1-ère Année. Juin 1919. No. 1.

Bulletins et Mémoires de la Société
DE
Neurologie, Psychiatrie et Psychologie
DE
JASSY

SOMMAIRE:

Jassy.—Imprimerie «Progresul» A. Grünberg rue Stefan cel Mare 4.

Bulletin of Integrative Psychiatry. Buletin de Psihiatrie Integrativă

New series of "Bulletins et Mémoires de la Société de Neurologie, Psychiatrie et Psychologie de Iassy", edited by "Socola" Hospital of Psychiatry Iaşi from 1919 to 1946

Serie nouă a "Bulletins et Mémoires de la Société de Neurologie, Psychiatrie et Psychologie de Iassy", editat de Spitalul de Psihiatrie „Socola" Iaşi în perioada 1919 – 1946

Redacţia/Editorial Board: Institutul de Psihiatrie „Socola" Iaşi / "Socola" Institute of Psychiatry Iaşi
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Published by "Socola" Institute of Psychiatry Iaşi, Romania
Publicaţie a Institutului de Psihiatrie „Socola" Iaşi, România

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Page layout şi copertă: Alexandra PANAETE

Serie Nouă | New Series
An XXII Nr. 1 (68) | Year XXII No. 1 (68)
Martie 2016 | March 2016
Frecvența: Trimestrială | Frequency: Quarterly

BPI Bulletin of Integrative Psychiatry

Buletin de Psihiatrie Integrativă

Official Publication of
"SOCOLA" INSTITUTE OF PSYCHIATRY
Iaşi, Romania

PUBLISHER: "SOCOLA" INSTITUTE OF PSYCHIATRY IAŞI

PEER REVIEW

All manuscripts intended for publication will be subject to peer-review by a committee of experts which assesses the scientific and statistical correctness of submitted articles. Submitted manuscripts are screened for completeness and quality of files and will not enter the review process until all files are satisfactory.

The Bulletin of Integrative Psychiatry tries to continue the tradition initiated at "Socola" Hospital in 1919, when a group of intellectuals, medical doctors and personalities from other professions founded the Society of Neurology, Psychiatry and Psychology in Iaşi. Even from its beginnings, the Society edited a journal entitled "Bulletins et Mémoires de la Société de Neurologie, Psychiatrie et Psychologie de Iassy", the first publication of the kind in Romania, which was unique also by its vision and opening towards biology, psychology, sociology and philosophy and by its prestigious board of editors: C. I. Parhon, Gh. Preda, Constantin Fedeleş, Arnold Stocker, P. Andrei, Corneliu Popa-Radu, I. A. Scriban, well known personalities, some of them being physicians of great culture and scientific qualification.

Starting from 1920, the Association and its Bulletin, born and edited at "Socola", due to their remarkable scientific activity have contributed to the organization of 18 congresses, which are mentioned in the description of "Socola" Hospital activities.

In 1947, the last number of "The Bulletin of the Society", edited in French, was banned as a result of the interdictions imposed by extremist tendencies. From its first number in 1919 and until 1947, "The Bulletin of the Society" published 2,412 articles.

The journal or "The Bulletin of the Society" has appeared under several titles: "Bulletin et Mémoires de la Société de Neurologie, Psychiatrie et Psychologie de Iassy" (between 1919 and 1922), then "Bulletin de l'Association des Psychiatres Roumains" and from 1923 it has changed its title several times.

After the year 1947, all publications at "Socola" Hospital were included in the "Medico-Surgical Journal of the Society of Physicians and Naturalists in Iaşi", another prestigious scientific journal which has been published without interruption since 1886.

Starting from 1994, Professor Dr. Tadeusz Pirozynski, Professor dr. Petru Boişteanu, Professor dr. Vasile Chiriţă, Conf. dr. Radu Andrei and Dr. M. E. Berlescu have revived the tradition of publications at "Socola" Hospital, editing the new "Bulletin of Integrative Psychiatry".

At the end of 2014, "Socola" Hospital became the "Socola" Institute of Psychiatry, which has increased its responsibilities regarding medical assistance, scientific research, didactic activity, professional training and also the development of editorial activity.

În conformitate cu Decizia nr. 2 din 23 ianuarie 2009 din cadrul Programului Naţional de Educaţie Medicală Continuă şi în temeiul art. 406, 414 şi 431 din Legea nr. 95/2006 privind reforma în domeniul sănătăţii, Consiliul Naţional al Colegiului Medicilor din România a decis ca articolele ştiinţifice publicate în reviste de specialitate clasificate CNCS, grupa B, să fie punctate cu 80 credite/articol.

Redacţia

Revistă cotată B+ CNCS, indexată BDI Index Copernicus, DOAJ, Erih Plus
Journal B+ CNCS and Indexed IDB by Index Copernicus, DOAJ, Erih Plus

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Publisher contact:

- SEDCOM LIBRIS Publishing House
  E-mail: editurasedcomlibris@gmail.com
  Web Site: www.editurasedcomlibris.ro

Summary

BPI Bulletin of Integrative Psychiatry
Buletin de Psihiatrie Integrativă

Editorial

Psychiatry in the 21st century and its integrative role

Alexandra BOLOŞ

Alexandra BOLOŞ – M. D., Ph. D., Senior Psychiatrist, Lecturer, Department of Psychiatry, "Gr. T. Popa" University of Medicine and Pharmacy Iaşi, Romania

The identity of psychiatry and its role among the other medical specialties is a widely discussed topic lately, especially due to new technologies used in detecting brain activity, that become an integral part of the diagnosis, along with the therapeutic methods. Thus, in the 21st century, psychiatry finds itself continuously assessing its position, both as a result of the social aspects reflected in the life of the individual, but also due to its intrinsic changes.

Regarding the future of psychiatry, J. P. Dauwalder foresaw ever since 1996 the appearance of methodological challenges that eliminate the simple cause – effect relationships, nevertheless existing a causality that is interactive, circular, individual, and tied to the particular ecological context of each relationship (1). The arguments presented in studies on quality of life come to support his allegations, this being a subject that has become of great interest in recent years. This concept is otherwise widely used in most medical specialties.

New approaches in psychiatry put forefront the attitude towards the patient, the patient being approached through a socio-relational angle. Consequently, the study of the psychopathological phenomenon ceased to be a priority, being outweighed particularly by the patient's interactions with society, especially if we refer to the mental disorders with a chronic evolution. On the other hand, the financial aspect became an integral part of the economic policies of the health insurance system, and the concept of quality of life derives from a desire to set the human condition of every patient as the highest ranking priority. All these aspects apparently contributed to the usage, in daily practice and on an increasingly wider scale, of the term *client,* given the wish to assure the patient's satisfaction, but also concerning the financial aspects of the medical services. Therefore, the idea of subjective well-being will start being defined, taking into account satisfying human basic necessities

to assuring the patient's state of happiness. In this context, the new perspectives of psychiatry focus on its social side, on the intense preoccupation for destigmatizing the patient and for a better understanding of mental disorders by the general public.

Nowadays, mental disorders are evaluated simultaneously in a complexity of ways that include elements of fundamental research, but also aspects of Freudian thinking and behavioural and cognitivist movements. Consequently, the bio-psycho-social model will be appreciated at its true value. The bio-psycho-social three-dimensionality in psychiatry, presented ever since 1974 by Prof. Petre Brânzei, was not just foreshadowing for the era, but also a precocious analysis of the different and intersecting methods of gaining knowledge in psychiatry. This way, the clinician will have access various possibilities, in several extents of approaching issues, through this unique model that integrates biological, psychological and social causes, and that will allow the implementation of a unique treatment plan that will be unitary, yet complex. With the help of this model, any person will be regarded as an entity involved in continuous change, requiring that, as S. Dilts suggested, the practitioner keep his critical sense and scientific spirit (2).

David Mechanic asserted that, in psychiatric practice today, we find a scientific part, an artistic part, and an ideological one. This fragmentation reflects precisely the uncertainty of knowledge, in which the psychiatrist is part of a large interdisciplinary network. But, in order to better define itself in the future, psychiatry does not necessarily require a revolution, but rather it must show free spirit that is not indebted to any theory, be it behavioural or social (3).

Psychiatry is an integral part of medicine; G. Gabbard declared since 1999 that it represents a unique niche among other medical specialties involving the biological and the psychosocial, both in the diagnostic process, as well as in the therapeutic one (4). This specialty always remains interesting, even attractive, through the mind – brain connection itself that apparently continues to be in the centre of its preoccupations. In this context, the discussions that were created around developing the two diagnostic textbooks, DSM (Diagnostic and Statistical Manual) and ICD (International Classification of Diseases) play an important role in what psychiatry represents among other medical specialties.

Research in psychiatry globalizes, the increase in the number of international clinical studies will also determine the better harmonisation, in the future, of the two classification systems. Beyond the operationalisation of the classification systems in psychiatry and the conceptualization of mental disorders, there still are subjects of great importance, such as psychopathology that will return in the spotlight. But apart from the new guidelines in neuroscience research, there is an acute necessity in terms of improving mental healthcare and foremost the realization of an integrative type of treatment. In this context, national and international psychiatry societies will play an important role, through creating a better connectivity between research and treating the body and the mind, which will represent the central element of this century's psychiatry (5).

Contemporary psychiatric assistance also implies human rights aspects, the use of

alternative or complementary therapeutic methods, such as developing communitarian assistance or assuring specific legislation. Many of these issues are not found in other medical specialties, like the one regarding the protection of patients with mental disorders. Current psychiatric taxonomy also aims at a pragmatic approach, especially social level, but also economically, legally, and politically. The new taxonomy will meet both the demands of fundamental research and statistical study.

In conclusion, we find that psychiatry is currently on a new path, which aims towards integration into 21th century medicine.

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Articles

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Mini-review: The relevance of body mass index and obesity in schizophrenia

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ABSTRACT

This article was intended to mini-review some of the mechanistic aspects of obesity and obesity-related metabolic disorders in schizophrenic patients, as well as the evidence regarding the possible mechanisms involved in antipsychotic medication-associated weight gain and briefly discuss the relations between the schizophrenic pathology, overweight and obesity, while also identifying possible influencing factors in this complicated equation.

KEYWORDS

body mass index, schizophrenia, obesity, antipsychotics

INTRODUCTION

The direct and indirect costs of schizophrenia all over the world are constantly increasing, since only in the United States in the '90s the costs were estimated to $33 billion per year (1). Moreover, inpatient

treatment is still common, despite efforts for deinstitutionalization.

However, schizophrenia does not just affect only mental health, since it is now believed that a patient with a diagnosis of schizophrenia usually dies 12 – 15 years before the average population (2). Although some deaths are suicides, as it commonly believed, actually the main reason for increased mortality is somehow related to physical causes, ranging from decreased access to medical care and increased frequency of routine risk factors, such as poor diet or reduced physical activity (3). As we will show immediately, these aspects are very important in the context of our mini-review study.

As it is known, obesity is a major contributor to a range of metabolic disorders responsible for much of the medical morbidity and mortality that burden the current society. As mentioned, obesity in schizophrenia could be accentuated by the antipsychotics which are known to result in increased weight gain together with the aforementioned poor dietary conditions and sedentary lifestyle (4). Of course, obesity in schizophrenia will be in a direct correlation to increased cardio-metabolic risks (5).

Moreover, several original studies such as the one conducted by Lindenmayer *et al.* in 2012 (6) or Smith *et al.* in 2011 (7) or by Yamada-Goto group in 2013 (8) reported significant associations between waist circumference and various scales of processing speed and attention, making it quite clear that obesity might lead to cognitive deterioration. There are also some controversial results in this area of research, since other group failed to find any correlation between the actual body mass index (BMI) and cognition (9, 10).

However, these aspects show the importance of further studies in this area of research. Moreover, in this context for the present mini-review we want to outline and discuss the relations between schizophrenic pathology, overweight and obesity, while also identifying possible influencing factors in this complicated equation.

CURRENT STATUS OF RESEARCH ON THE RELEVANCE OF BODY MASS INDEX AND OBESITY IN SCHIZOPHRENIA

While nowadays several million patients with schizophrenia are medicated with antipsychotic drugs, we are still not sure whether long-term use of this medication is associated with either increased or decreased mortality. Hence, excess mortality in people with schizophrenia has been widely discussed since the publication of a complex report from the National Association of State Mental Health Program Directors, cited by Parks *et al.* in 2011 (11).

This report showed that people with serious mental illness die on average 25 years earlier than do those in the general population, and although suicide and other unnatural causes account for about 40 % of excess mortality, roughly 60 % of premature deaths are due to more “natural” causes, such as cardiovascular and pulmonary disease.

For schizophrenia this is even more complex since the differential mortality gap between people with schizophrenia and the general population increased exponentially in last 40 years (12).

It is also believed that the introduction of second-generation antipsychotic drugs could have a negative effect on mortality in patients with schizophrenia, manifested es-

pecially as a raised risk of death from cardiovascular disease (11).

In this way, it is believed that the higher risks rates of obesity, dyslipidemia, glucose dysregulation, and type 2 diabetes can increase by more the 10 times the risk of cardiovascular disorders (13).

In addition, as described by Van Gaal in 2006 (14) the excess visceral fat could lead to an increased likelihood of type 2 diabetes, hypertension and increased concentrations of triglycerides, resulting in bigger chances of cardiovascular mortality.

In fact, it is believed that the aforementioned negative factors such as sedentary lifestyle behaviour or decreased physical activity, together with the specific antipsychotic treatment displaying adipogenic effects, could finally generate a poor performance of various systems, resulting in a dramatic shortening of life expectancies even by 25 – 30 years (15).

Thus, a good number of studies described above have reported that schizophrenics could have a higher BMI, as compared to the general population, as a result, of course, of an imbalance between food intake and energy expenditure over the time.

Thus, as described thus now, obesity and physical illness are recognized problems for patients with schizophrenia (16). Moreover, besides the aforementioned physical comorbidities (e.g., diabetes, cardiovascular diseases or cancer) (17), the increased mortality in these patients could be also connected to a significantly decreased quality of life and increased social stigmatization (18).

Therefore, hypertension, type 2 diabetes and dyslipidemias are quite commonly met in patients in schizophrenia (19). It is also important to note that a major risk for all of these aforementioned factors is represented by the abdominal obesity, which is, more importantly, modifiable by changing the lifestyle. Moreover, the prevalence of this aspect is indicated by several classical and well known studies such as the Clinical Antipsychotic Trials of Intervention Effectiveness (CATIE) study, which found that 76.35 % of women and 35.5 % of men were abdominally obese at baseline (13).

It should also be mentioned in this context that the cognitive decline or affected motivation are also important factors in the schizophrenic pathology. In fact, the latest studies are showing that cognitive impairment is common in schizophrenia, affecting up to 75 % of patients, with a variety of cognitive domains being decreased (e.g. memory, attention, motor skills, executive function or intelligence) (20). Moreover, it has been lately accepted that the lack of motivation is a fundamental aspect of the negative symptomatology in schizophrenia and that it could represent a useful factor in understanding and improving the mechanisms and further management of schizophrenia (21). In fact, previous studies have generally used linear models to investigate the association between obesity and cognition in schizophrenia, but the direction of causality between these two is not completely understood. It seems that age, education and gender are important covariates to consider in the analysis of the relationship between obesity, schizophrenia and cognition (22). In this way, the relationship between gender, obesity and cognition in the general population are quite unclear (23), with gender differences being noted in schizophrenia, where men have earlier onset of illness while females

have lower negative symptom scores (24). Moreover, the fact that the cognitive impairment often pre-dates the illness onset of schizophrenia (20) could be quite relevant in the present context, considering the aforementioned correlations between cognition and BMI (25, 26).

Inflammation and oxidative stress could also play an important part in these correlations. In this way, our group previously demonstrated for example by assessing the specific activities of the main antioxidant enzymes (superoxide dismutase-SOD and glutathione peroxidase-GPX) and the levels of a lipid peroxidation marker (malondialdehyde-MDA), in patients diagnosed with diabetes type 2 and chronic alcohol consumption, a significant decrease for the specific activities of SOD and GPX in the group of diabetic alcoholics, when compared to the control group. Also, significant increases for the levels of MDA, as a main marker of the lipid peroxidation processes, were recorded for the group of diabetic chronic alcohol users, as compared to the control group. These aspects, besides bringing into the discussion the toxic habits in schizophrenic patients (we will also discuss later on the relevance of cannabis consumption in schizophrenia), suggested at that time an increased oxidative stress status as a result of type 2 diabetes deficiencies and further opened the field for future studies regarding the relevance of antioxidant treatment in this area of research (27).

Moreover, regarding inflammation, some C-reactive protein (CRP)-related studies (produced by liver, from a group of proteins called “acute phase reactants”, which increased their levels in response to inflammation) showed that higher levels of CRP are associated with decreased cognitive performance. This led some authors to posit that obesity-related inflammation affects cognition quite significantly (28).

In fact, in regards to obesity, well known scientific studies report that the weight of almost 40 – 80 % of patients on antipsychotics have weight gain that exceeds ideal body weight by 20 % or more (29). In addition, obesity rates among persons with schizophrenia may range from 40 % to 62 % and are especially high in women (30). This could be explained by estrogen-related effects, while menopause has been cited in this context, too (31).

However, weight gain as a consequence of antipsychotic treatment has been demonstrated in clinical trials, and it was reported that up to 80 % of individuals treated with antipsychotic medication eventually become overweight and obese (32). It is also interesting to mention that some authors showed that young patients experiencing their first episode of psychosis are especially at risk to a rapid and pronounced weight gain (33).

Regarding the possible solutions, literature currently suggests especially some lifestyle interventions which of course refer to dietary changes and physical exercise. In fact, most of the studies on diet and exercise in schizophrenic patients demonstrated some weight reductions (29). This could be quite important, as some authors stress that a weight loss as low as 5 – 10 % of body weight could actually reduce obesity-related disorders (34).

The mechanistic beyond it may be extremely variable, but one could also relate it to the aforementioned modifications in the levels of inflammation or related oxidative stress processes. Hence, our group also demonstrated the effect of vitamin C admini-

stration before performing 40 minutes of cycloergometer aerobic training on the main oxidative stress markers of the selected untrained young subjects. Thus, the oxidative stress markers determined by our group at that time were again two antioxidant enzymes: superoxide dismutase and glutathione peroxidase, and a lipid peroxidation marker malondiadehyde. Our data demonstrated, in fact, an increased oxidative stress status after exercising, as showed by the significant decrease of GPX activity and increased levels of MDA concentration. Also, the administration of vitamin C resulted in a significant decrease of the oxidative stress status, manifested in both a significant increase of GPX, and in a reduction for the concentration of MDA. Thus, considering that oxidative stress is a factor that can be corrected, it seems that various antioxidants such as vitamin C could represent a possible solution in the aforementioned research context (35).

As we mentioned before, in the context of alcohol consumption in schizophrenia, we should also add that an increased number of articles support the hypothesis that cannabis increases the risk of developing schizophrenia and increasing the pathological manifestation specific to schizophrenia. Moreover, recent studies have also identified an excess risk among users of cannabis (36). Also, amphetamine, LSD, ecstasy or ketamine (self)administration have also been associated with schizophrenia-related pathological manifestations.

Therefore, as our research group previously described, the epidemiological data show a more frequent consumption of drugs in schizophrenic patients, as compared to the general population. In fact, some studies have shown that the abuse of substances is the most common comorbidity associated with schizophrenia. Among illicit substances, cannabis is the most common among patients with schizophrenia. In this way, similar clinical features of schizophrenia and cannabis consumption could be explained by some common neurobiological implications. In addition, N-methyl-D-aspartate (NMDA) receptor stimulation is associated with psychotic-type phenomena and schizophrenia and NMDA receptors are involved in the clinical effects of cannabis consumption. Thus, the CB1 receptors disseminated mainly at the level of the NMDA secretory neurons are activated by tetrahydrocannabinol, the psychoactive component of cannabis (37, 38). Moreover, cannabis abuse in association with other factors (e.g. increased BMI and obesity in the schizophrenic pathology) could contribute in the entire schizophrenic pathology. This could be quite important, especially since patients diagnosed with schizophrenia that abuse substances and have increased BMI/obesity could represent a special category of patients that require a complex therapeutic approach, especially considering the multiple problems implicated, such as reduced compliance with treatment, unfavourable evolution and prognosis with multiple relapses and frequent hospitalizations.

In addition, our group is also presently working with a ketamine induced animal model of schizophrenia, as it is now generally accepted that a subchronic administration of 30 mg/kg ketamine induces reliable changes in behaviour of rat and parameters of dopaminergic, glutamatergic, and serotonergic neurotransmissions, which could resemble to schizophrenia manifestations. In fact, we found significant me-

mory deficits in this ketamine-induced rat model of schizophrenia in rat, as demonstrated by an increased number of reference memory errors in 8-radial arm maze. Also, the time necessary to finish this test was increased in the ketamine group, as compared to saline. Moreover, the spontaneous alternation percentage was significantly decreased, suggesting deficiencies in the immediate working memory. Thus, subchronic treatment with subanaesthetic doses of ketamine were inducing significant memory deficits, as tested in the Y maze and radial arm maze tasks (39).

In fact, all the aforementioned aspects could also have a behaviour-related component, since it was shown in some interesting studies that patients with schizophrenia in fact consume more saturated fat or refined sugar, as compared to healthy persons and probably less fiber than people with no mental illness (40, 41).

Also, stressing again on the oxidative stress status mechanistic and its future treatment relevance in the aforementioned discussed context, we should also mention that several reliable studies in the literature demonstrate for example that adding a Ginkgo biloba extract to classical haloperidol treatment, results in enhancing the effectiveness of the antipsychotic and reduces some extrapyramidal side effects (42). Moreover, adding Ginkgo biloba extract also resulted in better scores in the Scales for the assessment of positive and negative symptoms (43). The same aspects were also demonstrated for the polyunsaturated fatty acids or even more for some combinations of eicosapentaenoic or docosahexaenoic acid and vitamin C or vitamin E (44) (like we also reported in our original study described above which involved the administration of vitamin C in exercised human volunteers).

CONCLUSIONS

This article was intended to mini-review some of the mecanistic aspects of obesity and obesity-related metabolic disorders in schizophrenia patients, as well as the evidences regarding the possible mechanisms involved in antipsychotic medication-associated weight gain and briefly discuss the relations between the schizophrenic pathology, overweight and obesity, while also identifying possible influencing factors in this complicated equation.

ACKNOWLEDGMENTS AND DISCLOSURE

Cezar Honceriu, Alin Ciobică, Florin Trofin and Radu Lefter are supported by a research grant PN II PN-II-RU-TE-2014-4-1886 called "A complex study regarding the relevance of oxytocin administration in some animal models of neuropsychiatric disorders". The authors state that they have nothing to disclose, except for the research grant mentioned above.

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Submission: November, 11th, 2015
Acceptance: January, 27th, 2016

BPI Bulletin of Integrative Psychiatry
Buletin de Psihiatrie Integrativă

Effects of two antidepressant drugs on spatial memory performance in rats – experimental research

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ABSTRACT

Affective disorders encountered in elderly persons affecting their daily life and activity are probably induced by the deficiency in monoaminergic neurotransmitters, especially norepinephrine and serotonin. The treatment of these disturbances consists of pharmacologic, non-pharmacologic and alternative methods. Fluoxetine is a selective serotonin reuptake inhibitor used in depression or obsessive-compulsive personality disorders in adults. Reboxetine is a norepinephrine reutake inhibitor, indicated in the therapy of depressive illnesses and panic disorders.

The purpose of our study was to evaluate the behavioural effects of the antidepressant drugs fluoxetine and reboxetine on cognitive functions in old rats.

Method: **The experiment was carried out on white male Wistar old rats (aged 18 months), distributed into 3 groups of 6 animals each, treated orally, during 1 month, as follows: Group I (Control): saline solution 0,3 ml/100 g weight; Group II (FLX): fluoxetine 10 mg/kbw; Group III (RBX): reboxetine 5 mg/kbw. To investigate the influence of antidepressants in animals cognitive performances, the effects of fluoxetine and reboxetine were evaluated during a single session of eight minutes in T-maze test. The data were analysed using SPSS 13.0 and ANOVA method. The experimental protocol was implemented according to the recommendations of our University Committee for Research and Ethical Issues, in compliance with the ethical regulations of the European Community.**

Results: **Chronic treatment with 5 mg/kbw reboxetine determined a statistically significant ($p < 0.05$) increase in spontaneous alternation rate compared to Control group in T-maze test, while the oral administration of 10 mg/kbw fluoxetine did not evidently influence the animals' spontaneous alternation behaviour. Oral administration of reboxetine during 1 month was associated with a markedly increase in the number of arm entries ($p < 0.05$) compared to Control group.**

Conclusion: **Our research revealed that chronic administration of reboxetine but not of fluoxetine resulted in an improvement of short-term memory acquisition in T-maze in rats.**

KEYWORDS

fluoxetine, reboxetine, T-maze, rats

BACKGROUND

Affective disorders are frequent disturbances that may affect elderly persons, largely influencing their quality of life. Literature data show that depressive diseases in older adults are usually accompanied by various degrees of cognitive impairment (1). The complex treatment of geriatric depression includes pharmacotherapy and nonpharmacologic procedures (e.g. psychoterapy, cognitive-behavioural methods, interpersonal therapies) (2). The farmacologic treatment of affective disorders in elderly patients consist of selective serotonin reuptake inhibitors and also serotonin and norepinephrine reuptake inhibitors, offering the advantage of a favourable balance between risk and therapeutic benefit (3).

