

## Alzheimer's disease - the role of nurses in patient care

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### SUMMARY

Alzheimer's disease is the most common degenerative disorder of the brain resulting in dementia. It occurs most frequently among the elderly. This article presents the causes, effects and manner of developing the disease. Described above are the most important aspects of patient care. Particular attention was paid to the adaptation of housing, communication, rehabilitation, diet, forms of support for the patient and caregivers. Due to the nature of care they were also presented specific problems in health and the role of nurses has been determined.

**Key words: Alzheimer's disease, AD, dementia, problems, care.**

### ADMISSION

The most common disorder among of dementia is Alzheimer's disease (AD), a chronic degenerative disease of the brain, causing dementia is most common in people over 65 years of age. It represents 60-80% of all types of dementing disease. Every 5 years has been a twofold increase in the number of Alzheimer's patients. its name It comes from the scholar Alois' Alzheimer's, which based on the observation of one of his patients in a psychiatric institution in Frankfurt described his observations and then in November 1906. he presented the results during the lecture Fri. "The unusual disease of the cerebral cortex," delivered in Tübingen. However, it was Emil Kreapelin in 1910. In the contemporary edition of the Manual for psychiatry for the first time used the term "Alzheimer's disease", officially approved in 1967. during a medical congress in Lausanne [1].

The etiology of the disease has not yet been fully explained. The main factor is the neurodegenerative changes in the brain, neurofibrillary degeneration, including inside neuronal and the presence of amyloid plaques deposits. Beta-amyloid is formed from

amyloid precursor protein. The deterioration of its manufacture and disposal becomes a cause of formation and accumulation of amyloid plaques in the brain, changes the structure and function of the tissue. In contrast, neurofibrillary tangles are formed helically twisted filaments comprising aggregates excessively phosphorylated tau protein, which in this embodiment has lost the ability to interact with tubulin, which results in a destabilization of the microtubule structures. Function is also impaired synapses and neuronal transport, leading to the death of the neuron. In Alzheimer's disease is also observed dysfunction of the blood-brain barrier, impaired microcirculation, mitochondrial dysfunction and the generation of free radicals. Some research indicates that guided lifestyle, diet (deficiency of thiamine, niacin, or vitamin B12), too little physical activity, habits, genetic factors, primary and secondary brain tumors, traumatic injuries, subdural hematomas, gradually increasing hydrocephalus with normal intracranial pressure, endocrine diseases, infectious diseases and neurological disorders, liver or kidney, brain aging, certain medications (benzodiazepines, beta-blockers), and sensitivity to changes in neuronal and cognitive affect the development of this disease [2,3].

Alzheimer's disease is characterized by: impairment of higher cortical functions such as orientation, thinking, memory, counting, understanding, speaking, assessment, learning ability and emotional disorders, behavior and motivation. The first symptom of the disease are the most common disorders of the intellectual. Usually at the beginning of deterioration of memory is fresh, there are disorders of thinking executive (eg. The difficulties in the preparation of meals), personality changes, irritability, the presence of spatial-visual shortcomings, reduction of interest, difficulty concentrating. In the later stages of joining aphasia, apraxia, Acalculia, agraphia, agnosia, psychotic symptoms (hallucinations, delusions), and depression. Develops and fecal incontinence, changes in body shape (restriction of mobility in joints, contractures, tilt forward, the emergence of the so-called. round back). They proceed with the difficulty in walking (tumbling, vertigo), shuffling, moving small steps and other movement disorders. In the last stage, the patient stays only in bed, does not say, they may appear myoclonus and seizures. An important fact is that the symptoms are irreversible, development of the disease can last for 1-12 years and growing stages [3,4,5,6].

The role of caregivers of patients with AD in Poland serve mainly those derived from the family circle or family involved. The largest group are the spouses, often measuring themselves with a number of disease entities, the infrequent case is to take care of the children. This is connected with the need to confront various problems (including restricted material), sacrificing valuable time, often at the expense of sleep, rest, relationships or professional life up to the total abandonment of work. Accompanied by long-term stress, excessive load, the feeling of loneliness and the deterioration of health and somatic mental [7, 8, 9].

This paper aims to gather basic knowledge of preparation of housing, communication with a sick person, possible exercises performed by the guardian of diet and forms of support, which should have medical personnel in contact with patients with AD and his family, to educate guardian of the patient, performing the custody in the home, and the same improve the quality of life of the patient, his family and Piastun.

## ADAPTATION OF HOUSING CONDITIONS TO PATIENT NEEDS

Alzheimer's disease is a progressive disease leads to gradual loss of independence, cognitive impairment and control over their own behavior, so over time the patient requires more and more help in everyday functioning. Due to the disorientation and memory problems, the sick person is exposed to danger at home, which is why it is important to adapt the apartment to its needs [10,11].

