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Change of Social Roles and Depression as Risk Factors for Elderly People to Experience Delirium Syndrome

Brodziak A*, Sudoł-Malisz M, Derkacz-Jedynak M, Różyk -Myrta A

Institute of Medical Sciences, University of Applied Sciences Nysa, Poland

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***Corresponding Author:** Brodziak A, Institute of Medical Sciences, University of Applied Sciences, ul. Ujejskiego 12, 48-300 Nysa, Poland, Tel +48 77 4091660; Fax: +48 77 4355244; Email: andrzejbrodziak@wp.pl

Abstract

The changing of social roles is a natural consequence of changes taking place in the life cycle of every human being. In older people, a change in their social role may cause a narrowing of their social environment and, consequently, may lead to negative effects, including episodes of depression. In recent years the term depression has been abused in colloquial language and functions as a term for mental discomfort. Depression, sadness, frustration, anger and even boredom are commonly referred to as depression. The implication of this phenomenon may downplay depression in the clinical sense. Depression is one of the greatest geriatric problems, and what is more, it is a key risk factor for delirium. For this reason, early diagnosis of mood depression is important for the prevention of delirium. In situations where changes in social roles happen, it is worth remembering that it may predispose one to a lower mood, which may contribute to the occurrence of the delirium syndrome.

Introduction

Medical personnel looking after the elderly should know the risk factors predisposing to delirium. Having such knowledge would ensure the implementation of preventive activities and prompt implementation of proper therapeutic procedures. Delirium appears as a result of two circumstances: individual vulnerability and adverse events. This implies a division into predisposing factors and factors triggering disorders of consciousness [1]. The first ones are: age>60 y, male gender, cognitive disorders, depression, chronic somatic diseases, neurological disorders, visual and hearing disorders, sphincter disorders, and mobility disorders [2]. In contrast, triggering factors include: infections, pain and catheterization of the bladder, surgery, metabolic disorders,

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dehydration, drug side effects and interactions [3]. Furthermore, an exaggerated reaction to stressful events associated with an increased level of proinflammatory cytokines and cortisol can be a risk factor for delirium [4]. Recently, it has been realized that apart from adverse somatic changes, a triggering factor for the delirium syndrome may be a psychological or living change. Examples include a change of residence, moving to a child's home, moving to a nursing home, impeding communication due to language barriers, or a changing social role.

In the available medical literature, the factors predisposing and triggering delirium syndromes which have the character of unfavorable organ changes and changes caused by external toxic interactions are quite accurately considered. To date, however, not much attention has been devoted to the triggering factors, which have a character of psychological change, and result from a change in the social role. In this short report we would like to discuss the specificity of the predisposition to the occurrence of delirium following a change in the social role.

The essence of social roles

The human being in his life cycle fulfills several social roles. The contemplated person is a husband, wife, parent, employee, supervisor, subordinate, etc. He acts as a teacher, adviser, friend, etc. Each of these social roles sets a certain pattern of behavior and is associated with a set of rights and obligations related to the position of the individual in a given social group [5]. Nonetheless, at every stage of life one's social role may be lost; however, it is naturally more common in old age. Particularly in older age people stop working, retire, move to a nursing home, lose a loved one or have to live alone. The narrowing of the social environment of an elderly person resulting from these changes may decrease the quality of life and, consequently, lead to an episode of depression.

Change of social roles as a predisposing factor to depression

Depression is one of the geriatric giants and next to dementia is one of the most common mental disorders of the elderly. Depression is a mental disorder manifested primarily by a low mood, loss of interest and the ability to experience joy, reduction of energy leading to increased fatigability and reduced activity. Additional symptoms include decreased concentration and attention, low self-esteem and low faith in oneself, feelings of guilt and low value, a pessimistic view of the future, suicidal thoughts and acts, sleep disorders, and reduced appetite [6]. An estimated 15-30% of elderly people suffer from depression. In studies of older people living in a home environment, a significant effect of functional capacity was demonstrated in the field of basic and complex activities of everyday life at the risk of depression [7]. The loss of functional capacity related to both the aging process and resulting from the presence of chronic diseases or injuries can often lead to partial or total dependence on other people, which in turn may contribute to the development of depression. In the above-mentioned studies, a significant relationship was observed between the occurrence of moderate depression and the decline in independence. The severe form of depression was more likely to affect highly dependent people. The same studies showed a significant correlation between the occurrence of depression in the surveyed seniors and negative events over the last years in their lives. They were mainly the loss of relatives, a change in housing conditions, serious illness, divorce, financial problems or other material losses [7]. They are situations related to a change in the social role, defined as active participation in the life of a specific community, which can give the individual a sense of purpose, value, identity or belonging to a certain social structure [8]. The analysis carried out by Harris et al. revealed that the loss of one's social role associated with chronic pain was a predictor of an episode of depression [9]. In turn, extensive research of the Japanese general population revealed that the occurrence of depression in late life is associated with reduced social activity, loss of purpose in life or in interpersonal relationships, and with health problems [10].

The problem of depression in the elderly population is a major challenge for healthcare professionals in their ability to detect this condition and effective treatment. In addition, this problem should be a warning about the increased risk of delirium syndrome [11]. Delirium is a cognitive disorder common among the elderly, manifesting mainly in disorientation and confusion "in time and space", attention disorders, developing in a short time. They may be accompanied by psychotic symptoms of a generative nature [12]. If a patient experiences delirium during hospitalization, it may have serious consequences for their health and life. A strong association of delirium with an increase in mortality in the hospital has been demonstrated. There is also a relationship between delirium that occurred in the intensive care unit and long-term cognitive impairment after leaving the hospital [13]. Close monitoring of hospitalized patients at risk group and the implementation of early preventive measures is crucial in preventing or alleviating delirium and its complications [14].