The *N*-methyl-3-phenyl-3-[4-(trifluoromethyl) phenoxy]propan-1-amine derivative fluoxetine is a selective serotonin reuptake inhibitor used in depression or obsessive-compulsive personality disorder in adults. Reboxetine (a-ariloxybenzyl derivative of morpholine) is a norepinephrine reuptake inhibitor and also a norepinephrine transporter inhibitor, indicated in the therapy of unipolar depression, in panic and attention deficit hyperactivity disorders (4).

WORKING HYPOTHESIS

The findings of various experimental studies suggests the interrelations between norepinephrine and serotonin pathways and affective disorders, revealing that norepinephrine system is involved in the memory for novel stimuli while some serotonin receptors subtypes mediate the con-

trol of recognition memory retrieval (5) (6). To directly verify this hypothesis we investigated the effects of two antidepressant drugs, fluoxetine and reboxetine, on spatial memory performance in the T-maze assay, a behavioural test for measuring the natural tendency of lab animals to explore new environment (7).

The **purpose** of our study was to evaluate the behavioural effects of the antidepressant drugs fluoxetine and reboxetine on cognitive functions in old rats.

MATERIAL AND METHOD

The experiment was carried out on Wistar male old rats (aged 18 months). During the experiment the animals were housed in polycarbonate cages, at a temperature of 23 ± 1°C and a 12-hour dark cycle (light period: 07:00 – 19:00), with free access to water and standard granulated food. Before the experiment the animals were placed on a raised wire mesh, under a clear plastic box and allowed 2 hours to acclimate to the testing room.

The rats were distributed into 3 groups of 6 animals each, treated orally, during 1 month, as follows:

Group I (Control): saline solution 0,3 ml/ 100 g weight;

Group II (FLX): fluoxetine 10 mg/kbw;

Group III (RBX): reboxetine 5 mg/kbw.

The drugs – fluoxetine and reboxetine (purchased from Sigma-Aldrich Chemical Company) – were extemporaneously dissolved in 0.9 % saline solution. All the experiments were performed during the same time interval (between 8:00 a.m. to 2:00 p.m.).

To assess the influence of the chosen antidepressants in cognitive functions, the present study evaluated the effects of fluoxetine and reboxetine on rat exploratory behaviour on the T-maze apparatus. This device consists of 3 identical arms (40 x 9 x 16 cm), shaped as the 'T' letter. Each arm has particularly designed walls on the inside surface, allowing animals to distinguish one from the others.

This experimental model was used to assess lab animal working and reference memory by monitoring the rat tendency to explore a new environment, consisting of its preference to visit a new arm of the maze rather than a just explored one (7).

Each animal was first placed in the start arm and allowed to move freely through the maze during an 8 min session. The first 2 minutes were for habituation, and the last 6 minutes for the alternation between arms. After a few seconds the animal chooses between entering either the left or the right arm of the T-maze. Normally, after repeated sessions of experimentation, the rat should choose to explore the alternate arm, manifesting less tendency to enter an arm that was least occupied recently (8). Latency to leave the start arm, latency of first arm visit, number of arms visited, alternate arm returns, and the same arm returns were also investigated.

The alternation percentage was calculated according the formula: number of alternations/total number of arm visits – 2 (9).

Supplementary, the experiment was videotaped using a video camera connected to a computer in another room, allowing analysis of the animal behaviour without distress.

The data were presented as +/- standard deviation, and significance was determined using the SPSS Program for Win-

dows version 13.0, with the ANOVA one-way method and Newman-Keuls test as post-hoc. P-values less than 0.05 were considered statistically significant compared to Control groups.

The study protocol was approved by the Ethics Committee of Research of "Grigore T. Popa" University of Medicine and Pharmacy, Iaşi, in accordance with the actual European legislation. For ethical considerations the duration of the experiments was kept as short as possible, each animal was used once only and immediately sacrificed at the end of the experiment (10).

RESULTS AND DISCUSSIONS

Typically the animal remembers which arm it has just visited, and enters into the different other arm, this being considered a correct choice. Correct arm visiting consists of entering at least the first third part of an arm. The alternation behaviour represents the consecutive entries into each of the three arms (7).

Chronic administration of fluoxetine (10 mg/kbw) was associated with a slight increase of arms entries number (mean ± S.E.M. number of arm entries = 16.22 ± 1.32), but statistically non-significant compared to control old animals (15.39 ± 2.17) in the T-maze test (Fig. 1).

Oral treatment with reboxetine (5 mg/kbw), during 1 month resulted in an increase of arms entries number (21.14 ± 1.20), statistically significant ($p < 0.05$) compared to saline solution group (15.39 ± 2.17). The results suggest that reboxetine generated an increase of the performance in this behavioural experimental model in rats (Fig. 1).

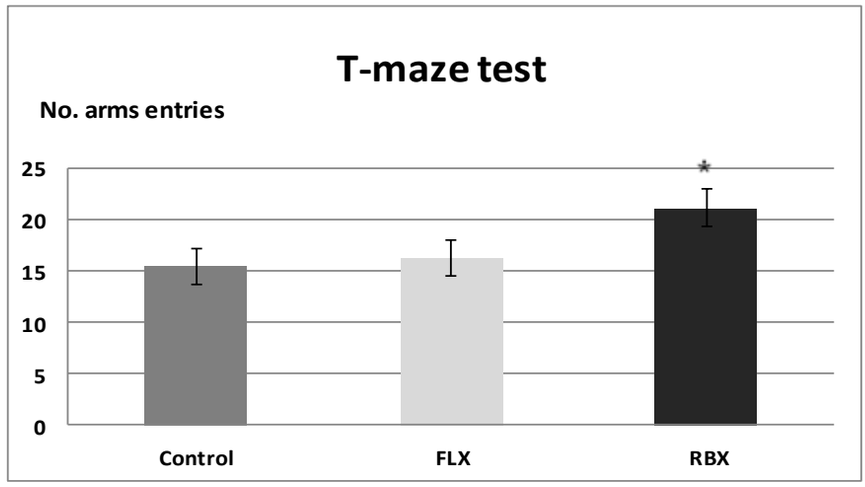

Figure no. 1. *Effects of fluoxetine and reboxetine administration on the arms entries number in the T-maze test. The values are expressed as mean ± S.E.M. of the arms entries number for 6 animals. * p < 0.05, ** p < 0.01 vs. control*

Spontaneous alternation in rats refers to animal natural tendency to spontaneously choose alternate arms in the T-maze assay (9). The alternation percentage of Control group was 35.14 ± 1.63.

The comparative analysis of the results revealed a minor increase in spontaneous alternation rate after fluoxetine administration (36.55 ± 2.19), but statistically non-significant compared to the group treated

with saline solution (35.14 ± 1.63) in the T-maze test (Fig. 2).

Statistical processing of data showed that the treatment with reboxetine (5 mg/kbw) was associated with an increase of spontaneous alternation percentage (43.37 ± 1.63), statistically significant ($p < 0.05$) compared to Control group (35.14 ± 1.63) in the same experimental behavioural model. These data suggest a facilitation of extinction learning capacity, especially on short-term spatial memory in old rats (Fig. 2.).

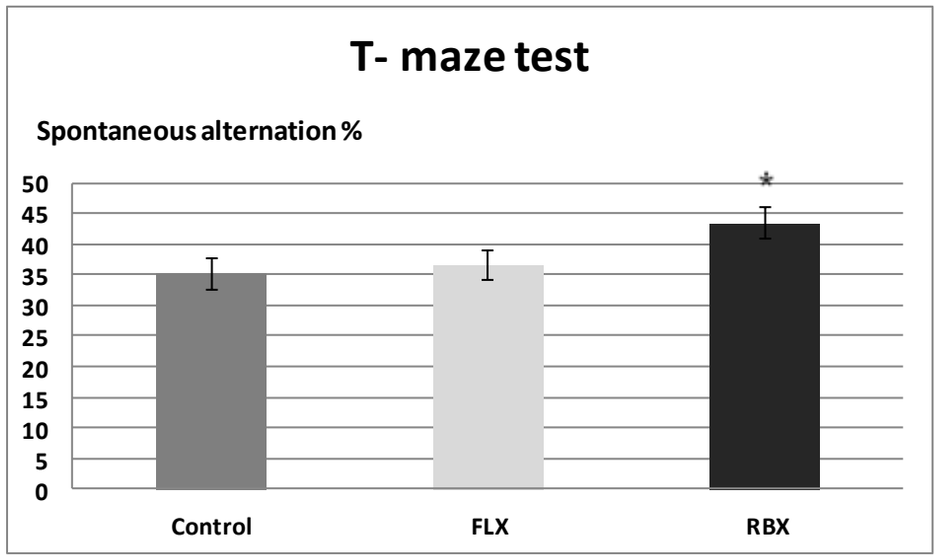

Figure no. 2. *Effects of fluoxetine and reboxetine administration on the spontaneous alternation percentage in the T-maze test. The values are expressed as mean ± S.E.M. of the spontaneous alternation percentage for 6 animals. * p < 0.05, ** p < 0.01 vs. control*

No markedly differences in the latency to leave the start arm and the latency of first arm visit were found between groups treated with fluoxetine, reboxetine and saline solution.

In our experimental conditions, chronic administration of reboxetine, but not of fluoxetine determined an improvement of spatial memory acquisition and also an increase of rat normal spontaneous locomotor activity in the T-maze test. Our previous studies revealed that some antidepressant drugs such as paroxetine, venlafaxine, duloxetine, citalopram and bupropion, but not fluvoxamine improve spatial memory acquisition in old rats in the Y-maze assay (11) (12) (13).

Previous reports have described the effects of some antidepressant drugs in different behavioural models, but most of them are controversial.

One experimental investigation has shown that the selective serotonin reuptake inhibitor paroxetine and the selective norepinephrine reuptake inhibitor reboxetine improved the cognitive deficit in passive avoidance test in animals with memory impairment determined by scopolamine administration. In the same experimental behavioural model the tricyclic antidepressant amitriptyline did not prove to have evident influence on memory deficit, effect probably related to its anticholinergic action (14).

Others researches have demonstrated that reboxetine improves the recognition memory without affecting the locomotor activity in the forced swim test in rats (15) (16).

Opposite to this, other findings suggest that some antidepressants such as fluoxetine, venlafaxine can impair the spatial memory in a variant of Y-maze test in rats (which are not capable to recognise the arm with changed brightness), while reboxetine does not significant interfere the animal spatial memory performance in the same behavioural model, probably due to the lack of influence on the serotonin level (17).

A large comparative study between antidepressant drugs has revealed their various effects on cognitive functions, actions that are related to the neurotransmitters involved. Thus, both type of antidepressants: the noradrenaline reuptake inhibitors (reboxetine, atomoxetine), and the serotonin-noradrenaline reuptake inhibitor (duloxetine), improved the recognition memory, while the tricyclic antidepressants (desipramine, mianserin) or the serotonin reuptake inhibitors (paroxetine, citalopram) did not significant influence the recognition memory in various behavioural models in rats (5).

CONCLUSIONS

Using the classic behavioural experimental model T-maze test, we demonstrated an enhancement of spatial memory in the rats treated with the norepinephrine reuptake inhibitor reboxetine, but not with the selective serotonin reuptake inhibitor fluoxetine, highlighted by an increase of spontaneous alternation percentage compared to Control animals, which suggests significant effects on short-term memory.

In our experimental conditions the administration of antidepressant reboxetine during 1 month was associated with the improvement of cognitive performances and the facilitation of the exploratory locomotor activity in old rats, this drug being more efficient in facilitating extinction learning.

AKNOLEDGEMENT AND DISCLOSURE

The authors have no potential conflict of interests to disclose.

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Submission: January, 04th, 2015
Acceptance: February, 11th, 2015

BPI Bulletin of Integrative Psychiatry
Buletin de Psihiatrie Integrativă

Cognitive disorders in renovascular hypertension with systolic dysfunction of left ventricle in elderly patients

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ABSTRACT

Introduction: **Renovascular hypertension diagnosis is a challenge for clinicians, involving complex investigations for elucidation. These patients often associate systolic dysfunction**

of left ventricle; in this condition, their prognosis is modified. Cognitive dysfunction is another aspect associated to these two previously mentioned diseases.

Objective: **The study followed the impact of renovascular hypertension, complicated with heart failure, on cognition, compared with elderly people with normal blood pressure values.**

Methods: **28 patients made up two groups: group A, 14 geriatric patients, with renovascular hypertension and systolic dysfunction of left ventricle and group B, consisting of 14 geriatric patients, with normal blood pressure values. The group A methods were the following: clinical examination, electrocardiogram, echocardiogram, renal arteries ultrasound, biochemical and haematological laboratory findings, renal arteriography, only for the patients with indication for revascularization, Addenbrooke's dementia score. As for group B, we utilized clinical examination, laboratory works and dementia score. The patients were monitored for 12 months.**

Results: **Cognitive impairment was more significant for group A geriatric patients, suggesting discreet implications of hypertension and heart failure on cognition.**

Conclusions: **Medical/interventional treatment in renovascular hypertension complicated with heart failure leads to an efficient therapeutic control of blood pressure values in geriatric patients, also improving cardiovascular prognosis, through beneficial effects on systolic and diastolic dysfunction. Future studies will provide a better understanding of potential positive influences on cognition.**

KEYWORDS

cognition, renovascular hypertension, systolic dysfunction of left ventricle

INTRODUCTION

Microvascular brain disease associated with arterial hypertension determines cognitive disorders in therapeutically uncontrolled patients. Nowadays, there is antihypertensive medication, with protective effects against brain damage (1). Disturbing the diurnal/nocturnal variability of blood pressure values leads to cognitive disorders in hypertensive patients, such as cerebral atrophy or white substance lesions (2). Neuroprotective effects of antihypertensive medication are achieved by angiotensin-converting enzyme inhibitors and diuretics, according to some authors (3), but also by angiotensin II receptor antagonists and dihydropiridines, according to other authors (4). Last decade scientific research proved that there are four different types of angiotensin II; experimental studies demonstrated that types 2 and 4 angiotensin receptors are implicated in cerebral function for hypertensive patients (5). Patients with mild cognitive impairment – who recorded two or three times, once a year, high values of blood pressure, above 140/90 mmHg – had faster degradation of cognitive neuropsychological parameters than the patients with the same level of cognitive disorder, but normal values of blood pressure. The clinical score for dementia rate registered the same descending aspect, for the patients with (even transient) high blood pressure (6). Like antihypertensive medication, statins have a protective effect for geriatric patients, concerning dementia onset and evolution (7). Due to an increase

in the number of geriatric patients, renovascular hypertension has an ascending prevalence; atherosclerotic stenosis of renal arteries is the most common aetiology. Sometimes the diagnosis is difficult, because renal arteries are not accessible to clinical auscultation and ultrasound in obesity. Modern methods, like magnetic resonance imaging or computed tomography, are extremely accurate for renovascular hypertension diagnosis, but routine utility is limited by elevated prices. Clinical examination, associated with suspicion for renovascular hypertension (the absence of reduced high blood pressure values after quadruple antihypertensive therapy; the occurrence or evolution of azotemia in a hypertensive patient treated with angiotensin-converting enzyme inhibitors; the onset of arterial hypertension after the age of 50; multiple atherosclerotic locations, in different arterial areas) and vascular ultrasound can lead to the diagnosis, for a significant percentage of patients. High performance methods are indicated for patients who are highly prone to renovascular hypertension, but the diagnosis cannot be definitely set using standard methods. Renal computed tomography angiogram and magnetic resonance angiography offer an accurate diagnosis for renal arteries involvement, but they are addressed only to certain cases.

METHODS

The study included 28 geriatric patients, aged between 65 and 92, with a predominance of males (58 %), monitored for one year. The patients formed two groups: group A, consisting of 14 patients with renovascular hypertension and systolic dysfunction of left ventricle and group B, consisting of 14 geriatric patients, with normal blood pressure values.

The inclusion criteria were the following:

- abdominal or lumbar bruits;

- evolution of azotemia in a hypertensive patient treated with angiotensin-converting enzyme inhibitors/angiotensin II receptor antagonists;

- difficult control of blood pressure values in a hypertensive patient treated with quadruple therapy;

- paradoxical high blood pressure in a hypertensive patient treated by angiotensin-converting enzyme inhibitors/angiotensin II receptor antagonists;

- systolic dysfunction of left ventricle, echocardiographically documented.

Group A patients recorded one or more aforementioned inclusion criteria.

Exclusion criteria were the following:

- active alcoholism/smoking;

- diabetes mellitus;

- cognitive disorders due to other causes: Alzheimer's dementia, post-stroke dementia.

The methods utilized for group A were the following: clinical examination, electrocardiogram, trans-thoracic echocardiogram, performed quarterly; biochemical and haematological findings, clinical dementia score, repeated every six months; renal arteries ultrasound, at the beginning of the study, necessary for renal artery stenosis confirmation. Every six months, we performed the following for group B patients: clinical examination, biochemical and haematological laboratory works, clinical dementia score.

Clinical examination was represented by complete anamnesis concerning the symptoms, personal and family medical history, symptoms evolution, and recommended

treatments. Home recording of blood pressure values was very important, the patients being educated about this necessary feedback (blood pressure value in clinostatic and orthostatic position, at different moments of the day or the night, including the associated symptoms). Different atherosclerosis locations (carotids, peripheral and coronary arteries) were significant for our study. Standard electrocardiogram followed suggestive aspects for left ventricular hypertrophy and arrhythmias. Echocardiograms were performed using Fukuda UF85-XTD, also observing left ventricular systolic and diastolic performance, left ventricular hypertrophy, and pulmonary hypertension. Hypertensive patients with significant cardiovascular illnesses (moderate, severe) were ruled out after echocardiography.

The biochemical and haematological laboratory works (every six months) were the following: serum creatinine, creatinine clearance, glycaemia, transaminase, microalbuminuria, lipid profile, complete blood count.

Clinical dementia score was calculated every six months, for all 28 patients within the study. We also used Addenbrooke's cognitive examination questionnaire, revised by the author in 2006 (ACE-R), with scores for orientation, attention, focus, anterograde and retrograde memory, verbal fluency, language understanding, visual abilities (in space and for perception), recognition, etc.

The renal artery ultrasound confirmed the clinical suspicion of renal artery stenosis, with uni- or bilateral involvement, resistivity index; the last parameter has the most important role in the therapeutic strategy for renovascular hypertension.

Group A treatment was represented by drugs for arterial hypertension and/or interventional treatment. For the patients with unilateral renal artery stenosis with resistivity index > 0.8, we used fixed combinations: angiotensin-converting enzyme inhibitors and diuretic-Perindopril/Indapamide 2.5/0.625 mg; 5/1.25 mg; 10/2.5 mg or angiotensin II receptor antagonists and diuretic-Telmisartan 40 mg; 80 mg and Indapamide 1.5 mg. The second fixed combination was addressed to patients with angiotensin-converting enzyme inhibitors intolerance. For patients with bilateral renal artery stenosis and resistivity index > 0.8, the treatment was represented by beta-blockers – Nebivolol 2.5 –10 mg; calcium-channel blockers – Amlodipine 5 – 10 mg; diuretics – Indapamide 1.5 mg, in combination with two or three drugs. According to European guidelines for renovascular hypertension treatment for renal artery stenosis, all patients from group A received antiplatelet agents – Aspirin 100 mg or Clopidogrel 75 mg and statins – Atorvastatine 5 – 40 mg.

FINDINGS

We found good blood pressure values upon the clinical examination, every three months, for all group A patients. Two patients within group A had an episode of atrial fibrillation, with fast ventricular rate, and we performed chemical restoration for the sinus rhythm with Amiodarone, followed by beta-blockers treatment. As for biochemical laboratory findings, one patient recorded an impairment of the renal function, during an episode of urinary infection; her serum creatinine values were back to normal after adequate antibiotherapy. Due to the influence on prognosis, diastolic dys-

function represented an important parameter in our study. Figures 1 and 2 illustrate the evolution of diastolic function pattern throughout 12 months, for group A patients: two out of three patients with type III diastolic dysfunction and two out of four patients with type II diastolic dysfunction regressed to type I diastolic dysfunction at the re-evaluation performed after 12 months (Figures 1 and 2).

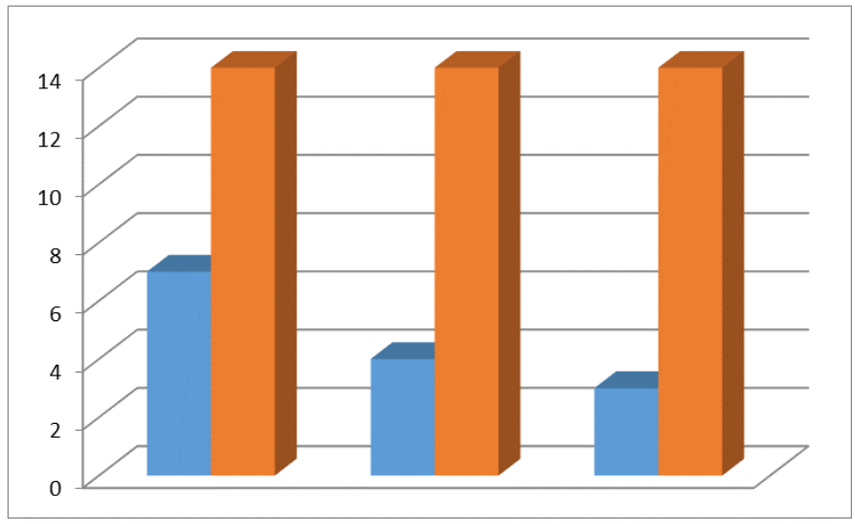

Figure 1. *Distribution of diastolic dysfunction for group A, at the beginning of study*

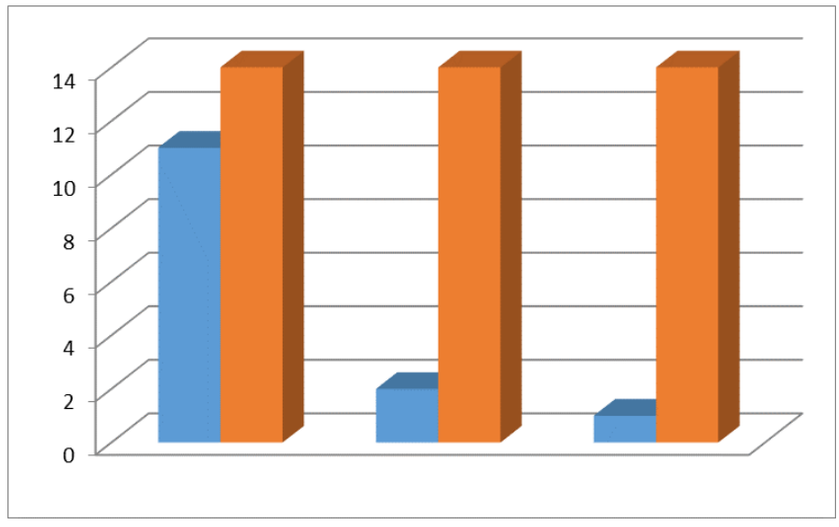

Figure 2. *Distribution of diastolic dysfunction for group A, after 12 months*

The systolic dysfunction of the left ventricle recorded a positive evolution, after 12 months of treatment; figure 3 illustrates the systolic performance altered at the beginning of the study, in group A (mild systolic dysfunction of left ventricle: ejection fraction EF between 45 – 55 %; moderate systolic dysfunction EF = 30 – 45 % and severe systolic dysfunction: EF < 30 %). Figure 4 reveals the improvement of systolic performance in two patients with moderate dysfunction (at the end of the study

they had mild dysfunction) and in two patients with severe dysfunction (at the end of the study they had moderate dysfunction) (Figures 3 and 4). Two patients of group A benefited from interventional treatment (resistivity index < 0.8); the other 12 patients continued the medical treatment.