Patient room should be a place that gives a sense of security and comfort. Any changes should be introduced slowly and gradually. It is therefore necessary to remove any rugs and obstacles to the patient to reduce the risk of falling. It is necessary to protect sharp edges and unstable furniture, the floor but can not be slippery. Fast glass, mirrors or porcelain items should be removed from the premises in which the sick person resides. The room should be in bed with access on both sides, secured ladders. Well if surrounded patient are objects to which it is attached, and which he likes. Using the orientation at the time of placement may be a wall clock and calendar with large, and the well-defined numbers.

It is important to properly prepare the bathroom. The road leading to it should be as short as possible, well lit, preferably at the same level as the patient's room, and the door without a lock. More comfortable to use for a sick person is using the shower than a bath. Floors and paddling should be provided with non-slip mats. Near the toilet and in the shower, secure the stable handrails and handles. Any cleaning products, medicines and electrical equipment should be available for a sick person [10,11,12].

The kitchen stove is a high risk that poses a risk of burns if the patient stays in the kitchen without the control of a guardian. In the case of a gas cooker gas flow must be protected. Any sharp objects, as well as matches, fire, or chemicals should be located in a place not accessible to the sick person. If the patient is prone to uncontrolled appetite, it is necessary to close the refrigerator and storage of food in ways unavailable to him. To increase security, you should consider the installation of smoke detectors in the apartment and gas [11].

Nand the front door lock to be set up or an alarm, which prevent leaving the house without the knowledge of the ward supervisor. Stairs are a major threat - before entering the secure should not be barriers to prevent a person from falling sick. It is also important to secure access to gas and electricity meters. The patient should not be able to leave on your own balcony or opening windows. You have to remember about the safe storage of important items, such as mobile phone, keys, documents and money [10,11].

## COMMUNICATION WITH sick person

As mentioned at the beginning of this article dementia is a group of symptoms caused by disease of the brain, which are disturbed higher functions cortical (cognitive), such as memory, thinking, orientation, comprehension, calculation, learning ability, speaking, assessment of the situation, information processing and planning [13]. The problem of dementia are also linked to personality changes along with the explosiveness and disregard of social norms and affective symptoms (abnormal emotional instability, irritability, apathy, primitivization social behavior) [14]. These symptoms make it very difficult to communicate with a person affected by Alzheimer's disease. In order to improve its quality of life, it is very important to nurse and caregivers knew well the nature of the disease and had the ability to communicate with patients [10].

- provide a friendly and peaceful atmosphere,
- Use short sentences and simple (speech should be clear and slow mild tone)
- establish emotional contact with the patient,
- show patience and understanding during the talks and to allow the completion of expression,
- make sure you understand well the meaning of speech by repeating,
- Avoid prompting words,
- pay attention to non-verbal signals,
- to meet the needs, complaints, problems of the patient,
- obtain information on the physical and mental well-being by formulating questions about specific needs (whether it is hungry, sleepy, or is comfortable clothing, whether it is warm or has a need to go to the toilet, etc.)
- show patience and calm during the interview, repeat important information [15]
- show interest in the overall well being of the patient,
- often refer to the patient's name,
- maintain eye contact,
- remove disturbing stimuli communication (loud radio, TV)
- use both verbal and non-verbal, especially in situations when the patient does not understand speech (showing, presenting the subject, describing actions gestures) [6,16]
- apply the principle of active listening, the use of therapeutic touch upon notice (a hug, a hand grip) [17,18].

It is also important to understand the carer learned to ward gestures, communication is much easier in the later stages of the disease [16]. Close patient expect patience, understanding and explanation of the key issues regarding the changes that occur in the patient's family member. The nurse should give them tips on dealing with various difficult situations related to changing patient behavior. The presence of family dependents in the facility gives him a sense of belonging to the community of the family, so you should try to allow frequent contact with loved ones.

## REHABILITATION

A very important element to slow the progression of Alzheimer's disease is the rehabilitation, in particular to improve movement. Those caring for patients should be thoroughly familiar with the methods and rules of physiotherapy so that you can practice with the sick at home. The purpose of rehabilitation is to improve the general condition, autonomy, motor function, prevention of falls, pressure ulcers and prevention of muscle atrophy [2].

Physical exercise should be fun for both the patient and the instructor and should be conducted no longer than 45 minutes at a moderate pace, with rest periods. The activity should be taken in the morning when the patient is rested and not just after a meal. In order to extend the exercise should start with simple movements and gradually move to more complex. For relaxation, you can turn on a quiet and relaxing music. The pace should be regularly exercise, steady and not too vigorous, not to bother the patient too fast. An important role during the course plays a benevolent, but motivating not demanded, full understanding of the atmosphere and sense of security. Use of movement used in everyday life example imitations. Tying shoelaces enables the patient to inadvertently move them to the ground every day life. Interweaving movements breathing exercises helps regulate breathing and prevent pulmonary complications. Eye-hand coordination and ability to perform unbalanced movements can be developed by crossing the midline, eg. With his left hand touching right knee. In the absence of opportunities to observe traffic most difficult for ward may be

isometric exercises, which are extremely important to maintain proper muscle tone and better control, for example. Sphincter, so you should allow to touch the muscle protector [2,19].