Decline of the cognitive reserve as a mediator of the delirium episode because of changes in social roles

It is thought-provoking why many older people, even after unequivocally negative life events, do not experience deterioration of their health condition. The appearance of the delirium syndrome in some elderly people after a change in the social role can be explained by the fact that their so-called cognitive reserve was scarce. Cognitive reserve is the ability of the cognitive system to optimize normal functioning as well as compensate for deficits in mental performance, resulting as a consequence of brain damage or the aging process [15]. The term cognitive reserves refer to a number of mental strategies and skills that are needed to effectively cope with complex cognitive tasks, despite the occurrence of pathological changes in the brain [16].

There is evidence that delirium is a reflection of the decompensated cognitive state in response to stressful events, and its occurrence testifies to a reduced cognitive reserve [17]. A change in the social role can thus become a predisposing factor (associated with retirement, moving to the child's home or a nursing home), or a factor triggering delirium if it is associated with sudden cognitive decompensation due to severe stress (e.g. sudden death of life partner). On the other hand, although the above-mentioned events are commonly considered to be stress-inducing, they do not have to be so perceived by the individual, thus they will not become risk factors for depression and delirium. A great deal` depends on the attitude towards emerging life changes.

In this context, the role of in-depth medical interviewing supplemented with the implementation of, among others, the Geriatric Depression Scale become of great importance. This tool can be used not only for quantitative diagnosis in which the number of points indicates the severity of depression or its lack, but it can also be used to analyze the answers in a qualitative way, and ask the patient afterwards about the the responses given in

individual item. This is important both in GP offices, as well as in hospital departments, the more so that older people show a positive attitude towards screening for mental health problems [18].

Because factors that affect the amount of the cognitive reserve are known, this concept is important to describe the possibility of delirium prevention. In considering the factors that affect the formation of the cognitive reserve, the role of intelligence, level of education and physical activity are most often indicated. The higher the level of intelligence manifested by a person, the higher the level of education and the more often he/she is physically active during his or her life, the higher the cognitive reserve he/she has. There is evidence that an increase in the cognitive reserve can also be influenced in elderly age [19,20]. For this reason, it is important that the elderly perform cognitive function exercises as well as take care of physical activity.

Researchers are attempting to develop and implement interventions aimed at shaping a positive attitude of older people to change in their social roles and to strengthen their social relations by undertaking new roles, e.g. a volunteer [8,20,21]. Such activities may be effective primary prevention of depression and may also have a positive effect on the construction of cognitive reserves, and consequently reduce the risk of delirium in the elderly.

Suggestions for Action in Practice

The following practical suggestions for action are to support older people in adapting to aging to succeed and ultimately reduce the risk of the occurrence and development of depression and delirium:

Application of techniques improving cognitive functions

1. Non-pharmacological techniques of cognitive function training

A. Therapies:

Cognitive-memory training, orientation in reality. Remincent-recalling memories using stimulating materials (music, photography, memorabilia, memoirs) as "memory rooms". Validation-stimulation of normal social behavior, patient's identity, reduction of anxiety, improvement of well-being. Occupational therapy-consolidation of skills still possessed by the patient, restoration of those that have recently been lost, improvement of activity. Environmental-creating a safe and friendly environment for the patient.

B. Multi-sensory stimulation (Snoezelen)

C. Art therapy (therapeutic application of art, music and dance)

2. Ensuring company of an animal-a positive effect on the behavior of patients with depression and cognitive impairment as well as dementia

3. Regular physical activity-according to WHO recommendations-for 65+

Aerobic exercises

Resistance exercises

Exercises to improve balance

4. Planning daily routine (in areas of activity and rest)

5. Information technologies for seniors

Compensating functional limitations-communication, movement, hearing

Information and communication technologies-access to public services, social communication, providing security, support in the occurrence of cognitive disorders, access to social care-telemedicine.

Conclusion

Aging is an age-related loss of adaptive abilities. These abilities determine the way of functioning in the changing conditions of the surrounding world, under the influence of environmental factors, emotions, neuropsychological loads and other life factors.

Considering the entire human life cycle, the stressors of the late maturity period are mostly related to experiencing losses in various areas of functioning. They are usually also associated with a change in social roles.

Age-specific factors causing stress include: deterioration of cognitive performance, loss of strength and vitality, loss of control over one's life and environment, loss of independence, loss of productivity, sense of not fitting in with the local community, change in physical appearance and diminished attractiveness (included sexual), experiencing chronic diseases and pain, deteriorating socioeconomic status, loss of professional prestige, necessity to change activity after retirement, experience of illness and death of relatives, exclusion and social isolation caused by reduced mobility.

In the course of aging, there is a depletion of cognitive reserves, external factors occur, there is a change in social roles which may be the cause of depression, and this lies at the base of delirium. In a word-"everything overlaps" and is consistent with the concept of "gears" in the pathogenesis of geriatric giants.

To avoid the adverse effects of changes in social roles, it is necessary to adapt to old age by modifying the activity of the elderly and adjusting the environment to meet the needs changing with age. The activity of older people lies at the heart of health-oriented coping with stressors of old age. It can be expressed through an active lifestyle (recreation, entertainment, family life, social activity), association (formal, informal peer groups, third-age universities, religious communities), proactive adaptive behavior, generativity (actions focused on goals and pro-social values).

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