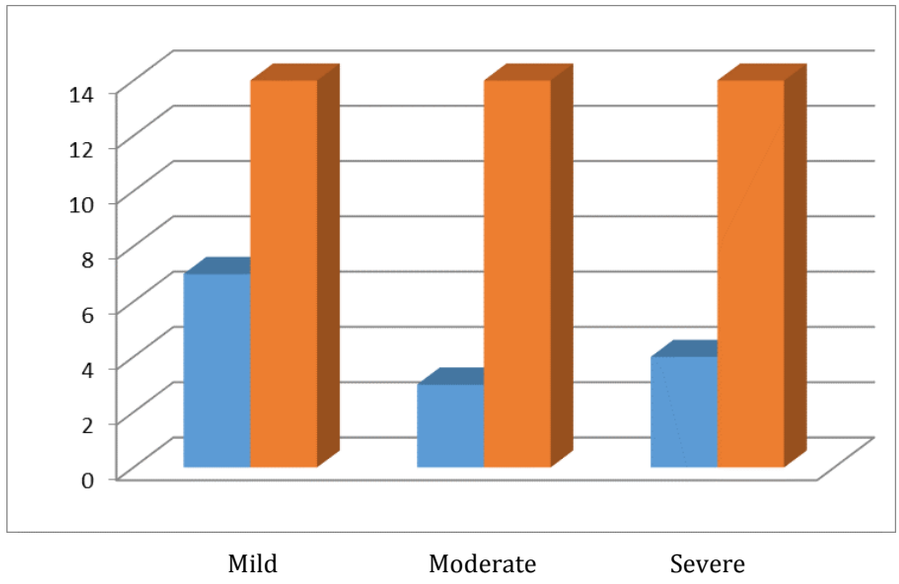

Figure 3. *The severity of systolic dysfunction of left ventricle, in group A, at the beginning of the study*

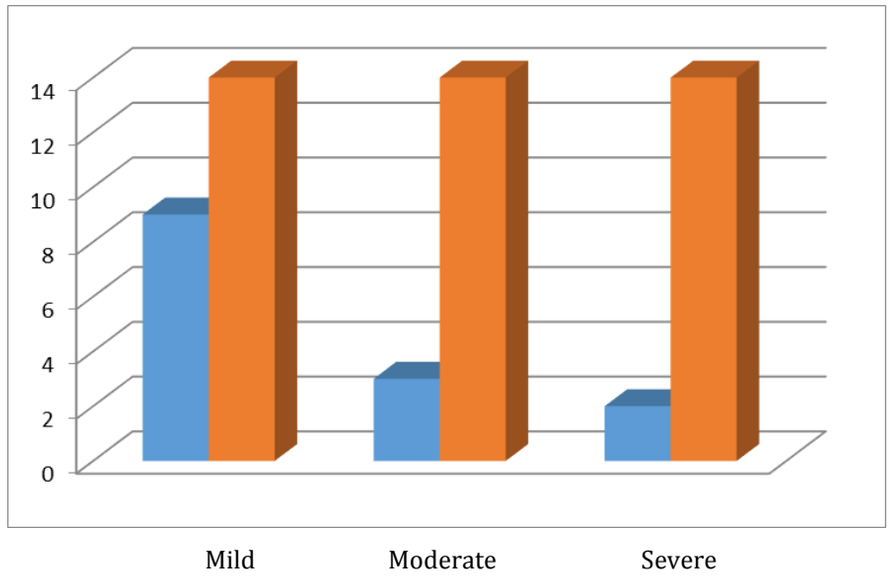

Figure 4. *The severity of systolic dysfunction of left ventricle, in group A, at the end of the study*

The clinical dementia score (calculated according to Addenbrooke's protocol, 2006) revealed a smaller number of patients with cognitive impairment in group B, compared to group A, at the beginning of the study. At the end of the study, group B patients were stable. As for cognitive impairment, two patients of group A had an un-

favourable evolution: the first patient from the "without cognitive impairment" category to the "mild dementia" category; the second patient moved from "mild dementia" to "moderate dementia". Figures 5 and 6 illustrate the distribution of cognitive impairment for group A, at the beginning and at the end of the study (Figures 5 and 6); figures 7 and 8 reveal the same aspects for group B (Figures 7 and 8). The patients within group A, who exhibited severe systolic dysfunction, also associated cognitive impairment, at the beginning and at the end of the study.

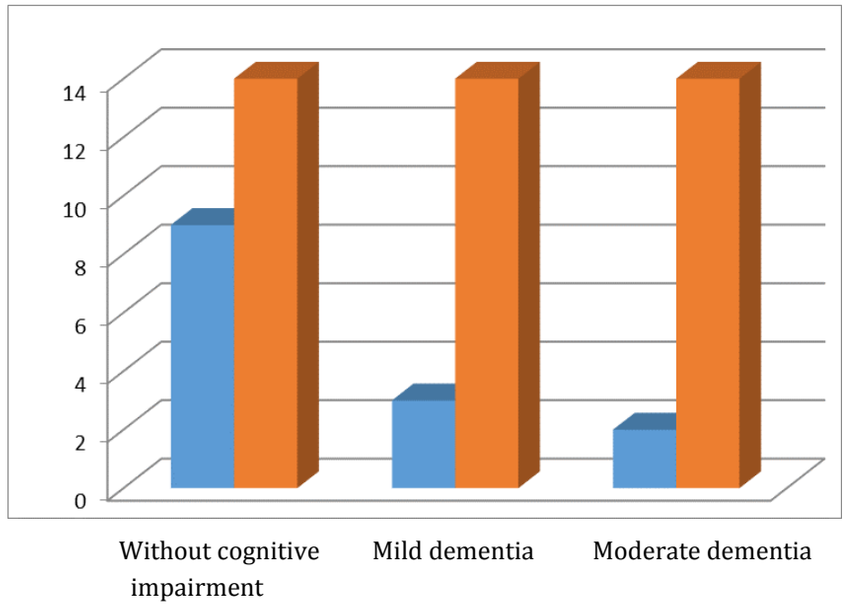

Figure 5. *Distribution of cognitive disorders among group A, at the beginning of the study*

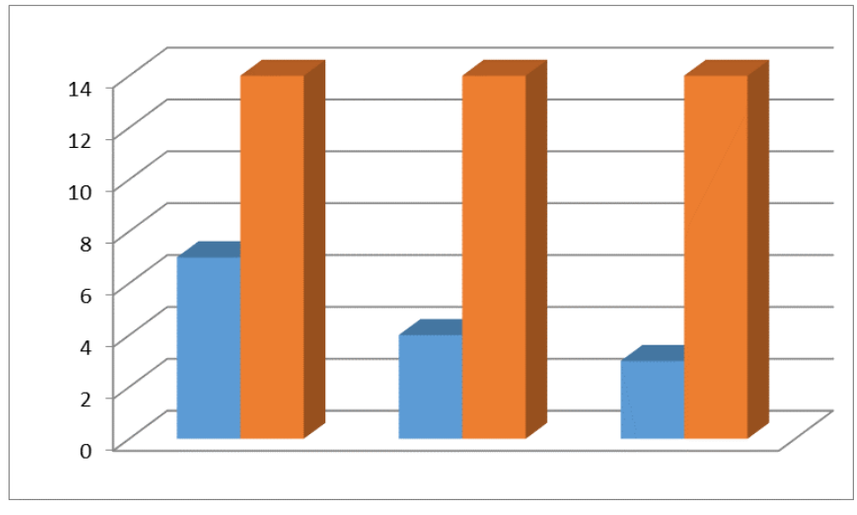

Figure 6. *Distribution of cognitive disorders among group A, at the end of the study*

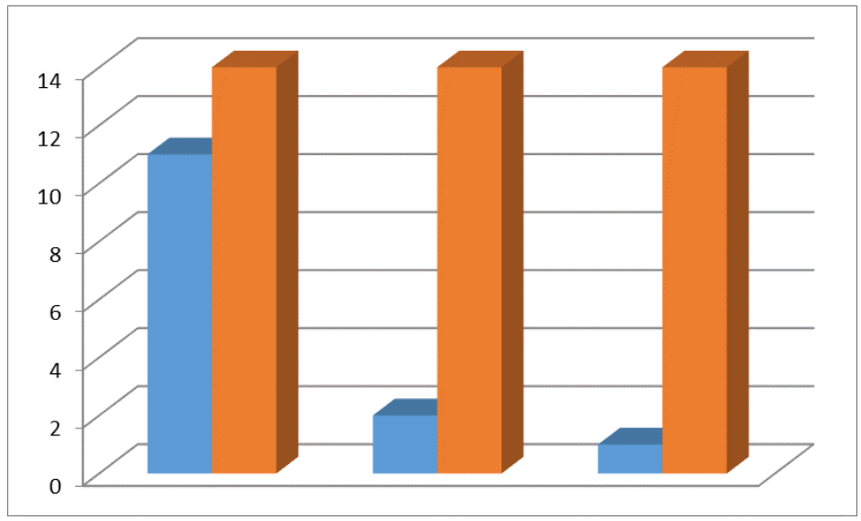

Figure 7. *Distribution of cognitive impairment among group B, at the beginning of the study*

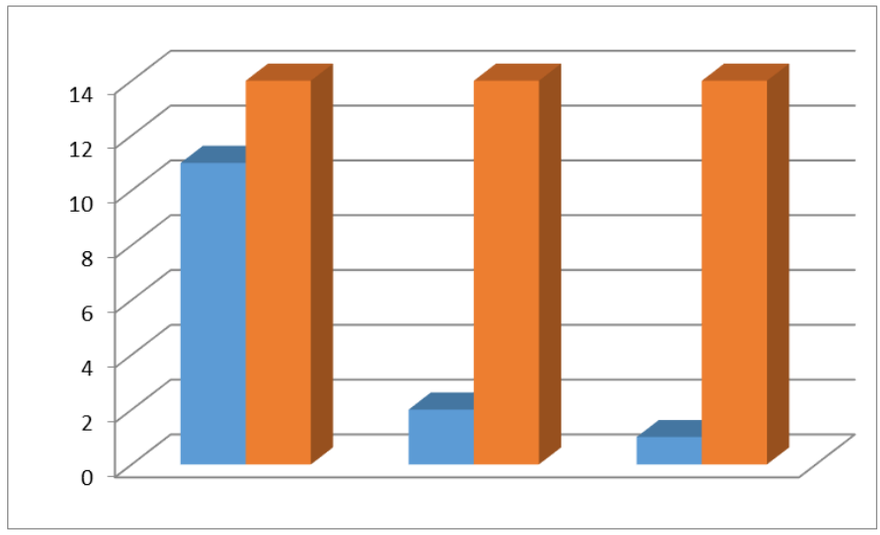

Figure 8. *Distribution of cognitive impairment among group B, at the end of the study*

DISCUSSIONS

Cognitive impairment among the elderly had a major impact on patients' quality of life and on their social entourage. It has an important influence on treatment compliance, necessary for somatic diseases. In our study, we followed the dementia prevalence among geriatric patients with a particular type of arterial hypertension (renovascular) and with systolic dysfunction of left ventricle, compared to dementia prevalence among geriatric patients without arterial hypertension. Our findings are consistent with those presented by other authors (8, 9, 10). Future directions of our study will include aspects of correlations between biochemical laboratory findings (among geriatric patients with

arterial hypertension, due to renal artery stenosis and systolic dysfunction of left ventricle) and cognitive impairment.

ACKNOWLEDGEMENTS AND DISCLOSURE

Special thanks to Igor Nedelciuc, M. D., for his contribution in case of the two patients treated for renovascular hypertension (percutaneous transluminal angioplasty and renal artery stenting). The authors declare they have no potential conflicts of interest.

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Submission: December, 30th, 2015
Acceptance: February, 5th, 2016

BPI Bulletin of Integrative Psychiatry
Buletin de Psihiatrie Integrativă

Ethical issues in communication with elderly patients

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ABSTRACT

Communication is one of fundamental human needs in general and all the more so among suffering elderly and it involves the transfer of information from a human sender to a human receiver with the aim of enhancing the receiver's knowledge in order to allow them to fulfil their tasks or to influence their attitudes and behaviour. The increase in number of the elderly population is a feature of the last decades, a global phenomenon, higher in economically developed countries. For the elderly, the need of communication is vital: their existence, the quality and duration of life are threatened by the failure to meet this need or by inappropriate communication. Elderly patients have a specific biological, psychological and social profile requiring a different approach than other categories of patients. Effective patient-clinician communication maximizes patient autonomy. Treating patients in a dignified, courteous and respectful manner is an ethical duty for any clinician.

KEYWORDS

communication, message, older, aging

BACKGROUND

The increase in the share of population aged over 65, namely the demographical ageing, is a feature of the last decades and this phenomenon has been recorded in economically developed countries and in Romania.

Some 400 – 500 years ago, life expectancy was 30 – 40. Today it has increased to 70 on average in most developed countries. In the 20th century, life expectancy has been enhanced by 25 years, which was called "the gift of the century". Different factors contributed to this spectacular evolution and to demographical ageing: social and economic processes, decreasing birth rate, development of medical sciences, improvement in nutrition and medical-sanitary assistance, all of which determined a decrease of morbidity and general mortality. The causes accounting for ageing ascension relate to decrease in mortality and to progress in medicine correlated to higher life standards. In developed countries, the progress of medicine foreseen for the next decades is conducive to higher aging and lower morbidity and mortality. (1)

Ageing is a complex process involving accumulation of certain changes attributable to multiple causes such as genetic faults, environment factors, diseases and hereditary factors. An essential feature of ageing is decreased ability of adapting to environment changes – to maintain homeostasis. As changes generate stress in aged bodies, homeostatic balance gets ever more unstable. Stress exceeds bodily capacity, eventually leading to death (2).

The human body may fail in so many ways during the ageing process, that it is impossible to define ageing in one specific, complete way. We can only say that ageing is a progressive increase of vulnerability to an extraordinary number of pathologic events.

The elderly are in the third or fourth period of their existence, during which losses and decline on physiological, psychological, economic and social level are the most severe. These losses are always due to a biological evolution concomitantly involving social, economic and cultural factors (3).

The numerical increase of the elderly led to mutations in the structure of morbidity, namely to the prevalence of chronic diseases and consequently to higher need of medical assistance. It is estimated that an individual aged over 65 has almost 50 % chances not to be healthy, to need medical treatment or even hospital care services (2).

Studies developed in the last years revealed the magnitude of medical aspects involved in demographical ageing. Therefore it was specifically stated that 42 % of people over 65 are ill, 4 % of whom are permanently hospitalized (3). On the other hand, it was established that 55 % of cancers develop in elderly people. "Polypathology" is also known as characteristic to the elderly, implying the concomitant presence of several diseases with the same individual. An average of 4 – 5 diseases is estimated to exist with the ill elderly (2, 4).

UNDERSTANDING COMMUNICATION

Communication has never been more important than in our current cultural moment. From the growing monopolization of global media by human rights issues, health campaigns, and free speech and social issues, communication has real political and ethical consequences.

In the theory of needs, communication is one of the fundamental human needs in general and all the more so in suffering elderly (5).

Communication involves the transfer of information from one human sender to a human receiver with the aim of enhancing the receiver's knowledge in order to allow them to fulfil their tasks or influence their attitudes and behaviour. Information transferred refers to the conceptual representation of various aspects of a universe under the form of a message that can be coded and sent over. Communication becomes effective when the forwarded message is identical to the received one, or else the message is either incomplete or distorted (6).

Successful communication implies a number of critical and essential components. *The Context* must be considered in the examination of any communication event. *The context or environment* refers to the physical or social context, to the number of people involved, relationships of participants, surrounding events, culture, rituals and noise. In the communication field*, a message* represents information that is sent from a source to a receiver (5). Much of the discussion during the development of a communication initiative focuses on what to say and how to say it. Health communicators must determine what information is to be provided, what style and tone to use, and what the message must ultimately convey. If the message does not resonate with the target audience, the communication effort is likely to fail (7).

There is no guide to provide information for a perfect communication with the elderly patient.

The Patient-focused method is preferable but there are cases in which a combination *of three* methods is more efficient: *the oblique method* that prepares the patient*, the patient-focused method* that makes the patient feel like a unique person having a suffering that is only his, and *the statistical method* that may show the patient that he misinterpreted his condition, as it is not advisable to consider a severe disease prematurely. It is essential to make the patient feel that he can communicate with the physician, that he can have confidence to express his anxieties and that he has someone to rely on. (6, 8)

COMMUNICATION WITH ELDERLY PATIENTS

In the theory of needs, communication is one of the fundamental human needs in general, and for the suffering elderly it is critical. A complex human being is indivisible and their existences involve psychological needs, needs of communication, spiritual needs. This is an argument to account for the human being's multi-dimensionality (4). Any person is an entity with individual and specific needs and resources. Human needs are multiple and complex and they are met to get "wellness", comfort, and quality of life. The quality of life of the elderly should be an essential target in any act of medical assistance; sometimes healing or recovery is no longer possible, but quality of life improvement is always achievable (9).

For the elderly, the need of communication may be considered vital, as their quality and duration of life may be threatened by failure to communicate or by improper communication. Communication in the last period of life gets particular significations and it is, alongside other elements of pal-

liative treatment, a solution for quality of life improvement until the last moment (5).

By means of communication, important data on the person's typology, psychological modifications determined by ageing, the degree of the illness, suffering, social and psychological stress, and disability are obtained. Communication plays an essential part not only in the evaluation of patients' needs, but also in the act of nursing. Gerontologists state that speaking to the elderly is an act of nursing, and that well-chosen words, if well received, may have a therapeutic effect (7).

Many elderly people often suffer more from isolation, marginalization, and neglect and from lack of communication with others. Speaking to the elderly hastily, shouting or using a cold tone, without adapting to their level of comprehension and culture, to their reception capacity, hearing ability may deepen their suffering. One of the abuses against the elderly is the psychological, emotional or verbal abuse by using improper language and it is one more stress the elderly have to face. Failure to communicate with the elderly may condemn them to psychological and social isolation and it may accelerate their psycho-intellectual regression (10).

A rating used in geriatric clinics and geriatric psychology from the point of view of communication ability makes the difference between communicating elderly people, partially communicating elderly people and non-communicating elderly people.

There are personal and environmental factors that either prevent the message to be sent over or lead to incomplete or distorted reception, thus affecting understanding, reception and response. These factors are not necessarily specific to the elderly, but their incidence is higher with this category cumulating regressive psychological effects as they grow older, stress of subsequent social isolation, effects of polypathology, disability and subsequent disabilities (8).

Environmental factors that may influence, positively or negatively, communication by entailing tension or discomfort are physical (noise, lack of privacy, failure to adapt) and social (presence or absence of other people). Certain claims or responses to needs may hide intimate issues such as lacking the presence of significant others. On the contrary, when a person feels more comfortable in presence of a close relative, he/she feels encouraged to communicate, acknowledge or emphasise what was said (11).

Any communication involves both *a verbal message* and *non-verbal displays.* In the elderly suffering from speech impairment, understanding, memory and orientation dysfunctions, verbal message may not be effective.

Medicine has limits and not all patients can be cured but the physician has to professionally offer hope and relief to patients. Bad news is often associated with terminal diseases, such as cancer, yet it may come under multiple forms (HIV, painful or costly treatment, chronic disease difficult to treat, amputation of a limb, etc.).

The impact of bad news depends on the gap between the elderly patient's expectations and his true medical condition and it can be evaluated after having found out what they know and what expectations they have related to their medical condition (4).

Communication of bad news is a mandatory ability – of the medical personnel, as physicians and nurses communicate with patients and their families more often than they apply any medical procedure. It was

noted that physician's attitude and communication abilities play a crucial role in the elderly patient's confrontation with the bad news. The quality of physician-patient relationship will influence patient satisfaction, their compliance to treatment and the patient's perception referring to physician's competence (5).

Disclosing the severe disease diagnosis improves the patient's and family's abilities of planning and facing the new situation, it encourages realistic targets and the patient's autonomy and it consolidates physician – patient relationship. It is deemed to be little or not useful to hide bad news from a patient who most likely is aware of his disease (7).

There is no universal successful approach that can be applied in all situations of bad news communication (8, 15).

The process of wordless communication (nonverbal communication) includes: body language, face expression, eye contact and actions of looking, paralanguage, touch, use of distance, use of time. The elderly patient may disclose communication signs that must be carefully recorded and interpreted, vocal wordless signs loaded with meaning: moans, groans, gasps, cough, weeping, laughter, various voice inflexions, etc. Even the body position in bed may show to the physician the existence of a pain that forces the person to change position in order to mitigate the pain. Tucking knees accompanied by a look expressing fear and concern may suggest anxiety and various visual or hearing hallucinatory conditions (7).

In the overall assessment of the elderly from which the physician wants to obtain as many data as possible, any other nonverbal messages are relevant, such as quick motions, agitation, restlessness, anxiety, muscle contraction, quivers and difficulties to focus. Any phrase or words that could trigger the patient's anger, fear, irritation, weeping or other particular status should be monitored (16).

PARTICULAR SITUATIONS IN COMMUNICATION TO ELDERLY PATIENTS

Dementia. Cognitive changes in older adults vary highly from one person to another. Dementia is a general term applied to a decline in mental ability severe enough to interfere with daily life. Alzheimer's disease is the most common form of dementia, accounting for 60 % to 80 % of all cases. The classic clinical presentation of Alzheimer's disease begins with vague symptoms of memory loss and confusion that worsen gradually. As the disease advances, patients experience disorganized thinking, impaired judgment, trouble expressing them, difficulty recognizing familiar people, and disorientation in time, space, and location. Patients with Alzheimer's disease and other forms of dementia face considerable communication challenges (20).

***Depression*.** Many elderly patients are depressive. In these cases speech is slower, answers are short and late. The approach is more difficult due to lack of focus, feelings of uselessness and distrust, of pessimism and even, in severe cases, of suicidal ideas. In elderly patients with severe depression, verbal negativism as well as mutism may be encountered. In these cases, questions shall be short in order not to challenge the focusing capacity, resumed after a break, with no insistence and persuasion that could determine any blocking of communication. The patient will be persuaded that everything is done with the aim of protecting and helping him (11, 14).

***Hearing Disorders*.** Either total or partial hearing impairment are frequent with the elderly whose hearing diminishes gradually. The estimated prevalence of significant hearing impairment among people 65 to 75 years of age is approximately 30 % to 35 %; among people aged 75 or older, the prevalence increases to 40 % to 50 %. In these cases, the medical personnel communicating information shall make their face and lips visible while speaking. Medical staff must also assess whether the person uses a hearing prosthesis, if this is on and if the battery is functional. Speech shall be clear, simple, in short sentences, in loud voice but without shouting, uttering more rarely the syllables and adding to it mimics and gestures (5, 10).

Sight Disorders. The decrease in visual acuity is also associated with ageing. Verbal speech is essential, while nonverbal communication is not useful, for which reason it is not to be used with such patients. Reductions in peripheral vision can limit social interaction and activity. For example, older adults may not communicate with people sitting next to them because they cannot see them well or at all. Patient shall be informed about any other noises, other persons entering the room, various manoeuvres necessary to examination and search of personal documents. (7).

***Disorders of Understanding and Phrasing*.** Many age-related changes in language comprehension are attributable to a gradual and steady decline in working memory – the brain system that provides temporary storage and manipulation of the information necessary for complex cognitive tasks (including language comprehension). They are encountered among elderly patients with cerebral conditions with sequela after cerebral-vascular accidents and are represented by incoordination in speech, difficulties in arranging words in sentence, inability to find words, impossibility to answer (21). Long-term memory is typically unimpaired, such that older adults do not forget general knowledge, vocabulary, or family history. However, older adults may experience more difficulty retrieving certain types of information from long-term memory, especially people's names. Physician shall address questions that involve answering by "yes" or "no", or by a nod. In these situations it is indicated that more time is granted to get answers and to concomitantly notice behaviour and nonverbal language (22).

***Tension*.** Some elderly people may experience a particular condition of irritability determined by anger or with no specific explanation. Tension may suggest fear, anxiety or impotence, conditions that may be prevented and removed by explanations and assurances. Distracting the attention eliminates the object of anger, tension, by driving the person in other activities for a shorter or longer period, after which the scope of communication is resumed (15).

Violence. It stands for a more special situation that may be encountered with some older adults and that accounts for a series of causes such as cerebral lesions, senility, various mental disorders, consumption of alcohol and adverse reactions to some drugs that may determine states of agitation. The physician shall get informed before initiating communication on the violence potential (previous violence, confusion and disorientation, agitation, irritability, impulsivity, non-cooperation, suspicion) (23).

In case a violence potential is suspected, certain precautions shall be taken, such as

informing the other team members (it is advisable for several medical staff members to approach the elderly patient), keeping the distance, identifying the underlying causes of violence, placing the patient in a room under permanent monitoring and removing blunt objects. Such a patient shall not be touched and no sudden motions shall be performed, in order to avoid defence or aggressive reactions (24).

***Weeping*.** There are persons that weep easily, they are emotional, labile, and there are persons who weep spontaneously and for no reason in certain cerebral disorders such as some forms of cerebral sclerosis – pseudo-bulbar syndrome. In the former case, weeping is a method of alleviation, discharge of tensions, and it may be allowed. Such elderly patient will not be asked to cease weeping and the physician shall not show emotionally expressed empathy (11, 25).

SUGGESTIONS TO IMPROVE COMMUNICATION WITH OLDER PEOPLE

1. Allow extra time for older patients. Because of their increased need for information and their likelihood to communicate poorly, to be nervous and to lack focus, older patients require additional time.

2. Avoid distractions. Patients want to feel that you have spent quality time with them and that they are important (12).

3. Sit face to face. This simple act sends the message that what you have to say to your patients and what they have to say to you is important. Researchers have found that patient compliance with treatment recommendations is greater following encounters in which the physician is face to face with the patient when offering information about the illness.

4. Maintain eye contact. Eye contact is one of the most direct and powerful forms of nonverbal communication. Maintaining eye contact creates a more positive, comfortable atmosphere that may result in patients opening up and providing additional information.

5. Listen. Good communication depends on good listening, so be aware of whether you are really listening to what older patients are telling you.

6. Speak slowly, clearly and loudly. The rate at which you provide information can greatly affect how much your older patients can take in, learn and commit to memory (12, 26).

7. Use short, simple words and sentences. Simplifying information and speaking in a manner that can be easily understood is one of the best ways to ensure that your patients will follow your instructions.

