

Mental Illness and Comorbidities, Aspects of Initial Evaluation

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Abstract Mental Illness is a public problem in western societies. Recent reports say that the most frequent conditions of psychiatric hospitalization are related to elderly, over 65 years old, diagnosed with dementia, other organic disorders and depression. And we are seeing increasingly in episodes of urgency, consumption of psychoactive drugs, which can foster the emergence of other comorbidities. The aim of this study was to characterize from a socio-demographic, clinical and functional point of view, older people who staged an emergency episode in a psychiatric hospital. This is a cross-sectional, descriptive and correlational study. The sample consisted of 99 elderly people involved in a psychiatric emergency episode in the biennium 2013/2014 and data were collected from the initial evaluation form (IE). Results: People with dementia have more associated diseases than others with other mental illnesses. Some are at higher risk for potential episodes of falls and loss of functionality and associated factors. Conclusion. More cognitive and functional impairment, evidenced in the functional dependency cycle. The quality of care in later age, requires a multidimensional and interdisciplinary approach. Initial assessment must be complete and holistic in order to give the best care.

Keywords Mental Illness, Comorbidities, Initial Evaluation

1. Introduction

Mental illness is continuously increasing in Western societies. About 38.2% of Europeans suffer from a mental health disorder with depression affecting about 6.9% of the population [1,2]. Mental health disorders are a major cause of illness worldwide: depression, in particular, is extremely prevalent [3]. According to a recent Swiss Health Observatory report the most frequent conditions of psychiatric hospitalization are related to elderly over 65 years old diagnosed with dementia, other organic disorders and depression [1]. Other conditions include the abuse of substances such as alcohol, anxiety disorders and stress, somatoform disorders and sleep problems as a secondary symptom to other physical and mental illnesses. According to Marksteiner [4] elderly people with serious mental illnesses are a growing segment of the European population.

In addition to these quantitative and qualitative demographic changes we are seeing increasingly in episodes of urgency of the older ones, consumption of psychoactive drugs, which is a factor that can foster the emergence of other

comorbidities, especially by changes in the pharmacodynamics and pharmacokinetics wherein the increasing age is associated [5, 6].

About 100,000 strokes occur each year in the UK, the recent reduction in the incidence of first stroke and improving survival has been attributed to the treatment of modifiable risk factors (hypertension, hyperlipidemia and atrial fibrillation). The incidence increases rapidly with age [3]. In this context, often older people star in episodes of urgency, regularly associated with relevant multiple pathologies, including disabling diseases, mental illness and social problems relating to health.

In aging and disease we can refer diseases classified into two major groups: 1) primarily exogenous diseases, whose prevalence is directly proportional to age due to the increasing vulnerability of the body (eg fractures and infections), and 2) diseases that result from accents and consequent imbalance of one or more manifestations of aging (eg, circulatory disorders mediated by atherosclerosis). In addition, the direct factors such as decreased mortality and increased life expectancy, and indirect factors such as the falling birth rate, the change in the structure by age and migration that works for the aging of population and to increase the prevalence of mental illness. Differentiation diagnostics according to gender also accentuates this age fringe because there is a progressive feminization of the

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aging process, especially because women live longer and therefore have at the end of life a greater number of mental illnesses.

The major causes of death among older are cancer and diseases of circulatory system. Cancer diseases affect more men as diseases of the circulatory system affect more women. Typically masculine are injuries, diseases of the respiratory and digestive. In women are more frequent mental illnesses, osteoarticular, tumors, endocrine diseases and congenital anomalies. From the viewpoint of primary care, usual complaints of older people are the pains, rheumatism, changes of the sense organs, insomnia and hypertension.

