most often a necessary part of the patient's treatment, because his/her stay in a psychiatric unit, public or private, makes his monitoring more intensive and more holistic. During psychiatric hospitalization, the diagnosis of the disorder usually pre-exists, but many times a new diagnosis is made or the old one is revised [44]. As for the treatment, it varies and is adapted according to the case, because apart from the diagnosis of the disorder and its categorization, each patient is unique. The therapeutic intervention, in addition to medication, however, includes the collaboration of the patient both with the psychiatrist and with the entire interdisciplinary team, as the person needs support in many areas of his life, such as work, interpersonal or financial [31].

Another phenomenon seen in elderly patients due to deficiencies in social and health systems is the revolving door syndrome due to depression and dementia. In a cohort study of 1619 hospitalized geriatric patients aged 65 years and older (mean age 76.4), 22% of them had at least one readmission in the past 30 days [54]. Consequently, as life expectancy increases, a host of medical, legal and ethical dilemmas arise. The above data underline that there is an urgent need to investigate the factors that can influence the process of re-introduction due to old age. Readmission to a psychiatric hospital can lead to stigmatization, violation of the patient's rights and freedom, increased suicidality and decreased functioning [54].

Moreover, in research carried out in Greece, through an interview with mental patients, who had experience of psychiatric hospitalization in all its forms, they themselves expressed that they do not wish to be hospitalized again, neither voluntarily nor involuntarily. They prefer and propose community care, social reintegration, psychosocial rehabilitation and alternative mechanisms to replace involuntary hospitalization due to potential risk [31].

### 3. Discussion

The importance of mental health to humans and society is undoubtedly one of the most basic issues. There is an imperative need for equality of physical and mental health in charting the politicians, as in many cases it is observed even today that they do not show an equal interest [55]. Involuntary psychiatric hospitalizations are traumatic experiences, according to patient testimonies, and frequent readmissions with a long stay they develop the syndrome of institutionalization, such the ones occur in in asylums and prisons, with the main symptoms being withdrawal, apathy, regression. In other words, additional symptoms are created on the symptomatology of the existing disorder [56]. Worth to note, that apart from the effects on the patients themselves and society, the mentality of involuntary hospitalization, long-term hospitalization and the revolving door phenomenon, have significant effects on the economy as well, since the cost is high and greatly affects the budget in the health sector [38].

Many researchers have attempted to analyze the reasons for readmission in acute psychiatric wards [35] [36]. Determining the factors of readmission to psychiatric hospital for special psychiatric patient groups, is not only done for statistical or epidemiological reasons, but it is very important for three main reasons. First, predicting and identifying risk factors for hospital readmission is an important clinical parameter for patient discharge. Secondly, as mentioned, since the cost of treatments and the distribution of public resources is an important concern of public health systems, it is considered important to predict the course of chronic psychiatric diseases. Third, researchers have emphasized the importance of correlating epidemiologic data with the neural mechanisms of psychiatric illness, which often leads to the re-admission of specific categories of the mentally ill [35].

There is, therefore, an immense need for alternative practices in therapeutic interventions in the field of mental health. First, there is a need for the principle of sectorizing psychiatric hospitals, as well as each psychiatric department placements to be open for involuntary hospitalizations with an acute department, specialized staff and logistical infrastructure. And this, because the phenomenon of hospitalization in another area from where the patient lives, is very common and not at all helpful either for the patient himself/herself in his treatment, nor for the clinic that is in charge of a

larger population than it can handle [11]. But if we wish to apply the principles of the Community Psychiatry, then involuntary hospitalizations should be limited. And so, actions must be directed to Community Care, employment, professional rehabilitation and proposal for involuntary outpatient treatment.(Community Treatment Orders)

Community Care Units offer psychiatric rehabilitation, as they improve the mental health of individuals, as well as in their social functioning. Furthermore, their implementation, brings about a reduction in involuntary hospitalizations, beds and involuntary treatment, as well as a reduction in episode duration and recurrent disease episodes [57]. At the same time, research showed that a decreased inpatient care is observed after patients finding employment and even more so if this is combined with the psychoeducation of the patient and his/her environment [58] [59]. Phenomenon revolving door was reduced when Community Treatment Orders were applied. Other positive points emerged, such as adherence to treatment. The inclusion of the mentally ill in the community, often works as a motivation for treatment. Of course, with this tactic, cooperation with the supportive environment of the individual is important. Involuntary outpatient treatment, has many advantages but financial and legal difficulties, as the lack of social resources and the lack of services, did not allow until today the implementation of this alternative approach in our country [27]. Among the most important points of modern psychiatry is its anthropocentrism. The patients are at the center and act as partners in process for making the decisions concerning them and the course of their health [56].

We conclude that the factors identified as influencing patient readmission to acute psychiatric hospitals cannot be summarized in a single paper. It is certain that strategies to mitigate these factors will reduce the rate of readmission to acute psychiatric facilities, but, as highlighted in this review, home care, provision of adequate inpatient care and adequate discharge planning, are recommended as necessary prerequisites before the discharge of patients. In addition, especially for psychiatric hospital staff, it is recommended for the policy makers, to strengthen in-service training, in order upgrade knowledge of psychiatric patient management, as well as contemporary practices based on interventions to reduce readmission rates. In addition, focused and coordinated transitional care and social support programs can be implemented as intervention design. Governments, policy makers and health systems can also adopt and implement interventions at the population level, by providing

psychological support services for the general public, patient careers and patients in the community.

In conclusion, further studies are needed to support the implementation of alternative methods of dealing with psychiatric admissions. Also imperative is the implementation of adequate research dealing with the family circumstances of the mentally ill, and the social support provided to them. Finally, an interesting challenge is the study of the positive consequences of preventive measures such as education, community education and the special therapeutic monitoring programs.

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