8. Stick to one topic at a time. Information overload can confuse patients; instead of providing a long, detailed explanation to a patient, try to outline the information (27).

9. Simplify and write down your instructions. When giving instructions to patients, physicians will avoid overly complicated or confusing ones. Writing is a more permanent form of communication than speaking and it provides the opportunity for the patient to later review what you have said in a less stressful environment.

10. Use charts, models and pictures. Visual aids will help patients better understand their condition and treatment.

11. Frequently summarize the most important points. As you discuss the most important points with your patients, ask them to repeat your instructions.

12. Give patients the opportunity to ask questions and express themselves. This will allow them to express any apprehensions they might have, and through their questions you will be able to determine whether they completely understand the information and instructions you have given (7, 28).

CONCLUSIONS

As elderly patients become more knowledgeable about health information, services, and technologies, health professionals will need to meet the challenge of becoming better communicators and more effective users of information technologies. Effective communication is not only a clinician's duty, it is important because it may prevent many ethical dilemmas. Communication with elderly patients always requires a multidisciplinary approach. Improved quality of life for the elderly should help them get through the biopsychological decline by facilitating a mental wellness that is mandatory for psychosocial adaptability.

ACKNOWLEDGEMENTS AND DISCLOSURE

The authors declare they have no potential conflicts of interest.

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Submission: January, 4th, 2016
Acceptance: February, 2nd, 2016

BPI Bulletin of Integrative Psychiatry
Buletin de Psihiatrie Integrativă

Clinico-diagnostic particularities of eating disorders in the elderly

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ABSTRACT

Whereas eating disorders have mistakenly been ascribed exclusively to adolescence and young adulthood, their presence is a cruel reality among geriatric population, too, and it causes serious problems in terms of diagnostic approach (including positive diagnosis, differential diagnosis and therapeutic approach in its multidimensionality, of course). This paper aims to review the current scientific literature on eating disorders in the elderly and the particularities of this nosological category among geriatric population. The final purpose of the paper is to give a warning sign regarding the life-threatening potential of these disorders in the elderly and to highlight the importance of early detection and rigorous approach, even when masked symptomatology is present.

KEYWORDS

eating disorders, anorexia nervosa, older adults, somatic comorbidities, depression

INTRODUCTION

Eating disorders are often labelled specific to adolescence or young adulthood. Nonetheless, a significant number of older adults – especially women – never managed to get over the eating disorders experienced in their teenage years (that often tend to

become chronic) or they developed eating disorders de novo. Women aged between 60 and 70 suffer from eating disorders and altered perception of their own body image, in a manner similar to teenage girls (1).

In the past few years, extensive studies have been conduced to show that there is no difference between teenagers and older adults when it comes to the development of eating disorders. Hence, a five-year study done online called Gender and Body Image Study, published in International Journal of Eating Disorders, reported that 13 % of the women aged over 50 feature symptoms evoking diverse eating disorders, 70 % of whom had taken various measures to lose weight. At the same time, 62 % of these female respondents are persuaded that their weight influences negatively their quality of life (1, 2). The cliché according to which eating disorders are specific to adolescence and young adulthood is currently being shut down through numerous ongoing studies aiming to highlight the particularities of this group of disorders in the elderly. Whereas symptoms may not vary considerably by age, their underlying reasons are characterized by dramatic differences (3, 4).

GENERALITIES ON EATING DISORDERS MANIFESTED AMONG GERIATRIC POPULATION

The impact of eating disorders upon the entire systemic status of the elderly is overwhelming: over time, the female body becomes less and less resistant and it may develop a series of gastrointestinal, cardiac, bone, or dental complications. This aspect requires careful monitoring of the elderly who suffer from eating disorders, from anorexia nervosa to bulimia or other disorders characterized by binge eating (2, 4).

These eating disorders are often underdiagnosed, mostly among older adults in nursing homes. The onset of anorexia nervosa and bulimia can be insidious and unpredictable, and their symptoms are often ignored because there is always another cause for weight loss, directly related to the ageing process. Furthermore, the subclinical psychological and behavioural issues that may intensify eating disorders in the elderly can progress without being pinpointed by the ones close to the patients or even by the patients themselves (4, 5). They may even degenerate into affective disorders, psychotic disorders, obsessive-compulsive disorder and dementia. On the other hand, weight loss (intentional or unintentional) entails – in case of an elderly patient – imunodepression, hypotonia and muscle fatigue and high susceptibility for other somatic conditions. Thus, it is associated with high mortality and morbidity (2, 6).

In the past 50 years, anorexia nervosa was associated almost exclusively with teenage girls and young women. However, there has been a recent and significant increase in cases of anorexia nervosa among geriatric population, mostly in elderly women. Among the young patients, the main factor of anorexia is distorted body image perception, but this process is less relevant within anorexia in the elderly. In their case, the most important determining or accelerating factors are taste and smell alterations (they emerge mainly as side effects of long-term use of certain pharmacological products), residual mental disorders left untreated during younger years, cognitive deficit, bereavement, loneliness

(easily entailing depression), and demonstrativeness (to draw the attention of others) (7, 8). Refusal to eat is often the ultimate way of gaining control. At the same time, it may appear as a form of protest against relatives or the healthcare personnel (in case of institutionalized older adults). On the other hand, refusal to eat in the elderly can be understood as a conscious or unconscious suicide attempt, as an escape from a road with no return, thus an expression of despair (7, 9).

Considering the rather scarce evidence of eating disorders symptoms in the elderly, it is essential to monitor their body weight closely, by focusing on a balanced diet and by ensuring a proper intake of proteins, vitamins and micronutrients. At the same time, it is fundamental to monitor the mental status of the elderly, by assessing any behavioural changes or affective and cognitive disorders constantly. Exercising and basic activities should be encouraged, because they represent an important factor in gaining appetite (8, 9).

The medical care personnel monitor the vital functions of the elderly as part of their work routine, but they often fail to assess the exact diet history of older adults, reason for which many patients pertaining to this age cluster are malnourished (10).

More than 75 % of the adults over 89 exhibit taste and smell alterations. Furthermore, salivary production decreases in the elderly, thus leading to dry mouth, dense oral secretions, dental problems, all of which determine these persons to ingest a smaller amount of food. Cavities, misfit dentures and partial or total lack of teeth reduce the quality of mastication, thus determining a decrease in food intake (8, 10). Dysphagia or other swallowing disorders are considered discouraging and hard to surpass by the elderly who lack proper socio-familial support. International statistics report that 50 – 75 % of the elderly suffer from indigestion, gastroesophageal reflux disease, dehydration and dyselectrolytemia. The most common underlying causes of involuntary weight loss in the elderly include depression, neoplasias and benign disorders of the digestive tract (7, 8). Of course, pulmonary and cardiovascular (in special congestive heart failure) diseases, alcoholism, dementia and long-term treatment with certain pharmaceutical products can deepen the problem. However, socio-economic status is also worth taking into account, because it can influence profoundly the dynamic of weight loss causes in the elderly. The elderly who depend totally or partially on their caregivers or on the medical personnel within the nursing homes they live in are more prone to unintentional weight loss than those who suffer from dementia but are still autonomous and, of course, than those who are still independent (6, 8, 10).

It is also important to understand and to consider that a 5 – 10 % loss of the bodyweight within the last 12 months is a major problem, with life-threatening potential, and that it should not be ascribed to an ageing-specific physiological process (10).

CLINICO-DIAGNOSTIC AND THERAPEUTIC APPROACH

The diagnostic approach to weight loss in the elderly must begin by making a difference between the four fundamental factors: anorexia, dysphasia, socio-economic troubles, and weight loss despite normal food intake. It is also essential to investigate the entire bio-psychosocial background

of the patient, by identifying somatic or psychiatric comorbidities, by assessing personal pathological records (organic or psychiatric), by investigating the implications of long-term pharmacological therapies (especially nausea and vomiting). A reduction in the doses of psychotropic drugs, for instance, may reveal a series of symptoms, such as anxiety (5, 10, 11).

A complete and complex initial approach to an elderly patient who experienced weight loss includes an assessment of the patient's history, a full body examination, a complete blood count, an examination of potential upper or lower digestive tracts bleedings and an endocrine exam (8, 10).

From numerous standpoints, anorexia nervosa in the elderly manifests itself similarly to that with onset at younger ages. In both age clusters, patients refuse to eat by finding excuses such as being already full and they have distorted body image. At the same time, family conflicts and dissimulative behaviours are also worth taking into consideration. Both age clusters engage in purging behaviours, although the elderly are more likely to use laxatives rather than engage in self-induced vomiting, which is a more common practice among younger people (5, 6).

As it occurs among younger people, the elderly develop eating disorders due to the accumulation of numerous factors, among which loss of independence, of their life partner or of someone dear, as well as isolation and perceived lack of control over their own life. Refusal to eat is used as a way to regain control of their own lives or – in extreme cases – it is a passive endeavour meant to slowly end their lives. Food refusal is subtly different from anorexia-specific pattern and it can be assimilated as a psychopathological disorder related to ageing (12).

Undiagnosed depression and trigger factors related to retiring and changing from an active to a less active life may determine eating disorders, which often become severe. On the other hand, eating disorders may also be just a way to draw the attention of others, mostly in case of institutionalized older adults (8, 12).

The main reference points in the differential diagnosis of anorexia nervosa in the elderly:

- little – or non-apparent clinical manifestations of infections, which may determine weight loss because of a drastic appetite decrease;
- loss of appetite consecutive to long-term use of pharmacological products known for such an adverse effect;
- gastrointestinal disorder that entail a loss of appetite;
- total or partial tooth loss;
- misfit dentures that cause pain and determine the person to avoid chewing, thus ingesting food;
- alcohol abuse;
- memory impairments;
- low socio-economic status;
- depression is an important factor that determines the loss of appetite in the elderly;
- loneliness and lack of significant social relationships;
- anhedonia and apathy induced by the feeling of imminent death (6, 7, 13).

It has also been reported that eating disorders in remission for several years may relapse in the presence of an unpredictable stressor (2).

Eating disorders in the elderly are extremely severe also because they usually associate chronic somatic conditions that may degenerate because of malnutrition. Improper diet may determine or increase cognitive impairments; they may cause disorientation, lipothymias; they may decrease the immune response; they may favour the emergence of bedsores in bedridden patients; they may slow down the cicatrisation processes (7, 8).

Early detection of depression symptoms in the elderly is another essential element. Hence, the most common symptoms specific to depression in the elderly are hypobulia (with implicit decrease of motivation to eat), lack of appetite and weight loss without other affective causes (9, 14).

The therapeutic approach to weight loss in the elderly must be based on cause management. If this cause is not well established, the main purpose is to prevent further weight loss, by initiating early nutritional support. A delicate issue for the family or the healthcare personnel of nursing homes is that of "silent suicide", which can be defined as a person's efforts to kill himself or herself, often insidiously, by intentional starvation and/or noncompliance with prescribed supportive medical therapy. This behavioural pattern is a commonplace among older adults with depression, among those with reduced mobility or even bedridden and among those who live in various nursing homes (8, 9). Furthermore, the success rate of silent and nonviolent suicide has dramatically increased toward 100 %. The problem of detecting or preventing silent suicide is further compounded by the fact that elders who refuse to eat or comply with medical treatment do so without warning or apparent manifestations of their true motives. Important somatic conditions or the loss of someone dear may mask suicidal behaviour; thus, it is ascribed to a natural reactive depression, considering the general context of the individual in question (11, 12).

Therapeutic approaches to the elderly with eating disorders can be established rationally, just like for young patients with anorexia nervosa. Focusing on solving the psychological issues subjacent to the eating disorder has been reported to be significantly more effective than direct intervention on weight loss or direct attitude to the diet issue (1, 2, 14). Counselling and supportive psychotherapy stimulates and makes more efficient the coping mechanisms of the elderly with eating disorders; they eventually overcome or accept their perceived losses, the anger, the felling of uselessness, the family conflicts or even low self-esteem. At the same time, patients who show symptoms of anorexia nervosa will be administered pharmacological products to stimulate their appetite (it is also important to reduce as much as possible the drugs with loss of appetite among their adverse effects). Management of depression is also fundamental: antidepressant will be administered after taking all necessary caution measures (managing the potential adverse effects and choosing the treatment effectively, after taking into account any associated somatic pathology) (10, 11, 12). Furthermore, alongside individual psychotherapy, these patients require family psychotherapy or counselling, with a focus on mediating family conflicts. The purpose is to provide to the elderly person a less hostile environment and a real state of psychological comfort (4, 6).

Food supplements are often necessary to correct nutritional deficits caused by food deprivation. In case of severe malnutrition, hospitalization or even parenteral feeding may be necessary to restore a normal nutritional status and the homeostatis required to reinitiate a normal food regime (10, 14).

In the elderly, anorexia nervosa can associate severe, life-threatening complications, mostly in the presence of somatic comorbidities, often encountered among this population group. At the same time, the pharmacological treatments administered to these patients to control their various organic disorders can often be compromised by diet deficit and by dehydration caused by insufficient fluid intake (3, 10, 11).

It is also fundamental to inform the family and the entourage and to explain to them that anorexia nervosa in the elderly is not the expression of stubbornness, but a potentially life-threatening medical and psychiatric condition (6).

In addition, it is worth underscoring that forced feeding attempts may actually make the disorder worse. The contribution of dieticians and the intervention of social workers are mandatory in order to attain the psychological, biological and social rebalancing of the older adult suffering from eating disorders (6, 10).

Furthermore, as part of the multidisciplinary therapeutic program, patients can be encouraged to take part in group activities and in physical rehabilitation programs. Psychological comfort is a fundamental element in the recovery of older adults with eating disorders (3, 10).

CONCLUSIONS

Whereas eating disorders have been wrongly ascribed exclusively to adolescence and young adulthood, their presence is a harsh reality among geriatric population, too, and it causes serious problems in terms of diagnostic approach (including positive diagnosis, differential diagnosis and therapeutic approach in its multidimensionality, of course).

Loss of appetite is not a physiological aspect related to the ageing process. Recent studies report an increase in the incidence and prevalence of eating disorders in the elderly; acknowledging the symptoms favour early diagnosis and a proper and multidimensional therapeutic approach.

ACKNOWLEDGMENTS AND DISCLOSURE

The authors declare that they have no potential conflicts of interest to disclose.

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Submission: December, 15th, 2015
Acceptance: January, 26th, 2016

BPI Bulletin of Integrative Psychiatry
Buletin de Psihiatrie Integrativă

Psychiatrists' perception of the medical psychiatric assistance (Ethical and Legal Aspects)

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ABSTRACT

Medical professionals' conception about the necessity of the coercive admission of the psychiatric patient refers generally to the emergency situations in which there is a prejudice risk as much for the patient as for the others. The informed consent is an important aspect of the medical psychiatric assistance and confidentiality is an ethic principle which needs to be respected.

The aim of this study **is to evaluate the perception of the psychiatrists about the ethical and legal aspects of the medical psychiatric assistance, the degree in which the medical professionals perceive and know the rights of the patients suffering from psychiatric illnesses.**

Material and method: **the study is a prospective one and was implemented on medical professionals engaged in psychiatric assistance of patients suffering from psychiatric illnesses. The study population consisted in 57 psychiatrists engaged in the therapeutic process of psychiatric patients, belonging to Iași, Suceava, Botoșani, Vaslui medical centers. The study is descriptive and questionnaire based and was conducted during July 2012 – July 2013 period of time.**

Results: **a high percentage of psychiatrists consider that the social and professional reinsertion would be compromised if the personal data of the psychiatric patient wouldn't be kept as confidential. There is a highlight on the large number of patients who are not acquainted with the Law of Mental Health.**

Conclusions: **stigma is a phenomenon which brings important personal prejudice by discrimination and social marginalization. The perception of the psychiatrists is that psychiatric patients suffer from discrimination not only in general but also comparing to other patients.**

KEYWORDS

psychiatrists, psychiatric medical assistance, ethic

INTRODUCTION

The mental health legislation is needed in society for the protection of the individuals suffering from a mental illness, these persons being a vulnerable part of it. In the domain of psychiatry, as well as in other domains, the ethical problems emerge not only during the research process, but also during the clinical practice. The psychiatric assistance admits two hospitalization manners: with consent (voluntary) and coercive admission. The coercive admission takes place inside the psychiatric institutions only after all the efforts aiming a voluntary hospitalization were made. The coercive admission represents one of the most controversial issues of the mental health domain. There are many opposite opinions regarding not only the legal and ethical aspects of the coercive admissions, but also respecting the voluntary hospitalizations and the way of obtaining a valid informed consent.

Opinions of a great diversity had influenced the legislation applied in many countries concerning the psychiatric medical assistance, especially when it comes to coercive admission. The hospitalization criteria and the number of the coercive admissions vary across Europe, being influenced by the social and cultural context.

After the political events that took place in December 1989, Romania began gradually to benefit of a legislation which addresses better to the needs of the society. The fiat 313 from 1980 was replaced by the Law 487/2002, the Law of Mental Health and Protection of Individuals Suffering from Mental Illness. Beginning with 2006, the appliance norms of this law were officially approved. The Law 129/2012, which was elaborated in order to modify and complete the Law 487/2002, surprises us with new legislative elaborations, aiming to bring us closer to the European norms.

According to psychiatrists' opinion, the decision to hospitalize a patient suffering from a mental illness registers a significant variation depending on the diagnostic. Some surveys which were applied to psychiatrists from United States show that they affirm the necessity of the coercive hospitalization in case the patient presents a risk of aggressiveness directed towards himself or others or is presenting a severe disability (1). Studies referring at the coercive admission which included legal bodies (e.g., lawyers) had also supported the coercive admission of the patients who present a

high risk of committing dangerous acts (2). There is lack of information that one can find consulting medical sources regarding the research implemented on psychiatric patients who were subjects of coercive admission and regarding their long-term treatment.

Social strong bonded phenomena, prejudice, discrimination and stigmatization are frequently affecting the individual depending on a variety of factors like nationality, religion, age or social and economic statute. If an individual is discriminated, he can still ascend on the social scale, but when discrimination, stigmatization and prejudice are directed towards a psychiatric patient, these social-determined aspects transcend all social classes and generate negative attitudes. The most vulnerable and stigmatized social category resembles the psychiatric patients (3). The society perceives the patients suffering from a mental disease with fear, fury, disgust and hostility; all these negative emotional feelings transform themselves in social discrimination (4). The stigmatization of the psychiatric patient can generate negative discrimination and this aspect has multiple consequences not only regarding the individual's functionality (5), but also in respect of his access to medical assistance (6).

Greece is one of the European countries in which, with the passage of time, the high frequency of the coercive admissions led to stigmatization of the psychiatric patients and ultimately to discriminatory acts that affect them (7). Some studies show that the discriminatory attitude (8) grew to the point that there is a high disapproval regarding the idea of living next to a psychiatric patient (9). Our conceptualization of these discrimination processes guides us to take into account aspects like branding, discrimination, stereotypes, emotional reactions, social status loss (10).

The researchers show that branding is highly associated with unemployment, discrimination, depression, low self-esteem, loss of income (11, 12). In the United States, 60 – 70 % of the individuals who suffer from a mental illness would like to work (13), but only 15 % of them are employed (14). The unemployment creates a state of poverty, erodes self-esteem and leads to discrimination and social isolation; this process creates a proper environment for mental illnesses to arisen (15). Some studies show that discrimination in schizophrenia can be observed due to a low adherence to the treatment (16).

The discrimination of the individual (17, 18) is a medical, legal, political, cultural and educational phenomenon. The avoidance of discrimination is an important feature when speaking about ethics and medical responsibility (19, 20). This phenomenon of avoiding the discrimination of the psychiatric patient grounds a fundamental ethical principle (21) which implies equal treatment (22).

Respecting the medical confidentiality is an obligation in the domain of the medical ethics. This aspect resembles a balance between the patient's confidence and the physician's professional conscience. Official international documents stand that the confidentiality of the individual is protected by law (23, 24, 25). The term "confidentiality" is frequently mentioned in ethical codes. Medical confidentiality, as a theoretic principle and practical obligation, is a mandatory requirement in medical care (26). Confidentiality is an ethical requirement not only in medical care, but also in research

(27). As an ethical ideal of medical care, confidentiality is a core principle which nourishes the relationship between physician and patient (28). By respecting medical confidentiality (whatever form would it take – photographical, electronically, biological) there is a respect showed to the intimacy and autonomy of the patient. In this way, respecting the medical confidentiality is a core condition of the relationship between physician and patient and a mandatory necessity in medical care. By violation of confidentiality, the integrity of the physician – patient relationship is broken and the patient becomes more vulnerable (23).

MATERIAL AND METHOD

The study is prospective, based on the responses of medical staff members involved in treating patients with psychiatric disorders. The study population was represented by 57 psychiatrists, members of the medical staff involved in treating patients suffering from mental illnesses from Iaşi, Suceava, Botoşani, Vaslui medical centres. The study is prospective, descriptive, inquiry based and unfolded between July 2012 and July 2013. The studied factor referred to the level of knowledge and application of the psychiatric patients' rights and to the modalities of their protection, taking into account the limitations imposed by the law. The main assessment criterion was represented by the lack of knowledge or consideration regarding patients' rights which can influence their voluntary addressability to medical psychiatric care and the psychiatric treatment.

The questionnaires followed all the steps from pretesting, revision, validation and their application in final form. The results were statistically processed for each item, subsequently making the correlation of the answers according to different characteristics of the study groups.

There was made an analysis of the responses given by 50 psychiatrists. The analysis of the indicators regarding central tendency and dispersion for each particular item concerning the factors which determine the protection of the individuals who suffer from a mental illness was:

Item Statistics

	Mean	Std. Deviation	N
i1	2.84	1.095	50
i2	1.04	0.198	50
i3	1.38	0.530	50
i4	2.92	0.274	50
i5	2.44	0.907	50
i6	2.82	0.629	50
i7	1.14	0.495	50

The inter-correlation matrix doesn't show items with a high degree of similitude.

Inter-Item Correlation Matrix

	I1	I2	I3	I4	I5	I6	I7
I1	1.000	.124	.139	.093	.072	.398	.146
I2	.124	1.000	.047	.060	.127	.059	.058
I3	.139	.047	1.000	-.067	.100	.219	.207
I4	.093	.060	-.067	1.000	.184	.270	.084
I5	.072	.127	.100	.184	1.000	.142	.367
I6	.398	.059	.219	.270	.142	1.000	.180
I7	.146	.058	.207	.084	.367	.180	1.000

The covariance matrix is calculated and used in the analysis.

The Cronbach alpha value was 0.730, which offers an acceptable result comparing it to the threshold of 0.70. This result validates the use of the questionnaire also to other categories of doctors and psychologists involved in monitoring people with psychiatric disorders.

RESULTS AND DISCUSSIONS:

Statistical analysis:

- 2 independent groups: χ 2 is a nonparametric test which compares 2 or more distributions of frequencies originated from the same population; it is applicable when the expected events exclude each other.

- For more than 2 independent samples: the Kruskall-Wallis test.

Demographical characteristics:

In the groups of psychiatrists, the analysis of the distribution according to specialty reveals the predominance of resident doctors (38, 6 %), followed by young specialist doctors (36,8 %); meanwhile, the predominance of the senior specialist doctors was only 24,6 %. The appliance of the Kruskall-Wallis intergroup nonparametric test points out statistically significant differences between the specialties of the doctors who answered the questionnaire (Figure 1).

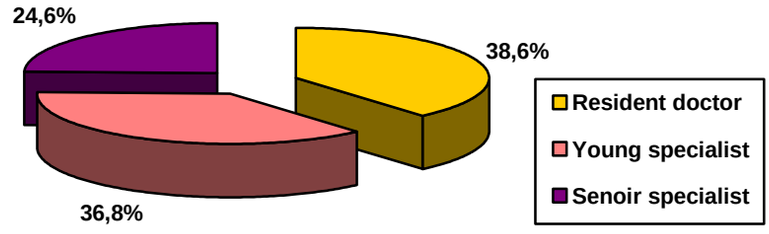

Figure 1. *Distribution of doctors according to specialty*

The distribution of the groups according to sex reveals the predominance of females with a frequency of 66.75 (Figure 2).

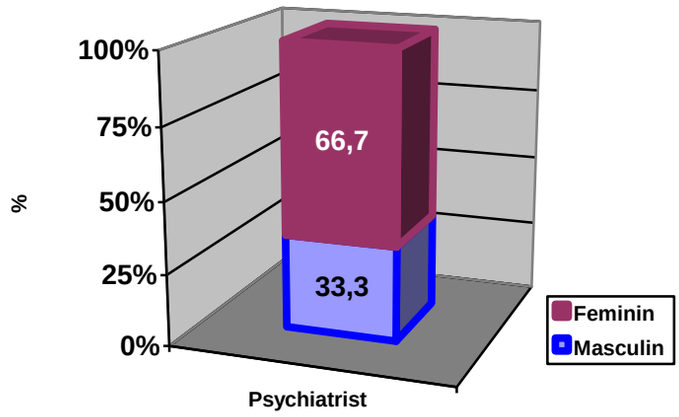

Figure 2. *Distribution of the groups according to sex*

The distribution of the groups according to age

By age, there can be distinguished a higher percentage of questioned subjects with ages between 30 and 39 years (49.8 %). There is a highlighted frequency of the questioned individuals above 30 years old – 21.1 %.