Geriatric syndromes often have a set of scenarios that combine a number of diseases that cause functional or social disability and star urgency episodes about falls, incontinence, cognitive impairment, etc. Sometimes these syndromes cause major disability and (or) death. One example is osteoarticular diseases with osteoporosis and arthritis, cerebrovascular diseases (stroke), neurological disorders (such as Parkinson's disease) [3], mental syndromes with senile dementias and Alzheimer dementia itself. Other residual scenarios that resulted from femoral fractures, amputations, a result of adverse developments of the disease or therapeutic procedures, other advanced organic diseases with functional limitations such as heart disease that cause immobility and chronic obstructive diseases that sometimes lead to obstructive and severe bronchopneumopathies. In this context, the aim of this research was to characterize from a socio-demographic, clinical and functional point of view, older people who staged an emergency episode in a psychiatric hospital.

2. Methodology

2.1. Population / Sample

This is a cross-sectional, descriptive and correlational study. The sample consisted of 99 elderly people involved in a psychiatric emergency episode in the biennium 2013/2014. All ethical requirements of a work of this nature, were respected and the study was approved by the Ethics Committee for Health of the hospital where the study was conducted.

2.2. Data Collection Instrument

It was used the initial evaluation form (IE) set out in the clinical process where the records of sociodemographic, clinical and functional variables are. The following variables were used: Gender, Marital Status, Age, inpatient Reason, Personal history, and functionality (mobility and reliance on self-care). The nutritional status was evaluated by the calculation of the body mass index (kg/m^2) using the formula $\text{weight}/\text{height}^2$ (kg/m^2) and it was used as classification criteria the cutoff points adjusted to the elderly proposed by the Nutrition Screening Initiative: $\leq 24 \text{ kg}/\text{m}^2$ (underweight); 24.1 to 27 kg/m^2 (normoponderal); $\geq 27,1 \text{ Kg}/\text{m}^2$ (obese).

The dependent variable under study is the presence of dementia versus other mental illnesses and their association with other comorbidities in people who have had an episode of psychiatric emergency.

2.3. Procedures

Data were collected from medical record. The study took place in the biennium 2013/2014. The ethical principles governing research with clinical processes were respected, in particular the anonymity and confidentiality of data. Statistical analysis was descriptive and correlational with categorical analysis models [3]. We used "IBM SPSS Statistical Software 21" for descriptive/correlational statistical analysis of the sample. It is considered statistically significant values of $p < 0.05$.

3. Results

The results suggest a mostly female sample (84.4%; binomial test with $p < 0.001$), widowed (42.9%), followed by married (34.5%) with age mean 72.4 years being the mode 77 years (7.1%). The ratio of persons who had had dementia and other mental illnesses was similar as binomial test ($p < 0.001$). The older ones had a higher risk of developing dementia than the younger, according to percentiles, boxplot and medias, whose differences are statistically significant. According to the data found, widowhood appears associated with increased risk of dementia process (46%). The internment subject with psychiatric illness was primarily due to behavioral changes (60.0%), with greater likelihood of this occurring in the group who had dementia diagnosis than in the group who had other mental illnesses (2,267 times) as Exact Test of Fisher and $p < 0.001$.

When comparing the comorbidities of persons suffering from dementia with other mental illnesses we found that most people who had other psychiatric disorders (88.4%) had no neurological diseases or psychological disorders (86.3 %), as likelihood chi-square test with no significant p values, not differing in dementia categories as Levene's test $p = 0.241$. With regard to physical ailments has been found that most people who had other mental disorders (94.7%) had no respiratory diseases, nor different in relation to dementia, as likelihood ratio chi-square test with $p = 0.561$. Regarding the functionality was found that most people were independent (70.4%) and compared to the interference of the functionality, according to the belonging group to dementia or other mental illness, it was found that people with dementia (80 %) were more likely to need help in self-care and 60% less likely to be independent than people with other mental illnesses, with statistically significant differences as Linear-by-Linear Association test of chi-square $p = 0.007$. Regarding the bowel and bladder control was found that people with dementia had a higher risk of bowel control problems (36%), and bladder control (44.6%) than those with other mental illnesses, although this difference was only significant in relative to the urinary tract $p < 0.05$. People with

dementia in this sample were 30% less likely to be independent than people with other mental illnesses.

Most people had no reference to pain in IE form (87.2%) and, although the differences were not significant, people who had dementia diagnosis were under 9% probability of showing pain than people who suffered other mental illnesses, although the differences are not significant.