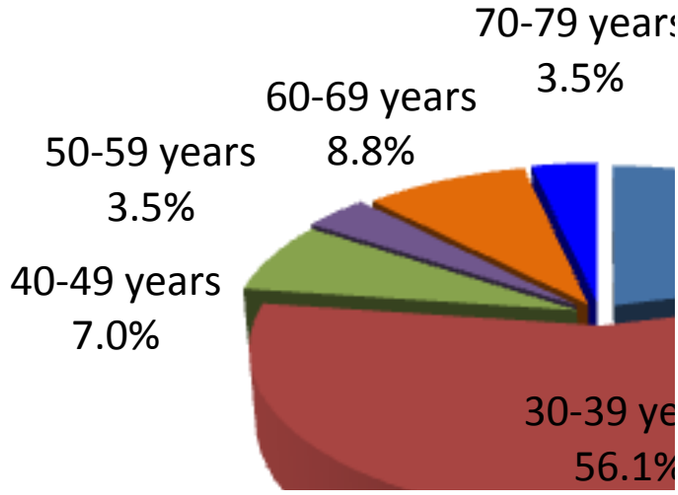

Figure 3. *Distribution of the groups according to age*

The evaluation of the questionnaire

Question 1: "The Law of Mental Illness and Protection of People with Psychiatric Disorders is":

a. Law 487/2002;
b. Law 129/2012;
c. Law 487/2002 and Law 129/2012;
d. I don't know.

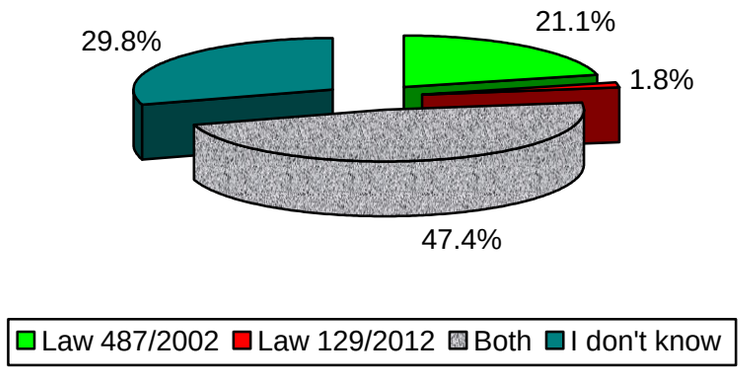

Figure 4. *Share of the answers given by psychiatrist about the Mental Health Law*

In the study group, the answer related to current legislation regarding the protection of individuals suffering from mental disorders shows that the questioned subjects, as medical professionals involved in therapy, couldn't provide the correct solution in a number of 29.8 % of cases (Figure 4).

Applying the Kruskall-Wallis intergroup significance test points out statistically significant differences between the answers given at the first question about the legislation regarding persons with mental illnesses.

Question 2: "Do you consider that patients with psychiatric disorders must be informed about the benefits and side effects of the treatment before initiating it?"

a. Yes, the psychiatric patient has the right to an adequate informed consent that has to be followed;

b. In the particular case of the patient with psychiatric disorders, I would provide a minimum of information;

c. The patient with psychiatric disorders must not be informed;

d. I don't know.

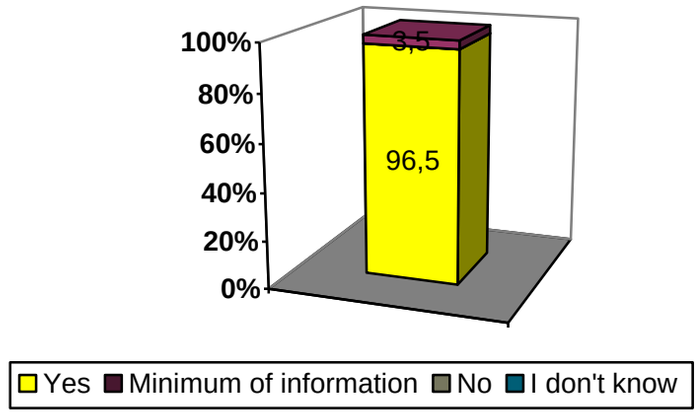

Figure 5. *The share of the answers given by psychiatrists regarding the disclosure of the information about the treatment*

Regarding the answers recorded at question no. 2, comparing the groups that were studied, the affirmative answers in all studied groups were noted (Figure 5).

Question 3: "In your opinion, the social attitude in relation to the patient with mental disorders is of...":

a. Acceptance and/or tolerance;

b. Discrimination and/or intolerance;

c. Other (please specify).

Stigma has four components: labelling an individual who is suffering from a particular illness, generalization of the individuals who are suffering from the same illness, division creation and discrimination of the individual. A diagnostic of cancer, AIDS, homosexuality, sexual disease, and psychiatric illness can lead to marginalization, labelling, until the individual is isolated by the community members. (23). The external stigma refers to the discrimination made by others, leading to an unjust attitude towards the patient (15). The prejudices related to psychiatric patients take part to their social isolation, generating discrimination and labelling (29). These stereotypes of negative attitudes generate discrimination, ignorance (30, 31) and incorrect certitudes regarding the diagnostic (32).

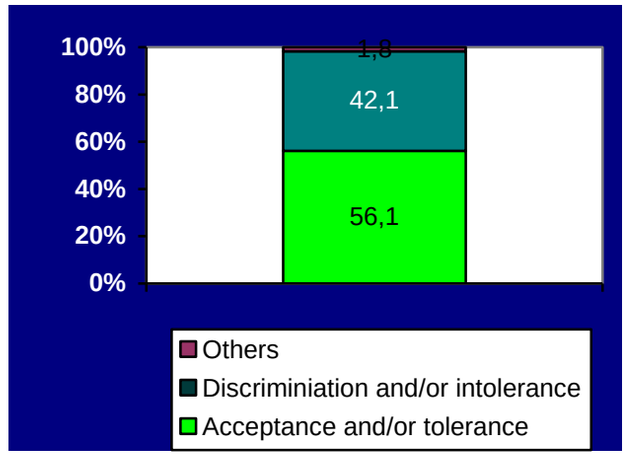

Figure 6. *The share of the answers given by psychiatrists regarding the social attitude towards the psychiatric patients*

The answers given at this question evidenced significant statistical differences between the two groups of study. A percent of 56.1 % of the psychiatrists considered that the social attitude towards the psychiatric patient is of acceptance/tolerance. Meanwhile, 42.1 % of the psychiatrists considered that the social attitude towards psychiatric patients is of discrimination and/or intolerance (Figure 6). The Law of Patients' Rights in Romania affirms that discrimination of the psychiatric patients is forbidden no matter their religion, ethnics, race, sex, origin and so on (19). Studies show a high risk of discrimination in medical psychiatric care in Romania (19, 33).

Question 4: "Assuming that the data of the patient with mental disorders would not be kept confidential but disclosed, do you consider that the patient would suffer?"

a. No, he or she would not suffer any damage;

b. Yes, but he or she would not suffer major damage;

c. Yes, the socio-professional reintegration of the patient would be jeopardized;

d. I do not know.

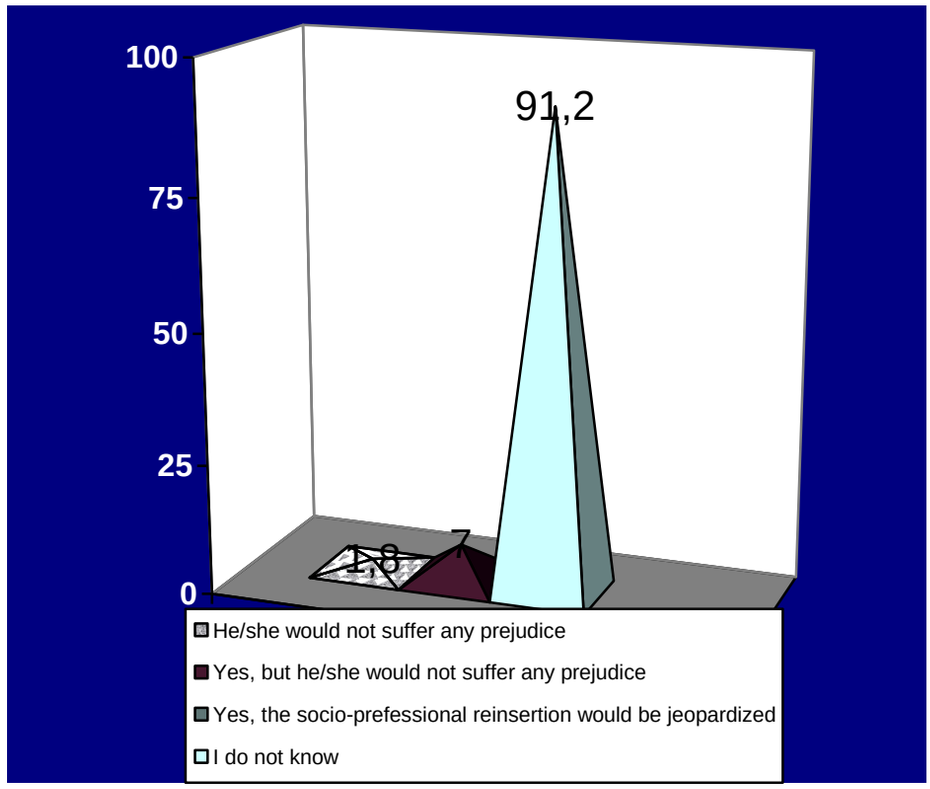

Figure 7. *The distribution of the psychiatrists' responses regarding the psychiatric patient's prejudice in case of personal data disclosure*

The predominance of positive responses registered for question number 4 in all analyzed groups was easily remarkable. 91.2% of the psychiatrists consider that the socio-professional reinsertion of the patients would be compromised in case of personal data disclosure (Figure 7).

On one hand, the physician is obliged to respect patient – doctor confidentiality; on the other hand, it is compulsory for him to rapport medical information to the governmental structures (syphilis, tuberculosis, wounds produced by gunshot, abuse). Nowadays, the legislation regarding the limits of confidentiality is stated differently in different countries.

The physician finds himself frequently caught between ethical tensions and requirements to break the medical confidentiality (26).

Question 5: Do you consider that the disclosure of information in the treatment of patients with mental disorders may be permitted in certain circumstances in relation to the medical team by:

a. Relatives/legal representative;

b. The police/legal bodies (Parquet/judges);

c. Another opinion (please specify);

d. I do not know

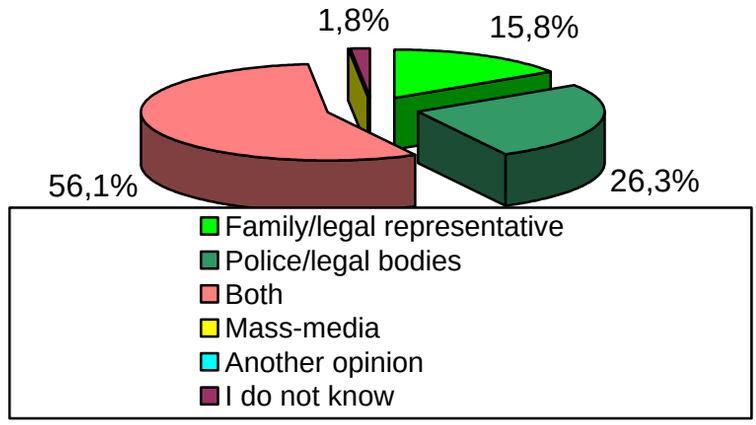

Figure 8. *The distribution of psychiatrists' responses regarding the permission to brake medical confidentiality*

Regarding the registered answers for question 5, a percent of 56 % of the psychiatrists consider that it is permitted to disclose personal information of the patient to the family, police and legal bodies (Figure 8).

Question 6: "Do you consider that any psychiatric patient should be compelled by the law to hospitalization and coercive treatment?"

a. Yes, because curing the patient is the goal and an authoritarian attitude (paternalist) of the psychiatrist is to be imposed in this domain;

b. No, the law should compel the psychiatric patient to hospitalization and coercive treatment only in case of psychiatric emergency (violence expressed against himself or others);

c. No, there is a violation of the patient's right to decide for himself and the coercive admission and treatment will reduce the addressability to psychiatric care.

d. I do not know.

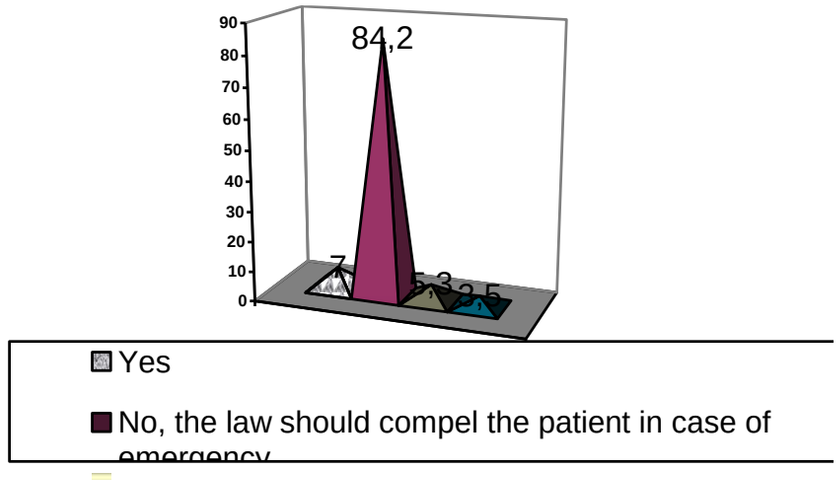

Figure 9. *The share of the psychiatrists' answers regarding the necessity to inform the patients about the psychiatric treatment*

Regarding the registered answers for question 6, the results are:

- 84.2 % of the psychiatrists consider that psychiatric patients should be compelled by law to hospitalization and coercive treatment only in case of psychiatric emergency (violence against oneself or others) (Figure 9).

Question 7: "Do you consider that, compared to other patients, psychiatric patients are discriminated?"

a. Yes, they are discriminated;

b. No, they are not discriminated;

c. I can not appreciate.

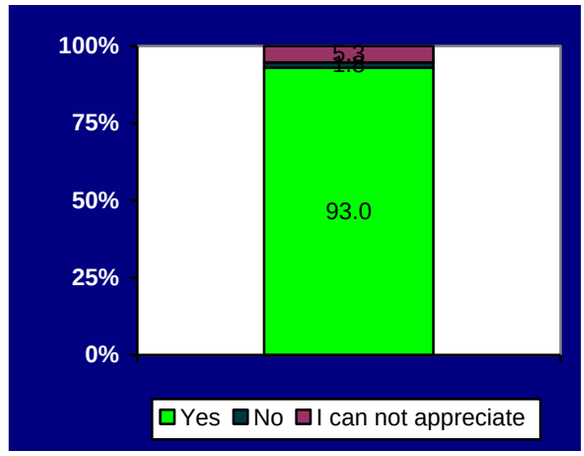

Figure 10. *The share of the psychiatrists' answers regarding the discrimination of the psychiatric patient compared to other patients*

The answer to this question evidenced statistical significant differences between residents, young specialists and specialists with more than 5 years of experience. The opinion that the psychiatric patient is discriminated compared to other patients belongs to 93 % of psychiatrists (Figure 10).

Studies show significant correlations between perception of discrimination and socio-economic status of the psychiatric patient (19, 34). Psychiatric patients are labelled (34), stigmatized, marginalized and discriminated in all societies, the probability of individual rights' violation being very high (36, 39). Numerous studies show a low propensity of the society to tolerate the psychiatric patients (37). Marginalization and social stigmatization can accentuate social isolation, increasing the risk of suicide.

The hostility which is present between psychiatrists and other specialists, the permanent conflicts regarding therapeutic methods generate marginalization in psychiatric medical care (38).

Mass-media can be an important partner when fighting against stigma (8), especially through informative programs and public debated (29), television and radio talks (38). Physicians are not allowed to stigmatize the psychiatric patient, but, from a utilitarian point of view, to protect the members of the community by the decompensate patients (23, 39).

CONCLUSIONS

To resume the characteristics of the study group formed by medical professionals, it is easy to remark the predominance of young females. The age group 30 – 39 included half of the survey's participants, this fact attesting that, in spite of being a part of the young population, the medical staff does have professional experience. Almost half of the psychiatrists involved in this study know not only the old Law of Mental Health, but also the new one. A quarter of the total number of psychiatrists does not know the Law of Mental Health.

Confidentiality is an ethic and legal principle which has a tremendous importance in consolidation and maintenance of the relation physician – patient.

The topic of non-discrimination is an ambitious challenge in Romania, as a member of the European Union, and stigma is an important issue for social services, in terms of modern psychiatric care.

ACKNOWLEDGMENT

The authors thank AMPOSDRU for supporting the research for this study, developed in the "Parteneriat interuniversitar pentru creşterea calităţii şi interdisciplinarităţii cercetării doctorale medicale prin acordarea de burse doctorale – DocMed.net", POSDRU/107/1.5/S/78702 project.

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Submission: June, 24th, 2015

Acceptance: December, 14th, 2015

BPI Bulletin of Integrative Psychiatry
Buletin de Psihiatrie Integrativă

The motivation of suicide

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ABSTRACT

The complex motivation of suicide is a dilemma of legal medicine, due to its complexity and especially to the victim's "discretion" as they get close to committing suicide. The present paper analyzes motivational aspects, starting from the influence of religion and social rules in various countries, as well as particularities related to the victim's age, gender and social and family status. The paper concludes that suicide has a complex motivation, confirming the victim's biological, psychological and social context in this case as well. Biological factors contribute through the genetic load of suicidal behaviour, psychological factors through the many psychological conditions favouring the suicidal act, and the social factor represents the triggering factor in unfavourable social conditions. The motivation of suicide appears more important as the perpetration is triggered, compared to the pre-existing motivation.

KEYWORDS

suicide, motivation, perpetration

INTRODUCTION

Suicide is defined as "the deliberate action of stopping one's own life". More than a personal tragedy, suicide is a serious public health issue. This phenomenon has raised the researchers' interest, especially since suicide is a mysterious gesture for humanity. This complex phenomenon cannot be approached from an exclusively medical point of view, since philosophical, anthropological, sociological or even theological notions are required. The frequency of suicide and suicide attempts increases constantly at an international level. More than a million persons commit suicide on an annual basis across the world, most of them out of desperation. This desperation can have several causes, such as psychological (depression, bipolar disorder, schizophrenia, abuse of alcohol or other substances), but in all cases the author thinks of suicide as the only solution for his/her personal or professional issues.

According to WHO, suicide is the 13th cause of mortality in the world and the first cause of mortality in teenagers and adults less than 35 years old. Suicide attempts reach numbers ranging from 10 to 20 million on an annual basis.

This study aims at clarifying the motivation for suicide and this is why it mostly analyzes cases of suicide attempts where several motivational data could be obtained, since the author is still alive. (1)

I. DEFINITIONS OF SUICIDE

Suicidal behaviour undergoes several steps, starting from the simple thought of ending one's days to the preparation of a suicide plan, to the acquisition of the means required to apply such plan, to the suicide attempt itself and, finally, the perpetration of suicide. Firstly, the various interpretations of the suicidal phenomenon should be analyzed. (2)

SUICIDE AS A FORM OF DEATH

The term *suicide* coined by Thomas Browne comes from the Latin words "sui" and "caedere", i.e. "killing oneself". Hence, suicide is an act by which the perpetrator voluntarily causes his/her own death, i.e. a murder of one's own person.

In 1987, Durkheim defined it as "the end of life resulting directly or indirectly from a positive or negative act perpetrated by the victim himself/herself, being aware that this would cause his/her death".

There are, at least, two distinct forms of suicide. Jean Starobinsky, physician, historian and literature theorist, expresses this idea as follows: "the image of suicide in Occidental culture oscillates between two extreme types: on the one hand, suicide in a full state of consciousness, as a consequence of an analysis or the necessity to die, assessed exactly and exceeding the reason to live; on the opposite, demential behaviour when an individual seeks refuge in death without thinking of it". (3)

However, modern psychiatry fails to differentiate between reason and lack of reason in suicidal acts. The most frequently found psychological disease is depression, under its various forms, from melancholic delirium to suicidal raptus, which represents an impulsive manifestation connected to a major frustration that results in a violent and uncontrolled behaviour.

In his book *The Suicide*, Emile Durkheim, one of the pioneers of sociology, analyzes this phenomenon from a social point of view.

He thus defines four types of suicide, such as egoistic suicide, altruistic suicide, anomic suicide and fatalist suicide. In all these forms, social dis-insertion is the first genuine cause.

Another classification resulting from the motivation of the act includes the following types of suicide:

a) Assisted suicide – an individual willing to end his/her life may require assistance from another person. The other individual, usually a family member or a physician, can only provide help upon approval of the person wishing to end his/her life. Assisted suicide is a highly popular topic, from both a political and a moral point of view, in most countries. The example of Dr Kevorkian, an American physician sentenced to eight years of prison for helping his patients die, is well known.

b) Suicide crime – is an act where an individual murders other persons some time before or at the same time with his/her own death. The motivation of suicide crime can be thought of as purely criminal or as an act of benefaction for a person suffering from depression.

c) Suicide with crime attempt – is a case where an individual subjects himself/herself to violent death, for criminal or military purposes. These persons are thought of as terrorists in civilised countries.

d) Opposition suicide – when suicide is perpetrated as a sign of protest or opposition.

e) Escape suicide – in some extreme situations when living becomes unbearable, some individuals commit suicide for liberation. (4)

Thus, there exist several types of suicide, whose differentiation results from the motivation of the act. In all definitions of suicide, the intention to die is certainly the key element. However, it is often very difficult to "reconstruct" the thoughts of the victim if he/she does not clearly express his/her intentions prior to suicide or does not leave an explicit letter.

ATTEMPTED SUICIDE

Attempted suicide corresponds to "non-fatal suicidal behaviour". While the term "attempted suicide" is frequently used in the United States, it has been replaced by "parasuicide" or "deliberate self-destructive act" in Europe. This is defined as a conscious act of a person with a view to committing suicide, but failing to achieve the objective.

In terms of intensity, attempted suicide ranges from "minor" suicide, with no significant injury (superficial injury), to serious attempts, resulting in invalidating injuries.

WHO has classified attempted suicide as "self-inflicted injury" and has defined it as "acts" with non-fatal consequences, performed by an individual on a voluntary basis and representing non-usual behaviour and which may have destructive consequences without the intervention of another person, or which may consist of excessive ingestion of substances, compared to a medical prescription, with the purpose of causing the changes hoped for by the victim.

The term "suiciding" refers to a person who has perpetrated at least a suicide attempt and who has survived a suicidal gesture. (5)

SUICIDAL IDEATION

This represents thoughts imagining death as a solution, based on some imaginary scenarios, but without perpetrating the act itself. The idea of suicide corresponds to the idea of ending one's own life, which is more or less intense or elaborate. Several thoughts can appear in the same individual: feelings of sickness of life, the belief that life

is not worth living and the wish never to wake up again. Persons with suicidal ideation have been referred to as "suicidals".

SUICIDAL CRISIS

This is always the consequence of a suicidal conduct and may represent a decompensation thereof. The term "conduct" implies the elaboration of a behaviour which initially was mostly instinctive. Conduct becomes the practical application of suicidal ideation.

Suicidal crisis is a psychological crisis whose major risk is suicide. There is a moment in the life of a person when s/he feels s/he has a problem and faces more and more intense suicidal ideas. Suicidal crises most frequently occur in a form of suicide referred to as pathological suicide. The victim suffers of "suicidal disease", where more or less regular crises can result in suicide. In these individuals, suicide increasingly becomes the method of getting rid of suffering and the only solution for a state of crisis.

SUICIDAL THREAT

This corresponds to the completion of a verbally expressed or unexpressed suicidal project. It is classified between the appearance of a suicidal idea and the perpetration of the act itself. The threat can be interpreted as a first "cry for help" from the subject with suicidal ideation.

SUICIDAL EQUIVALENCES

They represent risk behaviours, proving an unconscious desire to play with death. These conducts, just like some injuries or self-inflicted mutilation, should not be abusively interpreted as attempted suicide. There are many examples of suicidal equivalences: food refusal, treatment refusal, addictive abusive behaviour, extreme sports, risky driving of vehicles, pathological games, risky sexual practices, self-mutilation, etc.

SUICIDE WITH CRIME ATTEMPT

This represents a crime attempt whose perpetration implies the perpetrators' death. It is most frequently used by military or paramilitary groups aiming at destabilizing the institutions of another party seen as the enemy.

ASSISTED SUICIDE

It corresponds to the acts of a person with or without medical training, supplying means for suicide or counselling on suicide techniques to a person who wants to suddenly end his/her life. For instance, a terminally ill patient may ask the physician for a lethal dose of a medicine that would end his/her life. Assisted suicide is authorised in a few countries but very strictly regulated.

II. THE EPIDEMIOLOGY OF SUICIDE

At a global level, suicide represents 1.4 % of total morbidities. 804,000 persons commit suicide every year, in the world, according to a WHO report of 2012, i.e. a person every 40 seconds. Suicide results in a number of victims similar to wars and natural disasters and is found all over the world, even though the number of cases significantly differs from one country to another. According to WHO estimates, the number of deaths caused by suicide will reach 1.5 million in 2020.

The international average is 11.4 cases in 100,000 inhabitants. South-Eastern Asia is most affected, with a level of 17.7. The percentage is slightly higher in rich countries (12.7 %) than in developing countries (11.2 %). Guyana is the most affected country in the world, with a percentage of 44.2 %, while Saudi Arabia has the lowest

number of cases (0.4 %). Men are victims of suicide twice more often than women.

As for attempted suicide, their number is 10 – 20 times higher than the number of deaths by suicide, but they result in significant financial expenses due to hospital care and physical, affective and mental traumas. The gender distribution of attempted suicide is reverse to actual suicide: women have twice more attempts than men.

III. SUICIDE AND PSYCHOLOGICAL DISEASE

Psychological disorders are responsible for about 90 % of the cases of committed suicide and attempted suicide. This is why the first phase in the etiological diagnosis of attempted suicide should follow the diagnosis of a psychological disease. For some authors (Rich and Runeson, 1992), the best "predictor" of suicide is a psychological disease. In the 19th century, Esquirol exaggerated saying that suicide was a symptom and that any suiciding individual was a mentally ill person. However, the understanding, motivations and epidemiology of suicide has changed significantly since then. Depressions, schizophrenia, addictions and personality disorders are some of the psychological diseases with major suicidal risk.

We shall try to analyze them in order of frequency and related risks.

• Suicide and depression

Depression has a clinical table characterised by the pathological alteration of welfare, a psychomotor slowdown or inhibition and the modification of instinctual functions: sleep disorders, low libido, physical asthenia, anorexia. WHO shows a frequency of depression of 7 – 8 %.

Suicide is the most serious complication of depressive disorders. A depressive patient feels that the risk of suicide or attempted suicide increases considerably regarding his /her own person. Any patient can commit suicide because s/he is attracted to this "morbid solution" of overcoming depression.

From a clinical point of view, some manifestations may increase the risk of suicide, such as: the intensity of depression – the more intense the depression, the higher the suicide risk; the appearance of cyclical variations of psychological tonus; self-accusation or ideas of guilt and persecution are a warning sign especially in melancholic individuals; agitation, extreme anxiety or the appearance of delirious ideas may result in attempted suicide; psychological and emotional instability and impulsivity associated to desperation, implying an imminent suicidal risk, should be followed in depressive teenagers.

In melancholic patients, the wish to die is important, and seen as a liberation, both for the self (stopping the pain) and for the others (who will no longer worry). The risk is major, since suicide becomes a purpose and, at the same time, the core concern of the subject. This death sentence can be determined by multiple factors: atrocious moral pain, feeling of incurability, delirious ideas of self-accusation and guilt, prospective hallucination. Suicide is prepared cautiously or performed during a raptus. Perpetration occurs mostly in the morning and the risk is the highest, since melancholic people very rarely fail, as determination is major and the selected means are most violent.

Other types of existing risk factors:

- social and demographical factors: the risk of suicide is higher in patients aged from 30 to 40 or over 65 years old; attempted suicide is more frequent in depressive women than men;

- social and economic factors: the risk is higher in depressed individuals who are unemployed, bachelors/spinsters, widow(er)s or socially isolated;

- life events: the loss of an affective relationship, a spousal conflict, loss of labour or mourning;

- personal or family history represent a significant factor of relapse in attempted suicide. (7)

• Suicide and schizophrenia

Schizophrenia is an incipient psychosis in young adults, affecting 1 – 1.5 % of the population. It is characterised by disorders of thinking, delirious ideas, hallucinations and affective discordance. Patients with schizophrenia represent a group with a very high risk of suicide, which has been since long observed by psychiatrists. According to Bleuler, suicide was "the most serious symptom of schizophrenia".

Suicide affects 9 – 13 % of the subjects with schizophrenia, i.e. a risk 20 times higher than in the general population. 30 – 50 % of these patients have at least an attempted suicide during their lives. Schizophrenics resort to violent and sometimes atypical means of suicide (defenestration, fire weapons, drowning). Suicide attempts by drug intake are rarely found. Attempted suicide in schizophrenics has the same frequency in men and women. Suicide is most frequent in young people, decreasing towards seniority, so that the average age is 34, and the frequency decreases to 5 % in patients over 65 years old. Suicide is most frequently triggered by a stressful event that took place recently in the patient's life, for instance the loss of a close person. The risk of suicide in schizophrenics is frequently associated to social isolation, lack of a family and unemployment. Moreover, it is more frequent in women who have no children. (6)

• Suicide and personality disorders

Personality disorders represent a significant and long-term deviation of conduct and lived experiences, distinct from the individual's degree of culture. This disorder appears in adolescence or at the beginning of adult life. It is stable in time, resulting in suffering and altered social and family integration.

In hysterical persons, for instance, suicide attempts are not genuine but ambiguous, superficially prepared, not life-threatening, theatrical and resemble a "play". The suicidal gesture actually is an appeal to the others; lack of affection or the wish for love turn this game with death into a defence against others.

In borderline personalities, suicide may hide extreme anxiety, fear of separation, neurotic symptoms or personality disorders. The tendency to become involved in intense and unstable relationships frequently results in emotional crises and major efforts to avoid abandonment. Repeated suicide attempts or self-aggressive gestures usually entail. An apparently banal event results in an affective frustration or a narcissistic injury that may trigger an attempted suicide. (8)

In antisocial psychopathic personalities, characterised by the impossibility of obeying social rules, suicide frequently is the ultimate solution of an existence dominated by impulsive and antisocial conducts. Alcohol consumption most frequently facilitates the perpetration of suicide. Death generally occurs after several attempts and sometimes is not the result of the most decided attempt. Suicide can also be an impulsive response to frustration.

IV. SUICIDE AND ADDICTION

The use of toxic substances, alcohol abuse and addiction are undisputed factors aggravating suicidal risk. They facilitate perpetration in the context of a suicidal crisis, but they can also short-circuit such crisis.

Alcoholism is associated to increased suicide risk, about six times higher than in the general population, and 30 – 40 % of attempted suicides occur immediately after alcohol consumption. Major risk alcoholism is represented by precocious alcoholism, chronic alcoholism, acute drunkenness, drug withdrawal, depressive personalities and delirium. Alcoholism results in extreme behaviour, social isolation and rejection from the entourage. It represents a "descent to hell", which may result in suicide without the intervention of external factors.

In drug addicts, there is a very high risk of suicide. It must be noted that drug addiction itself is perceived as a conscious or unconscious "suicidal conduct". Just like alcoholism, it will make the subject enter an infernal spiral, which in some cases will result in isolation, needs, job loss, the loss of normal sociability or paranoia, all these representing risk factors that may trigger a suicidal crisis.

Suicide risk is also higher in anxious disorders and especially in panic attacks. Suicide also appears in some somatic diseases, such as AIDS. In such cases, it is perceived as a "less painful" death than the one caused by the somatic disease. (9)

V. ANALYSIS OF RELIGIOUS AND CULTURAL ASPECTS IN SUICIDAL BEHAVIOUR

• Suicide and religion

Due to the often stunning differences in the frequency of suicide from one country to another, researchers have also analyzed other types of predisposing factors. Many studies show that religion and culture are involved in the understanding of suicidal behaviour, and their role in the prevention of attempted suicide should be major.

This should raise some questions:

- is there a connection between religious and cultural factors and suicidal conducts?

- what is the influence of religion and culture in suicidal behaviour?

There is no general agreement on the definition of "religion". A global definition has been adopted, which includes spirituality (in relation to transcendence) on one hand and religiousness (specific behavioural, social and doctrinal features) on the other.

Many studies have shown that suicidal behaviour is less frequent in religious persons. For instance, McClain Jacobson performed a study aiming at assessing the psychological level compared to faith in a life after death in a batch suffering from terminal cancerous diseases. Three groups were identified: believers, non-believers and undecided. This study shows that there is no significant difference in terms of anxiety and depression between the three groups. On the contrary, lack of hope, suicidal ideas and the wish to die as soon as possible were more frequent in the non-believers' group.

We should note that suicide is traditionally condemned by some religious doctrines. More concretely, if suicide primarily represents an act against one's own person, some religions consider that man's destiny belongs to divinity; thus, suicide becomes a rupture between man and God's sovereignty. In other cases, suicide is more simply thought of as a negative action.

Judaism clearly forbids suicide, the Catholic religion conveys the same message, following the principle "you shall kill no one"

and the Islam equally punishes this "unnatural" death. Due to this fact, in countries where religious belief is very strong (such as Iran), there is a very low rate of suicide. (10)

Culture, broadly speaking, is considered the combination of the distinctive, spiritual and material, intellectual and affective properties of a society, a social group or a person. Subordinated to nature, it includes, besides the environment, art and written works, lifestyle, fundamental human rights, value systems, traditions, beliefs and science. Cultural factors play a very significant part in the national and regional variations of suicide rates.

• Suicide and political acts

Throughout history, suicide has been used as a political act of opposition, appeal or even devotion. For instance, in the Roman Empire, a person who was close to the emperor and wanted to end his/her days had to ask for his prior approval.

Suicide can be perceived as a political act similar to martyrdom. In the contemporary era, suicide is used for spectacular protests (especially through self-combustion) against situations thought of as unbearable: for example in 1963, in Saigon, a thinker committed suicide as a protest against the government of the Vietnamese president. Subsequently, this gesture was emulated in several countries: in 1969, two intellectuals committed suicide in order to protest against the Soviet repression during the "Prague Spring": three members of the Mojahedin Organisation of Iran committed suicide in 2003 as a protest against the arrest of an Iranian woman by the French police; the suicide of a young French woman in 2008 as a protest against the expulsion of her Armenian friend did not have a French citizenship; in Tibet, as of 2011, several secular persons, monks and nuns set themselves on fire as a protest against Chinese occupation.

VI. SUICIDE AND AGE

Whereas the number of cases of suicide increases with age, the number of young people aged from 15 to 25 who commit suicide has been noticed in the entire world. In all countries, suicide is today one of the primary causes of death in persons ranging from 15 to 24 and in elderly individuals. Among children, suicide is less frequent and causes are hard to identify. Risk factors include:

- perturbed relations between child and parents and, the sooner they occur, the child's narcissistic experiences become more and more fragile;

- perturbed family balance (parental conflicts, conflicting separations of a couple, with the child acting as a witness, some monoparental cases where the child loses his/ her part as a "child" and becomes a partner);

- all forms of violence, traumas, sexual abuse, needs of the child;

- suicide history in the family;

- parental psychopathology (mostly depression history).

In teenagers, the issue of suicide is widely debated. It has become a priority of public health in all Western countries. Suicide rates from 15 to 24 years old have recorded an increase from 200 % to 800 % as of 1960. In civilised countries, they represent the second cause of mortality in this age range. Suicide is more frequent in boys, while attempted suicide is more frequent in girls. Moreover, the frequency of relapse is very high.

Suicidal ideation is very frequent in adolescence. Moreover, some risky behaviour may sometimes have a suicidal meaning (drug consumption, massive alcohol consumption). In other situations, these behaviours can be the expression of an act of courage against dangers. Adolescence is a tricky and difficult period for any young individual. The sensation of lack of utility, depression and others, combined with the lack of maturity explain the high levels of suicide. This way of reaction is currently thought of by many authors as a defensive reaction aiming at overcoming the psychological conflicts specific to adolescence. These conflicts are dominated by the lack of identity, in close relation to the deep changes caused by puberty.

Suicide attempts are mostly performed using prescription drugs taken from the family and especially from the mother. The most significant risk factors are:

- a history of suicide attempts;
- a history of suicide attempts in the family or the entourage;
- educational failure;
- home abandonment;
- poor health status;
- a bad family balance and social insertion;
- drug consumption;
- bad treatment;
- psychological disorders (depression).

During the adulthood period, several risk factors may intricate, resulting in suicidal gestures. Among these factors, the following can be mentioned:

- a history of suicide attempts: represents the most significant risk factor, being highly frequent in the year following the attempt, but the risk also remains high on the long run, since 10 % of the subjects with an attempt commit suicide even after 10 years;
- an associated psychological disease (depression, anxiety, schizophrenia);
- the presence of a family history of suicide or attempted suicide;
- the clear notification of a suicidal intent in a very impulsive personality;
- premature parental loss;
- affective isolation, especially in the case of a weak social and family entourage (bachelors/spinsters, widow(er)s or divorced persons are more exposed);
- negative life events;
- social and professional isolation, unemployment;
- conflicts with managers or work colleagues, interruption of a repeated activity, the feeling of inefficiency or lack of utility at work and in social relations;
- repeated medical examinations for painful syndromes or fatigue;
- a serious disease;
- drug addiction;
- emigration.

Moreover, suicide is more frequent in homosexual persons, being explained by the population's rejection and lack of understanding towards this sexual orientation ("suicide shows the isolated suffering of young homosexuals", „Le Monde", September 10, 2005).

Suicide attempts in the elderly result in death on a more frequent basis.

Increased mortality depends on several factors:

- reduced physical resistance;
- social isolation with reduced risk of saving;
- a higher decision to die;

- a more violent use of suicidal methods and application of such methods with the explicit purpose of ending one's life.

However, in most cases, suicidal ideation is not explicitly expressed, but frequently in an alluded manner; "let me go..." This makes us conclude that, though most cases of suicide are based on a psychological disorder, rational, thought and planned suicide, as the only opportunity of leaving the battle with an unsatisfactory life, has a very significant share. A special place, which should not be neglected, belongs to reactive, demonstrative suicide, or based on pseudo-religious beliefs (group suicides) which become more and more wide and dangerous.

Through the combination of these multiple biological (suicide genetics), psychological (psychiatric disorders) and social (existential issues) factors, we conclude that the motivation of suicide is highly complex, requiring cautious investigation, but, unfortunately, is frequently hardened by the impossibility of analyzing the "soul" of the one who commits such an act.

ACKNOWLEDGMENTS AND DISCLOSURE

"This publication benefited from the financial support of the project "Programme of excellence in the multidisciplinary doctoral and post-doctoral research of chronic diseases", contract no. POSDRU/159/1.5/S/133377, beneficiary "Gr. T. Popa" University of Medicine and Pharmacy of Iaşi, project co-financed from the European Social Fund through the Sectoral Operational Programme Human Resources Development (SOP HRD) 2007-2013".

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Submission: December, 10th, 2015
Acceptance: February, 1st, 2016

BPI Bulletin of Integrative Psychiatry
Buletin de Psihiatrie Integrativă

Multidisciplinary contributions

BPI Bulletin of Integrative Psychiatry
Buletin de Psihiatrie Integrativă

Sides of a coin: postpartum depression and ritual confinement anxieties

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ABSTRACT

The article uses ethnographic data from Romania and other countries to add to the debate on postpartum depression. It compares medical data with traditional practices and beliefs in order to suggest that both influence women's acknowledgement of the change. Although the instruments for knowledge transfer differ, the result is similar because of the human reaction to the event of childbirth. New mothers confront themselves with distress whether they are part of traditional communities or not. Postpartum depression and confinement anguish are thus two perspectives on the same state of mind.

KEYWORDS

postpartum depression, folk beliefs, rites, confinement, tradition

INTRODUCTION

Childbirth has produced intense states of mind from the dawn of humankind. Fear of the unknown, anxiety caused by the mysterious process of conception was expressed in numerous cults, rites and superstitions around the world, many of them still active today. Even modern technology has been analyzed as a clue on archaic human needs, a perspective that reminds us of William Robertson Smith and his method of searching common cultural elements between the remote past and present day (1889). Cristina Gavriluţă believes that ultrasounds are nothing more that a contemporary form of the ancient attempt to foretell future (2014). Modern people lost magic thinking patterns, but psychological reactions to life remained the same throughout millenniums. The human need to know what lies ahead and the illusory feeling of

control evolved from compelling deities by sorcery to inventing more and more technological means of investigation.

Care for distressed women after childbirth produced a plethora of researches on the postpartum depression topic. Long before this psychiatric approach, traditional societies acknowledged the specific condition of confined women and isolated them from the public space by enforcing taboos and interdictions. Both the scientific attitude toward childbirth and the magic perception induce a socio-cultural expectancy that the first weeks after birth will be critical. Hence, pathological/superstitious sensations are more likely to be experienced by the new mother undergoing pressure from the community, as a *placebo* type of effect.

The mental tension caused by radical life changes (confined women face physiological transformations, emotional challenge and social reactions) may be regarded in antonymic terms. Antidepressants seem a rational response to the uneasiness of mind, something that puts the contemporary human being "apparently in a more favourable position with regard to archaic man" (Jung, 1992, 143). The latter, on the other hand, believes that women after childbirth are vulnerable to almost everything: guests, neighbours, witches, maleficent entities. Moreover, any careless gesture she does may offend the personified environment and repercussions will not be deferred, according to magic reasoning. Actually, postpartum depression or confinement folk beliefs reveal a psychological reaction to a life event still covered in enigmas. How pregnancy appears in some women while others cannot reproduce, why babies cry endlessly and fall ill unexpectedly and what are the causes of the "baby blues" are questions that await impossible firm answers.

The article uses empirical ethnographic data from the *Folklore Archive of Moldova and Bukovina* and international references to add to the debate on the postpartum period. First, medical facts are used to define the critical condition. The effects of such information are then compared to behavioural patterns from traditional communities in order to extract similar implications on a socio-cultural level. The second section of the article discusses anxieties induced to women as part of the folk knowledge from around the world and Romania. The last part considers ritual prescriptions as traditional management of the childbirth crisis, in an attempt to complete the comparison between the medicalization of PPD and the folk treatment of this life event.

MEDICAL FACTS

The concern with the importance and high frequency of postpartum depression (PPD) is revealed by the vast body of literature on the topic and by existent specialized institutions such as Postpartum Support International (http://www.postpartum.net). Childbirth comes along with a wide range of emotions that were classified in various ways: maternal distress, baby blues, anxiety, obsessive symptoms, stress disorder, panic disorder, mood disorder, bipolar mood disorders, depression or postpartum psychosis.

"Faulty biochemistry" has been blamed for the negative states of mind. Whether it is the low docosahexaenoic acid (DHA) level, the hormonal disorders (of the thyroid, testosterone or estrogens) or a lack of vitamins B or magnesium, they all have been proven correlated with PPD.

The popular series that explains complex themes in a manner which is clear even *for dummies* contains a book on PPD that opens with a discussion on the pressure of popular culture on new mothers (commercials and, generally speaking, social stereotypes suggest that all mothers are in best shape and have perfectly happy families). The author advocates the changing of mothers' mindset. Women should stop feeling that all things have to be done by them. Thus, the author believes that most of the experienced anger and frustration will cease. The "big adjustment" (Bennett, 2007: 9) in women's lives is therefore a self-referential case.

The Diagnostic and Statistical Manual of Mental Disorders included "depression with postpartum onset" in the forth version from 1994 (Godderis, 2010: 456). *The Illustrated Medical Dictionary* considers motherhood "not only a biological process, but also a psychological crisis that reactivates and brings again to personal attention issues connected to affective and sexual development" (Rosati, 2015: 317).

The period of PPD is conventionally considered to last for 30 to 40 days from childbirth (Rosati, 2015: 318). "Typically, the postpartum period is of four weeks duration; however, women remain at risk for occurrence of depression for several months following delivery. According to the International Classification of Disease, an episode of depression is considered to have postpartum onset if it begins within the first 6 weeks after delivery" (Sharma, Corpse, 2008: 77). A more general time limit states that the first twelve months after childbirth (Wisner *et al.*, 2006) are defined by the transition from pregnancy to full mothering acknowledgement.

On the other hand, specialized discourse on PPD came into focus, since it may "influence how women are treated by the health care system and the possibilities afforded to subjects to develop their own identities" (Godderis, 2010: 453). An article like *Postpartum Mood Disorders* (Seyfried and Marcus, 2003) may induce a certain level of expectation since it suggests that "30 – 75 percent of women experience postpartum blues, 10 – 15 percent of women experience PPD, and 1 – 2 percent experience psychosis. When the maximum percentages are combined, up to 92 percent of women who have given birth could be labelled as having one of the three conditions" (Godderis, 2010: 457).

Feminist researchers could not agree to such a bleak perspective and they noticed a psycho-cultural phenomenon that also takes place in traditional communities. While discussing Jane Ussher's book, titled *Managing the Monstrous Feminine* (2006), Rebecca Godderis states, "mental health discourses in psychology and psychiatry work to control and contain the power of the female body by medicalizing women's experiences, particularly in relation to the reproductive cycle. The continued search for hormonal causes for conditions such as pre-menstrual syndrome and PPD supports the positioning of women as inherently more 'mad' than man because of their biology" (2010: 453).

The author turns her attention to the "gendered discourses" under the influence of Foucault's thinking and she believes that medical statements have a great impact on women's treatments and self-definitions. The pressure is similar, though built on different parameters, to the effect of folk knowledge on women. They obey pre-exis-

ting cultural patterns that induce anxiety. Both medical literature and traditional beliefs tell the pregnant woman and the confined new mother that they are in danger. Psychiatrists consider them to be 'asymptomatic' or 'pre-symptomatic' (Rose, 2007: 19) patients, while the rural group isolates them and imposes numerous taboos in an attempt to protect them and their infants, as well as the public space. Despite the clash between the two types of society, childbirth causes social reactions that may bear comparison. "The high-risk mother [for PPD] is not an individual woman; rather it is a concept that is constructed by establishing a set of life circumstances" (Godderis, 2010: 458), and so is the ritually confined woman all around the world.

Medical education uses statistics and clinical studies to generate expectancy and therefore to manage any probable circumstances. Traditional knowledge also influences cognition, by using specific examples of taboo infringements to persuade community members. Moreover, any unwanted event has a unique code of interpretation, namely implacable punishment for disobeying ritual prescriptions.

E. G.'s statement illustrates the adaptive power of the rural socio-cultural system: "especially you shouldn't make the fire, because if you handle fire the child may get burned or hurt by the fire… Now what can I tell you… I tend to believe this one. When I had my second son, I lived in a house in Păcurari and my baby was not baptized. Of course I had to… my husband was working; I had to cook, to do something. After a while, at some point when my boy grew up, I had a niece over and she ironed something on the table, he climbed the table and the iron fell on the back of his palm. He has a sign here, a burn mark. Here [on the back of the palm], his entire hand is burned. At that point, I realized and I said: 'I was in charge of the fire… [immediately after childbirth]'". Although her existence took place in a large city (Iași) and she did not use a traditional hearth, E. G. needed magic patterns to cope with her life changes.

Such "imminent repercussions" of ritual transgressions (Hulubaș, 2015: 57) are based on widely spread beliefs. Scientific and magic reasoning are the two sides of the same coin trading childbirth perception. Firstly, mothers-to-be are told they are "pre-patients" (Rose, 2007: 85) to psychiatrists; secondly, the folk set of rules induces a deeply shaded horizon of expectations.

WORLD WIDE WORRIES

Almost a century ago, Carl Gustav Jung diagnosed the mental state of the modern man as a spiritual yearning "for an answer that will allay the turmoil of doubt and uncertainty" (1992: 243). The renowned psychoanalyst remarked the absence of a metaphysical system that can coherently support contemporary existence and blamed it on science, since it "has destroyed even the refuge of the inner life" (Jung, 1992: 236). Pragmatic behaviour induced by an exclusive cause and effect reasoning may suffice on a daily basis, but its effectiveness ends where scientific knowledge does, whereas traditional education manages to maintain a vigorous cultural system, always able to offer an answer to ontological questions.

Jung's mentor, Sigmund Freud, was the first to blame societal development for the uprising of mental afflictions, in 1898: "we may justly hold our civilization responsible for the spread of neurasthenia" (1962: 6). However, the disciple detaches himself from

the idea that basic instincts are repressed in order to be integrated within modern society and argues that the loss of a spiritual involvement, as a result of rational demeanour, represents the cause of the "turmoil". Nevertheless, both psychoanalysts identified the feeling of unhappiness (the initial title of Freud's *Civilization and Its Discontents* was *Unhappiness in Civilization*), of failure and inner discomfort in "the man of the immediate present" (Jung, 1992: 227), who turned his face away from unverifiable beliefs, nonetheless still active in rural societies.

Since an energizing feeling "is itself the expression of a strong need" (Freud, 1962: 19), the absence of a "metaphysical system" (Jung, 1992: 234) that supports mental processes annihilates essential inner demands, therefore positive states of mind become impossible. Women confront themselves with a hollow cultural space after childbirth, unlike traditional wives who are informed about the magic dangers of the confinement period and about specific "antidotes". Not knowing what makes them feel vulnerable and why, and not even how to fight with these unseen "foes" adds a lot to the strains of motherhood.

Aboriginal communities helped last century scholars discover that childbirth blood is considered a universal destructive threat. In 1902, Ernest Crawley wrote that "women in child-bed and for some time after, are called 'unclean', frequently *tabu*" (10). Most of the ritual negative prescriptions are the same during the first weeks after childbirth and menstruation, since blood is considered extremely harmful for the social environment. Firstly, it "contaminates" the public space and consequently causes social misfortune. M. D. (a 67 year-old woman) is convinced that drought and extremely hot weather are produced by women that gave birth and then walked in the public space without being subjected to a specific religious ceremony *(moliftă)* intended to purify them from the sin of birth. Such hyperbolic punishments work as community instruments. "The laws of nature are dragged in to sanction the moral code" (Douglas, 2001: 3), to predetermine behavioural patterns.