In relation to body mass index (BMI) it was found that people with dementia were less likely to have excess weight at least 8% when compared with the membership group of other mental illnesses.

As regards to the fall, it appeared that the most elderly persons (average 76.39) fell significantly more than younger people (average 69.74) being the difference of 6.65 years statistically significant, as test t , $p=0.008$. When we analyzed the sample overall it was noticed that 60.2% of people had no reference to any episode of fall. However, people diagnosed with dementia compared to those with other mental disorders, had a higher cause of fall with 80% more likely to fall, with statistically significant differences as Fisher's chi-square $p=0.01$. When assessing the risk mentioned in IE it was found that people belonging to the group of dementia had a higher risk of falling than those belonging to the other group (21%) but no significant differences.

Regarding the self-control it was found that most had difficulties at the level of aggressiveness and this may be one of the reasons that led people to the psychiatric emergency room. At least 67.4% of people had reference to episodes of loss of self-control and the group that integrated people with dementia diagnosis were less likely to express this behavior (6.1%), although with no significant difference.

4. Discussion

It was studied a mostly female sample, widow mostly, with a similar proportion of diagnoses of dementia and other mental illnesses. It is known that the female gender is more vulnerable in relation to mental illness and in the case of dementia there is also a higher incidence in females [5]. The age enhances the appearance of mental illness in general and in particular of dementia processes which goes against this study that the older tend to have a higher percentage of dementia.

Widowhood involves a number of complex changes, including a change of roles, the reduction of social interaction, lonely experience, or in some cases social isolation, and evidence of disturbance of functioning and cognition previously not detected by marital care in the domestic intra space. Often, is not known when it started and in what situation was manifested for the first time the need for help in self-care, because the marital relationship of mutual care hampers evidence of dependence on various levels. Thus, for some widowhood appears associated with increased risk of dementia process, results also found in this study.

Underlying, it is known that the trips to the emergency

room are often related to behavioral changes and these changes have biological processes as the neuropathological, neurochemical and genetic, but also the processes related to psychological factors including personality traits and response to stress [8]. The lived and felt reality becomes incomprehensible and the elderly can fuse itself a behavior that had never before happened. Thus, it is understood that insituation of infectious process, pain, respiratory distress or disturbance of cerebral oxygenation of multiple causes, it may be maladjusted behavior, particularly when these diagnoses occur with age, cognitive impairment or delusional hallucinatory activity. Social factors are also important. An aggressive or unstable environment or a troubled caregiver can influence negatively the receiving care person and make it irascible by feelings of insecurity or fear. Understanding the delayed phase behavior changes of life is perhaps the best example of the importance of an integrated approach to diagnosis. In this study the internment subject with psychiatric illness was primarily due to changes in behavior, with higher probability of this phenomenon occur in the group who had dementia diagnosis than in the group who had other mental illness which is consistent with data from Lawlor [8].

When comparing the comorbidities of persons suffering from dementia with other mental illnesses they had found that neurological disorders, psychological diseases and respiratory diseases, did not distinguish dementia and other mental disorders, i.e., the effect of comorbidities seems nil in the case of dementia and other mental illnesses. But with respect to functionality and falls it was found that although most be functionally independent, the group who suffered from dementia process had most need of help in self-care and more likely to fall than those who had other mental illness [9].

According to other authors [10] also in this sample had a greater predisposition to bowel and bladder runaway in the group with dementia, with emphasis to the bladder uncontrollable and therefore most in need of help to these self-care level.

The greater weight of comorbidities that accompany the diagnosis of dementia also makes itself felt in reducing the likelihood of evidence the presence of pain in the IE forms. These patients, either by confusional states that are target or the difficulty to discriminate pain stimuli and learn to interpret them in the context of its comorbidities, are often neglected in their expressions of pain because they do it in a socially maladjusted way. Other times, use less usual preferred communication channels and thus reduce receipt of the complaint by those who care formal or informally. In this context, some authors say that pain is prevalent, underdiagnosed and undertreated in people with a diagnosis of dementia or other mental disorders [11, 12]. Pain at any age can cause enough discomfort to interfere with the well-being but in this study most people do not regard pain though some had pain at the time of hospital admission which is consistent with findings of other authors who

reported having pain undiagnosed in people suffering from mental illness [13]. A comprehensive and thorough clinical evaluation is needed and nurses in *continuum* care will have to keep a careful observation of the multiple facets that pain can present [13].