Secondly, lochia transform the new mother into a contagious source of impurity. Women in childbed "are supposed to be in a dangerous condition which would infect any person or thing they might touch; hence they are put into quarantine until, with the recovery of their health and strength, the imagery danger has passed away" (Frazer, 2009: 208). Such folk knowledge is being transmitted very early to young girls, and when the moment comes for them to become mothers, the entire psycho-spiritual itinerary is clear in their minds. Not only do they know that a sense of *uncleanness* will cause them inner tension, but also they will master all the measures to ward off dangers, and this traditional "battle plan" may keep them safe from despair, a feeling that is common among women with PPD.

Mary Douglas established that impurity signifies disorder and that all attempts to isolate sources, hence to eliminate contagion represent "a positive effort to organise the environment" (2001: 2). On the other hand, both the new mother and the child are receptive bodies, and community itself becomes a threat. "The confinement period allows people to thwart possible actions of witches that may aim to harm the mother and her infant, in a time when both are most vulnerable" (Bartoli, 2007: 207).

The most common period of time that conjures the new mother and her child to stay indoors is 40 days for numerous civilizations (Bartoli, 2007: 207 – 213), Romanians included. This limit is provided by the magic significance of the number 40, which allows enough time to complete a spiritual and physiological sequence. Christian feast lasts for 40 days at Christmas; the ritual mourning period ends after the same amount of time. Moreover, the Bible abounds in references to this period of: King David, King Solomon, Noah, Moses and Jesus Christ were connected to the symbolism of the number 40. It signifies "a completed cycle" that leads to radical changes (Allendy, 1948: 385), and it is the number of "waiting, preparing", a number that suggests a trial and a punishment (Chevalier and Gheerbrant, 2009: 683). All these implications are found during ritual childbirth confinement.

Magic concerns that define the first forty days after childbirth are twofold. On one hand, the profane world can be damaged by the new mother's impurity; on the other hand, the sacred dimension (both pagan and Christian deities, the sun, the woods) may be offended by her. Nevertheless, both the social world and the spiritual environment are capable of harming, in their turn, the woman and her infant. The individual and his surroundings are communicating vessels, and this is exactly why the "dirty" woman has to be isolated and removed temporarily from this symbolic relationship. Frazer stated that menstruous girls, just like women after childbirth are "suspended, so to say between heaven and earth" (2009: 606).

Perils that lurk in the profane world start with the magic powers of the "evil eye". This universal danger is believed to be caused by people's *evil eyes*. The Italian name for this mysterious disease bears the name of its agent: *malocchio* [bad eye], as it happens in Romanian language, too. *Deochi* means "caused by the eye". Neighbours, friends, and relatives should not come in contact with the confined woman, and usually the traditional birth attendant denied them access to her room, as we were told in Draxeni village, county of Vaslui. She would take them out of the house if they already entered (Motoşeni – Bacău) or she would simply lock the door to the new mother (Berzunţi – Bacău). Both the mother and her child may be affected by "evil eye", and dangers consist in loss of lactation, sleeplessness, illness and even death. People's envious eyes can also harm the woman while being outdoors, reason for which she may not visit anyone, according to beliefs observed in Romania, South -Eastern Asia (Bartoli, 2007: 217) or in the Slavic world (Kabakova, 2000: 105). Seclusion can easily cause depression among women facing the new challenges of motherhood.

Furthermore, the sacred world becomes a threat to them. Uneasiness of mind may be the effect of folk beliefs implying the fact that lochia may even "outrage the gods". This expression was used by Lise Bartoli as a subtitle for providing empirical data from Catholic countries, Guatemala, South-Eastern Asia, and China (2007: 211-212). There and in Orthodox countries, too, women are considered unclean and cannot enter sacred establishments. Pre-Christian beliefs from Romania also forbid her to touch the ground, to come near the hearth (Hulubaş, 2012: 237 – 239), to look at the sun (Ciauşanu, 1914: 380) and to throw a glance at the woods (Hulubaş, 2014: 86). Otherwise, she would offend Mater Genetrix (the

Earth) and crops can be destroyed, or Vesta, the domestic fire, or Sol – the god of sun, and woodland deities similar to the Roman Diana.

Although the cult for these gods disappeared under the pressure of Christian doctrine, folk beliefs are active in the sociocultural dynamics in Romania. D. L., a villager from Neamţ County, declared in 2011: „while confined, the woman should not look at the forest, for the forest will impair her, the Mother of the Woods *(Mama Pădurii)* will impair her. She should only look down, at her feet; the light should not be on all her face! They say that if you take a glance at the forest, while being outside it, of course, the forest will impair you and will give you headaches…" Confinement headaches represent a frequent anxiety in rural settlements, but they are also acknowledged by numerous medical facts. According to a study from 2005, 39 percent of parturients experience postpartum cephalalgia in the first week after delivery (Goldszmidt *et al.*).

Restrictions thus appear as relics of complex worshiping from the remote past. Frequent taboos of coming close to the fire before and after childbirth are related to the adoration of hearth gods. "The hearth is considered sacred by most modern populations. Nothing impure should be found either on it or behind it, and even more so in the hearth fire, because it is a sin according to folk beliefs. It is hence obvious that we are presented with reminiscences of a religious cult which only preserved this respect for the place that was once an altar and a dwelling for deities completely forgotten by tradition today" (Caraman, 1988: 120 – 121).

Despite the apparent clash between cultural anthropology (which subsumes ethnology, ethnography and folklore) and medical sciences, as a consequence of the different research instruments, afflictions may fall on the fine line between the two sciences. As echoes of psychological reactions to the world, disorders require the entire context in order to be treated effectively, and the collective unconscious that stores cultural information could play a significant role in the pressure exerted on PPD women. As noticed, a female ethnographer was the first to speak about a distinctive "postpartum psychology" in Romania at the end of the 19th century (Marian-Bălaşa, 2013: 38) [1]. The loss of the rural sociocultural coherency has not been compensated by the pragmatic outlook on life. Traditional knowledge provided specific causes, clear explanations and efficient remedies for a radical life change, whereas modern mothers are only left with possibilities and uncertainties. However, the social pressure is comparable in both societal types. Folklore influences women and predetermines what they feel, just as much as medical discourses do. The latter solve the psychosomatic crisis with drugs. Taboos and amulets are their correspondent in magic reasoning.

RITUAL PRESCRIPTIONS

Seclusion and restricted access to domestic elements represent specific magic reactions to childbirth. No unexpected distress is apparently possible for the new mother, since traditional culture warns her about perils constantly. As a teenager, she heard about them from her female relatives, while as a pregnant woman she was watched by the entire community. On a psychological level, the confined woman knows what lies ahead, how to ward off evil and what omens

are used for her own well-being and for her newborn. Traditional birth attendants took great care of women's mental state when allowed to assist labour, decades ago. For example, in Moldavia, she sweet talked women in parturition, caressed and emboldened them and even sang songs and told fairy-tale stories (Hulubaş, 2012: 188) to take their minds off the pains.

Empirical midwives in most traditional communities around the world closely guarded the first eight to 40 days after childbirth. Access denial to harmful spaces represents the main countermeasure to unwanted situations. Archaic prescriptions forbade confined women to touch pots in Uganda (Frazer, 2009: 539) and even food in Tahiti (Frazer, 2009: 208). In Romania, women are still forbidden to cook and even touch the food of the rest of the family (Hulubaş, 2014: 90). This prescription marks a symbolic hearth taboo that we discussed above and self-consciousness helps women feel secure. Once they obeyed the old, socially proven precautions, they were protected from all dangers.

The access is also denied to sources of water, since the impurity of lochia will spoil it (in Moldavian villages, small red worms are believed to appear in fountains after confined women take water from them). Fields, orchards and public roads are also affected, according to Romanian folk beliefs, by an unseen fire which burns underneath the new mother's feet (Marian, 1995: 84). On the other hand, visits can affect her, as a consequence of the "evil eye" or of the attention she draws upon her from evil spirits. Remedies consist in specific amulets. Metal is believed to have apotropaic powers since time immemorial. Because it is extracted from the earth's womb and then purified, metal is compared with "the spirit that detaches itself from substance" (Chevalier and Gheerbrant, 2009: 582). As an expression of spiritual power, metal – just like spit – is used against maleficent sightings, to prevent "evil eye" and to mitigate intense fear, according to Romanian beliefs.

Women after childbirth wear needles on the inside of their coats when going in public spaces (Curteşti – Botoşani). The prickly metal is also a magic component of other stave off settings. A red thread in a needle is pinned behind the door to the newborn's cradle and it is also placed in a pot containing naphtha or excrement (Hulubaş, 2012: 231). Both practices are intended to chase away dark forces. The needle scratches and manages to "catch" evil intentions, on a symbolical level, whereas the red thread distracts the unwanted attention. The vessel with bad odours indicates a folk belief that maleficent entities loathe exactly what humans do. Therefore, they will leave the confined woman alone if such a pot (also containing a weapon – the needle) lies underneath her bed.

Horseshoes are hidden underneath the waist belts in Grădiştea – Vâlcea, to prevent nighttime dangers (Ghinoiu, 2001: 34). *The Encyclopaedia of American Folklife* mentions silver as an amulet fit for babies, thanks to its capacity to distract evil eyes (Bronner, 2015: 780), and this is a clear example of a cultural relic. The unfriendly eyes that can physically hurt the newborn are perceived as "ugly" in Timoc, Bulgaria (Ţîrcomnicu, 2010: 54) and the risk of encountering them is higher if the baby is taken outside the house. The interdiction to take the infant outdoors in the first 40 days after birth has also been attested in the Slavic world (Kabakova, 2000: 105).

When seclusion ends, the first road taken by the new mother always leads to church. A three-stage religious service has to be performed for her, according to Romanian folk beliefs. First, she needs to confess all her sins and to receive the sacrament of Holy Communion, before she gives birth. Eight days following childbirth, the confined woman calls the priest to her home (it was the traditional birth attendant who used to bring him over), and she is subjected to a special religious service *(molitfă).* Thirdly, her first outdoor walk after delivery takes place after 40 days and it consists in going to church, where she is again the subject of a specific prayer and religious service. Only afterwards, can the new mother return in the community as a full member. This Christian rite of exit mixes heathen beliefs into its doctrine, since the timing and explanations used to argue the woman's impurity are older and they can be found at various civilizations around the globe.

Nevertheless, it is more important here to observe that the social monitoring of women who give birth is very active in traditional communities. It starts during adolescence and it continues on two levels. Firstly, folk knowledge creates "typologies" of menaces and then it provides "battle plans". Secondly, the Orthodox Church offers mystical remedies and shields all possible attacks with religious services. Postpartum depression dims in this thick network spread over heaven and earth. Traditional mothers know what to expect and how to fight back, unlike modern new mothers who experience a comparable pressure based on scientific facts, but who can only benefit from prescription drugs instead of community support.

CONCLUSION

Discourses on postpartum depression are not as different as one might expect when comparing traditional perception to the scientific one. Childbirth brings along a plethora of complicated implications on various levels: material issues, physiological afflictions, psychological effects and spiritual needs have to be taken into consideration. Medical investigations are limited to rational instruments, whereas magic reasoning succeeds in reassuring women that anything that will affect them and their babies can be handled. Rites, folk beliefs and superstitions act as confidence enhancers, as long as prescriptions are observed. On the other side of the postpartum depression, "coin" is the effigy of self-induced serenity, the antidote of any anxiety. Biology is blamed for female-specific disorders in medical discourses and women blame themselves eventually. Therefore, the feeling that "something must be wrong *with* me" is the effect of such an education. Traditional knowledge shifts the focus from the "impure" woman to the universal interest she becomes. Bad intentions are blamed and not physiology. Something wrong may be happening *to* confined women at any time, however folk knowledge is prompt in delivering efficient means of defence.

ACKNOWLEDGEMENT AND DISCLOSURE

The authors have no potential conflict of interests to disclose.

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Submission: December, 5th, 2015
Acceptance: January, 29th, 2015

Notes:

[1] *Any nervous excitation can shake up her entire body. Some even die other go crazy or remain in fear for their entire life. The postpartum woman is like a balance: the smallest weight set on one side startles her equilibrium; in some cases, she strengthens up, in some other she's lost. The fresh mother must be guarded during her burden, when nothing came to shake her soul, to bitter up her life with dark and painful thoughts and, if left alone all sort of strange things can glitter in her mind. A small thing, set in shade, takes before her the most exaggerated and ferocious proportions; an unclear voice that comes to her ear seems to her frightening and threatening. Her sensitivity and susceptibility are to such a tension that one step only can push her into insanity. Who in his life has never seen a dead passing or a big fire? Well, the postpartum woman should not see it, otherwise she fell sick or mad, this is why the postpartum woman must be guarded*. (Sevastos, 1892: 196, *apud* Marian-Bălaşa, 2013: 39 – 40)

BPI Bulletin of Integrative Psychiatry
Buletin de Psihiatrie Integrativă

The psychological impact of performing folk group rituals

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ABSTRACT

Starting by discussing contexts in which folk rituals were envisaged and researched in the history of anthropology, sociology or folkloristics, I will evaluate the real necessity of an integrative study of both the psychological and the sociological dimensions of the ritual phenomenon in traditional societies. By the many disciplines studying it, ritual is perceived as a mechanism for group identification and the emergence of a social identity. Though it was frequently denied the right of psychological investigation in the study of collective ritual, due to the domination of sociologists, who submitted social performance to the effect and domination of Emile Durkheim's "collective consciousness" or Ferdinand Tönnies's "natural will", there are perspectives of folk ritual which could be properly understood by taking into account a psychosocial underpinning.

KEYWORDS

psychological study of folklore, cognitive anthropology, folk ritual, Romanian village, social psychology

FOLKLORE, PSYCHOLOGY AND THE SOCIAL

Professional cultural anthropology started in the 19th century using psychological evolutionist explanations for the religion of primitive societies. The first theoreticians of primitive mentalities tended to believe that the primitive human being was functioning less like an individual, and more as an automatic spirit dominated by group suggestions (Bartlett, 1923). Therefore, one important question was deciding how much of the ritual action's control is assigned to the individual and how much to the group. Denying the legitimacy of psychological study on the religion and ritual of exotic popula-

tions, the sociological school of E. Durkheim stressed on the social factor and dismissed any individual contribution. However, the most important theoretical ambition of Durkheim, that consolidating the social origin of religion, was frequently criticized for denying any role for the individual within the ritual framework. The famous French sociologist's endeavor was indeed oriented towards a general and total critique of the psychological and cognitive approach to religion and ritual, especially because of the success recorded by the evolutionary theory on primitive society and animism in British anthropology (such as the contributions of E. B. Tylor and R. R. Marett).

Nevertheless, even scholars of Durkheim's influence on the scholarship of ritual phenomenon acknowledged the psychological implications that even the great creator of the sociological method could not avoid taking into account. For example, Mary Douglas noticed the interest paid by Durkheim to social-psychological phenomena such as *social cohesion* and *collective effervescence*. Therefore, group behaviour in ritual settings could not be studied by any other than social psychology, an integrated discipline which connects psychology to sociology.

Folklore was defined by modern experts as having a strong social basis, especially by the American folklore scholars in the 1970s, when they decided to put greater emphasis on folklore's context. Dan Ben-Amos emphasized that folklore is "artistic communication in small groups", and that "folklore communication takes place in a situation in which people confront each other face to face and relate to each other directly" (Ben-Amos, 1971: 13). Even today, American folklorists tend to focus on the study of "special groups", such as age groups, occupational groups, ethnic groups, regional groups; they chose to follow a different path than their European colleagues (who were heavily text – and genre –oriented) and they saw folklore as a function of shared identity, as a within-group identity (Bauman, 1971: 31 – 32).

It is also widely accepted that one of the principles by which traditional behaviour is preserved and transmitted is the "behavioural rules that individuals seem to follow when generating and communicating folklore. Researchers assume that people learn these rules, usually intuitively, and follow them (most often unconsciously) when they tell stories or pose riddles, compose and sing songs, deliver sermons, design and construct buildings" (Jones, Jones, 1995: 254). These rules bring a much-needed psychological comfort to their life, by assuring predictability and durability. The lack of a rational, pragmatic purpose of action in ritual behaviour and the performance according to unconscious rules was researched by cognitive anthropologists, who noticed that they might actually appear meaningless to external observers. When asked, the performers refer to tradition, their ancestors, community rules, etc., a tendency which was called "deference" by Maurice Block. Therefore, the actual ritual performers "are, and are not, the author of their acts" (Humphrey, Laidlaw, 1994: 5)

RITUAL, SOLIDARITY, AND THE GROUP'S PSYCHOLOGICAL STANDPOINT

A field which studies the psychological side of rituals is the psychology of religion, along with the cognitive approach to religion, whose main purpose is the study of religious experience through the investigation of psychological and cognitive processes of the

individual, but always set within societal frameworks. The sociological study of ritual also took into account its meaning as underlined in psychiatric knowledge; from the psychiatric perspective, ritual was envisaged as pathological, stereotypical behaviour and within certain adaptive human interactions, again stressing the conventional, repetitive character of rituals.

Students of the anthropology of religion show that ritual behaviour is implicitly a quest for permanency and a battle against indeterminacy, the psychological need of people to give their life order, a trajectory, a stable background. People's permanent desire to get involved in group rituals shows commitment to in-group rules, values, standards, and therefore enhances group cohesion. Briefly, rituals are a social identity marker. Performers of rituals seek a temporary liberation from the usual social constraints and engagements, though paradoxically they accept subordinating themselves to another order, other structures of power, to interact with each other from different standpoints. When asked about it, people are normally aware that the main reason they perform rituals is to prevent something negative from happening to them, without making very clear the concrete ways in which ritual provides them that security.

The psychological underpinning of ritual received attention from different disciplines such as cognitive science, social psychology, or evolutionary anthropology. Christine H. Legare and Nicole J. Wen recently noticed that ritual is an "understudied yet pervasive feature of human social group cognition and behaviour" (Legare, Wen, 2014: 9). The fascination of psychologists and cognitive scientists for ritual is due to its casual opacity, namely the lack of a clearly noticeable casual connection between the actions performed and the effect envisaged by the performers.

An important definition of the effect of rituals on the individuals within a performing group was given by Alexander: "Ritual effectiveness energizes the participants and attaches them to each other, increases their identification with the symbolic objects of communication, and intensifies the connection of the participants and the symbolic objects with the observing audience, the relevant *community* at large" (Alexander, 2004: 527). Other scholars of the psychological processes underlying the emergence of solidarity stressed on the concept of 'belonging': "Human social interdependence necessitates that at least some of these memberships become solidified into something potent and secure-in short, belonging. The role of rituals in the creation of belonging is suggested by the fact that social integration and a sense of unity are among the most noted outcomes and functions of ritual" (Marshall, 2002: 360)

Most rituals which aroused interest from social anthropologists and folklorists was not by the scholars' choice that performed at the community level. The collective involvement even in life transitions, great changes which concern every individual (such as birth, marriage, death), are not performed as unattended, solitary moments, but traditionally require the participation of the entire community. In these cases, "the belongingness-generating effects of ritual", as Marshall calls them (2002: 360), are created by postulating the new membership of a community member. Initiation rituals mark not just a change from one community position to another but the passage from outsider position to insider

status. The anthropologist Victor Turner emphasizes that for this transition to be accomplished, the neophytes go through a state of total social indeterminacy, a temporary removal of the personal identity and self-differentiation, after which they have to accept a new personal self-image: "They must obey their instructors implicitly and accept arbitrary punishment without complaint. It is as though they are being reduced or ground down to a uniform condition to be fashioned anew and endowed with additional powers to enable them to cope with their new station in life. Among themselves, neophytes tend to develop an intense comradeship and egalitarianism. Secular distinctions of rank and status disappear or are homogenized." (Turner, 1977: 95).

RITUAL AVOIDANCE AND PSYCHOLOGICAL SECURITY

The need for ritual survives even in the contemporary industrialized societies, a situation acknowledged even by theories which stress the gradual retreat of religion from the public sphere. This survival is explained by the continual need for existential security in societies where the economic and administrative structures do not provide this security satisfactorily. Pippa Norris and Ronald Inglehart posit that the persistence of irrational ways of ensuring existential security is recorded especially in vulnerable populations: "We believe that the importance of religiosity persists most strongly among vulnerable populations, especially those living in poorer nations, facing personal survival-threatening risks. We argue that feelings of vulnerability to physical, societal, and personal risks are a key factor driving religiosity, and we demonstrate that the process of secularization – a systematic erosion of religious practices, values, and beliefs – has occurred most clearly among the most prosperous social sectors living in affluent and secure post-industrial nations" (Norris, Inglehart, 2004: 4). They consider that in this type of society the ritual solution and magical-religious beliefs are greater than in highly developed ones: "In agrarian societies, humanity remains at the mercy of inscrutable and uncontrollable natural forces. Because their causes were dimly understood, people tend to attribute whatever happened to anthropomorphic spirits or gods. The vast majority of the population made their living from agriculture, and were largely dependent on things that came from heaven, like the sun and the rain. Farmers prayed for good weather, for relief from disease, or from plagues of insects" (Ibidem: 19).

As an answer to unknown supernatural threats, these communities respond with a ritual solution. In specialized literature, this response is called *ritual avoidance*, and it is characterized as "non-instinctive predictable action… that cannot be justified by a 'rational' means-to-ends type of explanation" (Leach, 1968: 520 – 521). Therefore, the psychological security offered by ritual performances is a means of fighting against misfortune, ill luck. The first anthropologist who studied this side of ritual functions was Bronislaw Malinowski; he noticed in the field that situations of uncertainty and risk foster magic and ritual, especially when people cannot fight with technological solutions against the bad weather and other natural threats which could endanger their cultivated fields. Agriculture is one of the most risky enterprises for small-scale producers, and it was proven to induce high levels of anxiety because it is impossible to

predict the success of crops. This is an important source of the very rich weather-lore of primitive and traditional agricultural societies across the globe.

A ROMANIAN TRADITIONAL GROUP RITUAL AND COMMUNITY CONSCIOUSNESS

Generally speaking, the social group which preserves rituals nowadays is the village community as a whole, a reality acknowledged by rural sociologists who envisage the village on which they focus in their research not just as an administrative and territorial unit, but also as a spiritual and cultural one (Bădescu *et al.,* 2006: 188). The question to which anthropologists, sociologists and psychologists try to answer is how the ritual works its force of binding people together and providing them psychological support by annihilating individuality, because they noticed how ritual behaviour enhances the social self and puts the individual self on a lower level. The proponents of *detraditionalization*, supporters of liberalism and free individual choice, who discuss about the gradual disappearance of *collectivist* or *communitarian* societies and the emergence of a more profound cultural and psychological urbanization, believe in a future of individuality.

Nevertheless, a different approach comes from scholars trying to prove the need for the preservation of community, even beyond the background of tradition; they disapprove of the pejorative meaning a scribed to ancient forms of community by the apologists of modernity: "Prejudicially by many, the past was reconstructed as the time of isolation before the modern freedoms. Romantically by others, the past was re-figured as a perfect model of community life offering security, certainty and a place in the grand scheme of things." (Morris, 1996: 224). Small-scale communities survive even through the age of the individual as a central value of human existence, as Paul Morris points out: "It is important to note that each and every theory of the individual necessarily entails some account of how individuals become, or should become, aggregated." These collectivities could be created by association, by covenant, by contract, by agreement, or by consent. (Morris: 226).

As a social structure, Romanian village life offers the appropriate environment for the study of many forms of contemporary solidarities. The most important theoretician of solidarity, E. Durkheim coined two types of *solidarity*, namely the *mechanical solidarity*, belonging to primitive societies, and the *organic solidarity*, characterizing the more developed societies emerged after the division of labour (Durkheim, 1967). In order to provide a necessary instrumental meaning to the solidarity concept, the sociologist Jean Baechler adds another durkheimian concept, i.e. "morphology". The different "morphologies", which have a high level of coherence and cohesion between their members while they engage in collective manifestations, are *the group, the tribe, the feud, the casts assembly, the tribal confederation*, etc. (Baechler, 2006: 96). Durkheim noticed that solidarity could develop even outside consanguinity or family ties, in purely social groups such as neighbouring, common interests groups; he also mentions the need of neighbours to associate with one another against a common danger, or even just the basic need of people to become united, even without any pragmatic reason (Durkheim, 1967: 27).

The group rituals specific to Romanian traditional life belong to several morphologi-

cal categories: organized groups (technical, professional, occupational), informal (age groups, bands of young people), ecological groups (based on spatial relationship: local communities, neighbourhoods), social categories or domestic groups (the family) (*apud* Vedinaş, 2001: 15). Ion Cuceu calls attention to the psycho-sociological environment ensured by the "micro-units" of the Romanian village (the family, the kinship, the neighbourhood) (Cuceu, 1999: 69).