With regard to the changes related to body mass index, it was found that this study confirms other studies [14] in relation to the likelihood of people with dementia have low weight.

There are several causes for decreased appetite in the elderly that are directly related to age: sensory decline, social, organic, psychological factors, and adaptation to lower energy expenditure and satiety [15]. On the other hand, in the case of dementia cases, interfere other factors such as medication, depressive states, dysphagia, teething with changes, diarrhea and dysgeusia [15]. The changes that accompany dementia processes particularly with regard to muscle mass loss, are also documented by impaired mobility, cognitive loss and all that it relates. Hormonal changes and neurotransmitters that interfere with the feeling of satiety and their understanding also contribute to weight loss. There is also a strong contribution to weight loss in dementia that has connection to hyperactivity and hiperambulation and the actual behavior of food rejection, very present in these processes, particularly in times of crisis and exacerbation of comorbidities such as diabetes or other respiratory infectious scenarios or urinary tract infections that induce delirium with consequences in attention, concentration, the capacity of perception and understanding and therefore the ability to accept food or feed themselves [16].

According to Dalgarrondo [16] the changes in self-control of the person who has dementia diagnosis may be associated with paranoid episodes, with suspicion, diffuse fears, feeling that the person are being robbed or assaulted. In this study it was found that most had difficulty at the level of aggressiveness and this may be one of the reasons that led people to the psychiatric emergency room. More than half of the people assessed had reference to episodes of loss of self-control and the group that integrated people with dementia diagnosis was less likely to express this behavior, but with no significant difference. The author [16] referring to other mental disorders indicates that sometimes the difficulty of understanding reality in their subtle aspects and other more complex, such as social values, by the patient, can lead to constraints that induce despair and, in the limit, the state of agitation. Changes in behavior are multifactorial etiology [17] and they can often mean need for assistance, pain, hallucinatory or delusional activity, which was similar to the study group that, despite having had multiple diagnoses each other a common aspect, the changes behavior and a greater risk of having sleep pattern changes with predominance to the hospitalized for depression. The cries, the wailing cry, tantrum and running away from home can be example of the reality facing so and the difficulty of dealing with what we already do not know or have not understood.

5. Study limitations

In future studies it would be important to know the perception of the families about the process of mental illness of their families and the views of professionals about the importance of initial evaluation in episodes of urgency of older people. Longitudinal studies identify in particular form the beginning of functional loss and provide a greater understanding of the risk of falling associated predominantly with dementia processes.

6. Conclusions

The overall initial assessment of people who suffer episodes of psychiatric emergency gives a strong contribution to the planning and implementation of care plans and contributes in essential way to understand the complex factors that are involved in behavior changes that lead people to service urgency. There are multiple factors that work together for the distinction of different nosological scenarios and in these it is important to understand and treat comorbidities associated. Early interventions at all ages and stages of life, information about the articulation of these various factors can produce health gains and allow people to make choices reducing or delaying the onset of associated morbidity.

People with a diagnosis of dementia have more associated diseases than other people with other mental illnesses and some of those people are at higher risk for potential episodes of falls and loss of functionality and associated factors, which means more cognitive and functional impairment as evidenced in the functional dependency cycle.

7. Implications for the Practice

The quality of care in later age, such as early childhood, requires a multidimensional and interdisciplinary approach. Only this complex approach allows to draw an action plan that recognizes the personal, psychological and social needs of the older person with dementia and with this to produces a globally comprehensive intervention. A quality-based strategy also requires that distinguishes other mental illnesses, as such, with all that goes with it, including its life history, the internment experience, the experience of stigma, and the necessary cooperation between health systems face to the stocks of other concomitant diseases.

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