In the ritual setting, for the individual with a high level of self-identification with the group, "group members are not perceived as mere cooperators; they are psychological keen" (Whitehouse, 2014: 676). One's autobiographical self-concept and self-defining experiences are essential for understanding the emotional attachment to group rituals performed within the family or the larger community. *Psychological kinship* (Whitehouse, 2014: 678) is acquired in the traditional Romanian communities through collective ritual activities like collective magic practices, carolling, and feasting. Sometimes these bonding mechanisms are age or gender-specific, at other times the whole community gets together to celebrate a wedding or a funeral. Examples may be found in many timeframes of the Romanian folk calendar; a very well-preserved example of group creation for an established period of time is the one devoted to carolling during the winter holidays. The group to which we will refer is *Ceata de colindat* ("carolling group").

The traditional carolling group, usually a male one, performs many of the winter calendrical customs, such as carolling, from Christmas Eve until Epiphany, together with all the practices assigned to it (dividing the village for every male group without forgetting any household, Christmas theatrical representations, the traditional ball or dance at the end of the winter cycle). Men perform these peregrinations of different kinds in the entire village to gather the necessary money and products which are needed to organize the great ball after Epiphany.

The behavioural coordination and the importance of the quality of rituals as socially encrypted actions and the group members' synchrony is acquired in the case of the male carolling by long rehearsal; the group starts to get together at the end of autumn or beginning of winter to decide about the songs they will perform during Christmas and New Year. Judging by the high level of support that the group receives from the other villagers during this learning and coordination process, it is clear that these rituals are not just needed to amplify the inner feeling of group affiliation (as in early childhood, according to social cognitive research, Legare, Wen, 2014: 10), but they also act for the community's benefit. Therefore, not just the members of the carolling group themselves are part of it, but also the audience, the other villagers who receive and encourage their performance. Indeed, students of social identification theory took notice that the effect of ritual on people is not limited to those situations when they are physically co-present, but they could identify themselves with the ritual's engagement even by "cultural proximity" (Von Scheve, 2011).

The functions for the community of the carolling group were enumerated by Romanian folklorists who studied this phenomenon: to offer an organized environment for the young people's group games or entertainment, to educate the young villagers about their social roles in the community

according to their age group, to exercise a moral censorship, to encourage the creation of new families within the village community (Moise, 1999: 121). These male groups act as "an informal authority" and offer to young people the experience of a different kind of subordination outside the family authority (Chelcea, 1990: 102), they initiate the teenagers into their new social obligations (Herseni, 1977: 303).

However, if rituals are forms of communication, how does the group communicate its messages by so many voices and self-expressions together? The scholars of ritual explain this by an effective organization of role-playing and a high degree of coordination. This also requires a high level of codification which makes it difficult to grasp ritual meaning by an outsider. How do these people react to the undermining of their self-expression? The answer, discovered after thoroughly analyzing these group rituals in contemporary rural communities, is that they act as intensifiers of the community bonding and no longer as means of magical protection against supernatural attacks, as they did in pre-modern times. Therefore, whereas the rural environment in Romania may not evolve technologically as much as in the Western world, people are more determined to create solidarity through temporary group engagements for easy psychological comfort, and less for the hard psychological need of existential security.

ACKNOWLEDGEMENT AND DISCLOSURE

The authors have no potential conflict of interests to disclose.

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Submission: December, 9th, 2015
Acceptance: February, 2nd, 2016

BPI Bulletin of Integrative Psychiatry
Buletin de Psihiatrie Integrativă

Case Reports

BPI Bulletin of Integrative Psychiatry
Buletin de Psihiatrie Integrativă

Obsessive-compulsive and anorexia nervosa symptoms in paranoid schizophrenia. Case study

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ABSTRACT

This paper features the case of a patient aged 49 who is in our psychiatric records since he was 28, initially diagnosed with schizoid personality disorder (he met its diagnostic criteria and he had a satisfactory professional functioning). Two consecutive psychotic episodes within a short timeframe – the latter with a symptomatic persistence of more than three months, despite antipsychotic therapy – determined a new diagnosis: paranoid schizophrenia. Despite this diagnosis, after being discharged from the psychiatric ward, the patient maintained a reasonable functionality. He resumed his professional (solitary) activity, and the psychotic symptoms mitigated; the only persistent symptoms were social withdrawal, a degree of flat affect, and interpretative elements. The patient continued therapy with atypical antipsychotics and he came back for follow-ups regularly for eight years. In a non-favourable family environment, he subsequently stopped taking his medication, against doctor's orders. Hence, his subsequent therapeutic response became a real challenge for the physicians. The following psychiatric admissions – including the latest one – were motivated by a heterogeneous clinical picture, dominated by ritualistic, compulsive elements, and by anorexia elements, all developed on a delusional-hallucinatory background, partially dissimulated by the patient. They raise additional issues concerning the therapeutic approach, the differential diagnosis, and the social reintegration potential of the patient.

KEYWORDS

paranoid schizophrenia, compulsion, anorexia nervosa, ritualistic behaviour, therapeutic adherence

THEORETICAL BACKGROUND

Schizophrenia is a major psychiatric condition, with considerable impact upon the global function of the patients, with a worldwide prevalence ranging between 0.6 and 1.9 %. Gender distribution is relatively equal; differences concern the evolution patterns of the disease. Generally, the onset occurs earlier in case of male patients (most commonly around the age of 25) (1, 2).

The paranoid type of schizophrenia is characterised by the existence of delusional ideation, usually influence, with elements pertaining to thought broadcasting, thought insertion, but also delusions of control, persecution, or poisoning. Patients also exhibit signs of mystical-religious delusions, as well as hallucinations – often complex auditory hallucinations, of voices commanding or commenting (talking about the patient in the third person). This form of schizophrenia usually occurs later than hebephrenic or catatonic schizophrenia. The first episode occurs between the age of 20 and 30; up to that point, the patient manages to build the foundations of his personal and/or professional life; thus, he has a more favourable prognosis than the other patients with schizophrenia. Typically, patients with paranoid schizophrenia are tensed, reserved, sometime hostile or aggressive, but, in certain cases, they may behave normally in various social contexts. The intellectual acquisitions within areas outside delusional ideation tend to remain intact on a long-term basis (1, 2, 3).

General diagnostic criteria of schizophrenia imposed by ICD 10 plead for the presence of a continuous symptom or two or more symptoms within the first four criteria if such symptoms are vague (thought echo, insertion, thought broadcasting, delusional perception and delusions of control; influence or passivity; auditory hallucinations of voices commenting the patient; persistent inadequate delusions of other kinds) or at least two symptoms of the last five diagnostic groups (persistent hallucinations accompanied by delusions – which may be fleeting or half-formed –, breaks or interpolations in the train of thought, catatonic behaviour, negative symptoms, significant and intense alteration in the global functionality of the patient), for at least a month. In order to determine the diagnosis of paranoid schizophrenia, it is necessary to highlight the prominence of delusions (such as delusions of persecution, reference, exalted birth, special mission, bodily change or jealousy; threatening or commanding auditory hallucinations), if the patient meets the general criteria described for the schizophrenia diagnosis (4).

Beyond these diagnostic rigours, it is worth underscoring that an obvious prodromal phase exists in almost all cases, characterised by loss of interest for the professional or social activity, for personal hygiene, accompanied by generalised anxiety and slightly depressive symptoms, with bizarre preoccupations that persist for weeks or even months prior to the outburst of psychotic symptoms per se. Moreover, numerous scientific studies highlighted that schi-

zophrenia onset may be favoured by a Cluster A type of personality (2, 3).

Whereas the aforementioned symptoms dominate the clinical picture of schizophrenia in general and of the paranoid type in particular, the aspect of this major psychiatric disorder is polymorphous and heterogeneous, thus also including a series of other aspects that raise serious issues of differential diagnosis (2, 3).

The obsessive-compulsive symptoms noticed within the clinical picture of schizophrenia have been described constantly throughout the years, but they been given due attention only in the past few years. For this reason, their clinical and biological importance for the underlying disorder is still a controversial issue. Whereas in the beginning obsessive-compulsive symptoms are relatively rare and associated to a benign evolution of schizophrenia, recent clinical trials have reported that they are highly prevalent in schizophrenia – 14 %, and that they associate a less favourable prognosis. Furthermore, it has been demonstrated that the cases of schizophrenia that associate obsessive-compulsive symptoms have a modest response to standard psychopharmacological treatment with antipsychotics. Indeed, these patients require a specific approach of their symptoms and individualised medication and psychotherapeutic intervention, in order to obtain favourable functional outcomes (5, 6).

At the same time, several studies reported the possibility of comorbidity between anorexia nervosa and schizophrenia. The frequency of anorexia nervosa symptoms in schizophrenia is 1 – 4 %. Paradoxically, men with anorexia nervosa are reportedly 3.6 times more likely to associate schizophrenia than women. Anorexia may appear as a symptom in the spectrum of clinical manifestations of schizophrenia, before or after the psychotic onset (7, 8).

GENERAL PRESENTATION OF THE CASE

Patient with a psychiatric history, including 13 previous admissions to the psychiatric ER (all with his informed consent) and numerous outpatient visits.

He graduated from the Polytechnic University, but he worked for more than 15 years as a meteorological technician. After the onset of the psychiatric disorder, he began to be gradually concerned – in a sterile manner – with abstract fields; he actually studied and graduated from the Faculty of Philosophy. The patient was never married and he always refused to provide any information on his personal life, which he describes as follows: “I’ve never had anybody; I have never been interested in such things”. He lives with his mother, but their relationship is filled with conflicts. She seems to have always been overprotective and to have had issues understanding the psychiatric disorder of her son. Concerning his personal pathological history, besides the evolution of his psychiatric disorder, the patient is not diagnosed with any other chronic somatic or neurological disease, as organic substrate of psychiatric symptomatology. Concerning his family medical history, the patient does not have first-degree relatives with diagnosed psychiatric disorders.

The first medically attested psychopathological manifestations occurred around the age of 28: the patient was diagnosed initially with schizoid personality disorder, because he met the specific diagnostic criteria and he had a satisfactory professional functionality, while exhibiting social with-

drawal, avoiding solid inter-human relationships and communication (also encouraged by the nature of his meteorological profession).

Two consecutive psychotic episodes within a short timeframe – the latter with a symptomatic persistence of more than three months, despite antipsychotic therapy – determined a new diagnosis: paranoid schizophrenia. The clinical picture is dominated by mystical, chase, and persecution delusions, by thought broadcasting and commanding voices (he ascribed this voice to divinity). Despite this diagnosis, after being discharged from the psychiatric ward, the patient maintained a reasonable functionality. He resumed his professional (solitary) activity, and the psychotic symptoms mitigated; the only persistent symptoms were social withdrawal, a degree of flat affect, and interpretative elements. The patient continued therapy with atypical antipsychotics and he came back for follow-ups regularly for eight years. In a non-favourable family environment, he subsequently stopped taking his medication, against doctor's orders, reason for which he experienced, rather soon, a new psychotic decompensation.

The context of the latest admission was represented by the accentuation of delusional-hallucinatory behaviour with verbal and nutritional negativism, with obsessive-compulsive ritualistic elements emerged due to psychotic symptoms.

Upon the psychiatric examination conducted in the psychiatric ward, subsequent to the triage exam, the patient exhibits psychomotor inhibition; he is partially cooperative and he showed selective verbal negativism. The patient is underweight, considering the significant elements of anorexia argued by xenopathic elements. His face has reduced expressivity, hypomobile mimicry, inhibited and stereotypical gestuality and ritualistic gestures; he does not initiate eye contact with the interlocutor; he has low-pitched and medium-intensity voice, with low affective modulation. He exhibits unpleasant mood, with anxious manifestations that the patient tries but fails to dissimulate, anhedonia – their origin is xenopathic; he has low tolerance to frustration, obvious ritualistic behaviour with compulsive nuances. The patient reports mixed sleep disturbances, with non-relaxing episodes of sleep. He refuses almost all foods, but he motivates his anorexia not by poisoning delusion, but by polymorphic delusions related to his body image (including a change in his perceived body image). He denies the existence of perception quality impairments, but he exhibits a clear delusional-hallucinatory behaviour. His gestures have a mystical-religious ritualistic nature and his discourse is marked by the presence of hallucinations. He has self-blaming and mystical delusions; he tries to dissimulate the latter.

The current psychological examination showed a dysthymic configuration with psychotic symptoms and obsessive-compulsive consistencies in a discordant context, accompanied by serious socio-familial adjustment difficulties. The electroencephalographic exam did not show any pathologic aspect, while the CT scan revealed a slight widening of lateral ventricles, which is consistent with schizophrenia. Concerning laboratory works, the patient turned out to be severely dehydrated. Upon the objective clinical examination, he appears to have lost a lot of weight, due to his re-

fusal to eat, but without any other organic cause; he is pale and the skin is dehydrated.

The positive diagnosis of paranoid schizophrenia is incontestable, because he definitely meets the criteria of schizophrenia and the main features are well-formed delusions and hallucinations, objectified by the suggestive behaviour of the patient, despite the fact that he denies their very existence. A less typical characteristic is the coexistence of ritualistic symptoms with obsessive-compulsive origin and of anorexia elements, which is at the core of the clinical picture exhibited by the patient in question. It is worth noting that these symptoms evolved gradually: at the beginning, they were vague, but in the context of the last three psychiatric admissions, they became unexpectedly intense also by the huge impact upon the global functionality of the patient. The patients' GAFS score is 25, which suggests serious problems of social insertion and self-care, with a loss of personal autonomy due to the intense parasitizing of xenopathic delusions and hallucinations and to the rituals that take most of the patient's time. The direct consequence of the latest psychotic decompensation was represented by ill health retirement, due to the dramatic decrease in professional efficiency (in the past, his job was not affected by his psychiatric disorder).

THE CHALLENGE OF CLINICO-THERAPEUTIC APPROACH AND FORECASTED EVOLUTION

This particularity of this case comes from the polymorphism of symptoms, from the association of obsessive-compulsive and anorexia elements with the entire psychotic system, developed on a discordant background. The general appearance of this patient is bizarre; he exhibits delusional and hallucinatory behaviour spiked by mainly mystical and religious rituals. The issue of differential diagnosis was solved easily, because he met the ICD 10 diagnostic criteria. However, it was necessary to rule out the obsessive-compulsive disorder, considering the rituals and extreme anxiety caused by his attempts of fighting the rituals; we also had to rule out anorexia nervosa as a disorder per se. At the same time, the differential diagnosis also ruled out: schizoaffective disorder, because the patient did not show any hyperthymic symptom (negative or positive); bipolar affective disorder, with acute psychotic disorders and schizophrenia signs (given that the patient had a long history of the disease); organic delusional disorder (given the dramatic decrease of global functionality and the absence of any organic substrate), Cluster A personality disorders (it is worth noting that before being diagnosed with paranoid schizophrenia, the patient was diagnosed with schizoid personality disorder – premorbid personality). Delirium, dementia, atypical depression, intoxications with various psychoactive substances – all of them were easily ruled out because there were no symptoms to really support such diagnoses.

As suggested by the medical history of this patient, the main challenges of the clinico-therapeutic approach to this case are precisely the dramatic loss of therapeutic adherence, as well as the polymorphic symptoms. Scientific literature has launched the dilemma of the need to treat differently the patients with schizophrenia who also exhibit obsessive-compulsive symptoms, but they have not attained any significant outcome. In essence, the exact mechanism that

enables the emergence of obsessive-compulsive elements in the discordant spectrum is still to be discovered (2, 7).

Up to his latest admission, which is actually the focus of this paper, the patient was prescribed a psychopharmacologic treatment with Aripiprazol 15 mg/day, an atypical antipsychotic that had a favourable effect upon the patient's symptoms, but he stopped taking it twice, against medical recommendations. The eight-year period when the patient functioned optimally occurred while he was taking Risperidone 4 mg/day, subsequently increased to 6 mg/day, a therapy to which the patient gave up without the consent of his GP.

Therefore, upon this latest admission, the decision was made to prescribe him Olanzapine, considering the entire context of the patient, from his mixed symptoms to his underweight status. This atypical antipsychotic has a strong and equal effect on both the negative and the positive symptoms; it also helps in anorexia and obsessive-compulsive disorders resistant to standard medication (9). The patient received Olanzapine 20 mg/day in the evening and Lorazepam 1 mg, when needed (7). Three weeks after this therapeutic plan, the delusional and hallucinatory behaviour was obviously improved; however, the patient was still highly interpretative and he preserved a mystical delusional core. On the other hand, his compulsive actions continued to be ritualistic, despite the patient's attempt to dissimulate this aspect. Currently, his diet is normal, but he is still very prone to isolation.

Considering the entire history of the patient and his partial therapeutic response, the prognosis is reserved: if he maintains therapeutic adherence, global functionality may increase, hence his quality of life; however, if he stops taking his antipsychotic, a new decompensation is set to follow. A fundamental issue is represented by the fragile socio-familial support systems, which condition negatively the therapeutic response of the patient, as well as his social reintegration. In an ideal situation, as also reported by scientific studies, antipsychotic therapy can be successfully doubled by supportive psychotherapy sessions, but the patient cannot afford to pay for them (6, 7).

CONCLUSIONS

This case is more spectacular from a clinical perspective, considering the mixture of psychotic symptoms *per se* (developed on the discordant background) with high degree of affective ambivalence, social withdrawal tendencies, and obsessive-compulsive symptoms degenerated into ritual, as well as anorexia symptoms. Scientific literature reports an increased rate of such polymorphic type of clinical picture in schizophrenia. However, experts have failed thus far to pinpoint the mechanisms enabling these symptoms to occur at the same time. In this context, dilemmas also arise in terms of the therapeutic approach to these cases: it is necessary to control this palette of symptoms, but there is also the issue of therapeutic responsiveness and adherence and of the extent to which antipsychotic therapy can actually control all manifested psychopathological aspects.

ACKNOWLEDGMENTS AND DISCLOSURE

The authors declare that they have no potential conflicts of interest to disclose.

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Submission: January, 11th, 2016
Acceptance: February, 10th, 2016

BPI Bulletin of Integrative Psychiatry
Buletin de Psihiatrie Integrativă

Book Review

BPI Bulletin of Integrative Psychiatry
Buletin de Psihiatrie Integrativă

Book Review – Kaplan and Sadock's synopsis of psychiatry: *Behavioural Sciences/Clinical Psychiatry*, eleventh edition

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Kaplan and Sadock's *Synopsis of Psychiatry: Behavioural Sciences/Clinical Psychiatry*, eleventh edition, edited by the renowned authors Benjamin James Sadock (Professor at the Psychiatry Department of the New York University School of Medicine and attending psychiatrist at the Tisch Hospital and the Bellevue Hospital, New York), Virginia Alcott Sadock (Professor at the Psychiatry Department of the New York University School of Medicine and attending psychiatrist at the Tisch Hospital and the Bellevue Hospital, New York), and Pedro Ruiz (Professor and professor and executive vice chair and director of clinical programs in the Department of Psychiatry and Behavioral Sciences, University of Miami Miller School of Medicine, Miami, Florida) was published in 2015, eight years after the tenth edition.

Kaplan and Sadock's *Synopsis of Psychiatry: Behavioural Sciences/Clinical Psychiatry* is a genuine world best-seller among psychiatry treatises, with a tradition spanning over more than 40 years. Furthermore, it is a point of reference concerning the structuring of psychiatry notions from general to particular, from theory to examples and illustrations, from etiopathogeny aspects and vulnerability to diagnostic criteria, from psychopharmacological therapy to psychotherapeutic approaches. This synopsis aims for both a meticulous scientific approach to clinical psychiatry with the multiple facets it entails and a detailed presentation of the most updated information concerning behavioural sciences, thus consolidating the premises of a holistic understanding of what normal and pathological hu-

man psyche means and sometimes the fine delimitation between the two.

The new – 11th – edition of Kaplan and Sadock's *Synopsis of Psychiatry: Behavioural Sciences/Clinical Psychiatry* represents an ample, thorough, and comprehensive overview of all the aspects of the psychiatric field. The synopsis benefits from significant scientific update (including the latest information in the field and the diagnostic criteria of the DSM-5); thus, it represents an incontestable resource for clinicians, psychiatry residents, and for other medical or psychiatry-related professionals.

The 11th edition of the *Synopsis* integrates diagnostic criteria of the DSM-5, thus providing a complete, complex, and multidimensional image (including updated information) regarding every psychiatric disorder discovered thus far. The *Synopsis* comprises a main revised, updated, and complex Chapter on neurocognitive disorders organized along the DSM-5 model, as well as an extended and updated child psychiatry section that includes a diagnostic and a guide to diagnosis and treatment of autism spectrum disorder and other disorders of childhood.

The 11th edition of Kaplan and Sadock's *Synopsis of Psychiatry: Behavioural Sciences/ Clinical Psychiatry* has a rigorous structure. Each Chapter on psychiatric pathology comprises a series of subchapters, maintained from one main topic to another. Hence, every Chapter on psychiatric disorders includes as follows:

- aetiology, comorbidity, and epidemiology elements;
- tables with DSM-5 diagnostic criteria;
- a psychopharmacology section organized according to mechanisms of psychotropic drug action (updated to include therapeutic schemes/options with the newest substances accepted in the pharmacological therapy of psychiatric including those in preparation);
- relevant case studies, from typical aspects to atypical or inconstant features of psychiatric disorders; extremely suggestive images, mainly concerning expression psychodiagnostic in various psychiatric pathologies;
- non-pharmacologic therapeutic approaches, including a description of the latest psychotherapeutic technique.

The 11th edition of Kaplan and Sadock's *Synopsis of Psychiatry: Behavioural Sciences/ Clinical Psychiatry* is structured into 37 main chapters, with their corresponding subchapters. The first Chapter concerns neural sciences; it uses references from fundamental elements of functional neuroanatomy, neurogenesis, neurophysiology, neurochemistry, psychneuroendocrinology, as well as immune system and central nervous system interactions, neurogenetics, applied electrophysiology, and chronobiology.

The next three Chapters treat the main reference points of the relation between psychiatry and behavioural sciences with psychosocial and sociocultural sciences, and the implication of theories of personality in psychopathology (including the models of Freud, Erikson, positive psychology, and other psychodynamic schools).

The fifth Chapter consists in a detailed and structured presentation of examination and diagnosis resources currently available in psychiatry, from psychiatric interview to psychiatric rating scales, laboratory testing, and neuroimaging. As a preview of the pathology Chapters *per se,* the sixth Chapter features the diagnostic classification in psychiatry, with a special attention

to the DSM-5 model and to its connection with ICD-10. Thus, the following 16 Chapters (from Chapter 7 to Chapter 22) present in a detailed, illustrated, and updated manner the mental disorders organized along the DSM-5 model: schizophrenia spectrum and other psychotic disorders, mood disorders, anxiety disorders, obsessive-compulsive and related disorders, trauma- and stressor-related disorders, dissociative disorders, psychosomatic medicine, chronic fatigue syndrome and fibromyalgia, feeding and eating disorders, normal sleep and sleep-wake disorders, sexual dysfunctions, gender dysphoria, disruptive, impulse-control and conduct disorders, substance use and addictive disorders and gambling disorder (inserted in this category considering the general dynamic of addictive behaviour), neurocognitive disorders, and personality disorders.

Chapter 23 concerns emergency psychiatric medicine: it is structured into three subchapters of a fundamental importance for clinical practice: suicide (presented individually, including the features of terrorist suicide), psychiatric emergencies in adults, and psychiatric emergencies in children.

Chapter 24 focuses on complementary and alternative medicine relevant in psychiatry, by providing an overview and an objective opinion on acupuncture, Ayurveda, bioenergy, nutritional supplements, meditation, oriental and Tibetan medicine, shamanism, reiki, meloterapy, etc.

The following Chapter, 25, features other psychiatric conditions that may be a focus of clinical attention, such as malingering, bereavement, spiritual or religious problems, acculturation problem, phase of life problem, noncompliance with treatment, relational problems, and adult antisocial behaviour.

Chapter 26 presents the topic of physical and sexual abuse of adult, while Chapter 27 focuses on the relation between psychiatry and reproductive medicine.

Chapter 28 includes an exhaustive presentation of the most important psychotherapies, from psychoanalysis and psychoanalytic psychotherapy, brief psychodynamic psychotherapy, to group psychotherapy, cognitive and behaviour therapy, interpersonal therapy, and narrative psychotherapy. This main topic also comprises a subchapter on combined psychotherapy and pharmacotherapy, of a major importance for current specialty practice and for attaining the fundamental goal of approaching patients in a manner adapted to their own necessities, multidimensional, complete, and efficient.

In a logical succession of this synopsis, an extended chapter follows that is dedicated psychopharmacological treatment. It begins by outlining the general principles of psychopharmacology, and then it features all classes of drugs used to treat psychiatric disorders. Each presentation comprises both their conventional indications and the most common and important adverse effects. The entire chapter is based on scientific argumentation on the neurohormonal and neurotransmitter mechanisms involved.

This chapter is followed by one focused on brain stimulation methods including their indications and adverse effects, such as the classic Electroconvulsive therapy, but also transcranial magnetic stimulation, magnetic seizure therapy, vagus nerve stimulation, implanted cortical stimulation, and deep brain stimulation.

Chapter 31, covered in around 250 pages, is dedicated to child and adolescent psychiatric pathology; it is followed by two other brief but edifying chapters on the particularities of adulthood and geriatric psychiatric pathology.

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