Very well suited to Nordic Walking, which improves quality of life, overall condition and increases the efficiency ward. Physiotherapy can also include garden therapy, based on contact with nature. It contributes to improving the condition of general well-being, balance, coordination, muscular strength, range of motion in joints, and to reduce the level of stress [2,19].

Selection of the appropriate rehabilitation techniques depends on the development stage of the disease and the condition of the patients. In the initial phase of the disease (I and II), where cognitive function and physical fitness are not significantly disturbed, you can use any form of rehabilitation (isometric exercises, manual, memory and imagination). Classes shall be attractive from the inclusion of increasing amounts of auxiliary devices, such as balls, rods, shafts, sashes or the belt and consist of the steps ranging from simple movements, and ending at the more complex to be divided into various phases and study ward exercising the next part. At this stage, patients still retain sensitivity to the music, allowing you to stabilize emotional instability, relaxation and produce the desired mood. At the time of mastery of specific moves, you can go to the exercise in full. Training of cognitive functions are to maintain mental fitness and prevent their gradual loss. At this stage of rehabilitation can be conducted collectively with more participants in [20,21].

In severe physical therapy should be focused on individual work with the patient. Its purpose is to stretch the muscles and przykurczonych improve and maintain mobility of joints and the other rim. Due to the slow gait, small steps and increased tension and stiffness of the whole body working methods of the sick are much narrower, should be limited to a simple exercise and all activities carried out with the patient. A good way is taking walks on the ward. In view of the progress of the disease are worsening cognitive functions. In this case, the activity should be limited to training orientation in time and learn the basic information about themselves and family members coming [20,21].

In the last phase, which is a deep stupor, when the patient has no contact with reality and is bedridden, which contributes to increasing the risk of pressure sores and contractures, rehabilitation consists only exercise passive in semi-sitting position or lying down, which should be covered by all the joints, and in particular the lower limbs, thereby preventing heart failure and blood clots, spasm and pain appears. The movements should be performed regularly in all joints to the limits of pain (feeling of resistance or characteristic facial expressions of pain). To provide better blood flow and prevent swelling after completion of therapy should be arranged above the patient's leg trunk flexion in knee joints. An important aspect is the daily patting patient [20,21].

Very important it is also in addition to physiotherapy and mental training to improve memory. This contributes to the effective working of the brain, logical thinking and decision-making. Among the methods that help to improve brain function include jigsaw puzzles, crossword puzzles, logic games and board games, exercises with shapes, colors and associative boards [12]. The use of individually tailored and comprehensive cognitive training can lead to the achievement of three main objectives, namely improving the quality of life of patients and carers, positive impact on their self-reliance and mental state [22,23]. It is important that the recommendations be adapted individually to the development phase of the disease and the patient's environment [24]. Encouraging ward activity in different areas of his life

conducive to maintaining the overall efficiency of the patient. In addition to physical activities in your daily schedule should be time for mental activities. In patients with dementia (including Alzheimer's disease), who regularly exercise your mind, slowly developing disease processes, and thus longer remains psychophysical efficiency. Training the mind allow for maintaining the efficiency of processes: attention, memory, perception, thinking and other cognitive functions, which are not yet affected by the disease. It should also ensure patient access to fresh air, and adequate amount of sleep time. More than that care should be taken to minimize stress levels, respectively, with the position and avoid the use of drugs by the patient [12]. In addition to physical activities in your daily schedule should be time for mental activities. In patients with dementia (including Alzheimer's disease), who regularly exercise your mind, slowly developing disease processes, and thus longer remains psychophysical efficiency. Training the mind allow for maintaining the efficiency of processes: attention, memory, perception, thinking and other cognitive functions, which are not yet affected by the disease. It should also ensure patient access to fresh air, and adequate amount of sleep time. More than that care should be taken to minimize stress levels, respectively, with the position and avoid the use of drugs by the patient [12]. In addition to physical activities in your daily schedule should be time for mental activities. In patients with dementia (including Alzheimer's disease), who regularly exercise your mind, slowly developing disease processes, and thus longer remains psychophysical efficiency. Training the mind allow for maintaining the efficiency of processes: attention, memory, perception, thinking and other cognitive functions, which are not yet affected by the disease. It should also ensure patient access to fresh air, and adequate amount of sleep time. More than that care should be taken to minimize stress levels, respectively, with the position and avoid the use of drugs by the patient [12]. slowly developing disease processes and therefore longer maintained psychophysical efficiency. Training the mind allow for maintaining the efficiency of processes: attention, memory, perception, thinking and other cognitive functions, which are not yet affected by the disease. It should also ensure patient access to fresh air, and adequate amount of sleep time. More than that care should be taken to minimize stress levels, respectively, with the position and avoid the use of drugs by the patient [12]. slowly developing disease processes and therefore longer maintained psychophysical efficiency. Training the mind allow for maintaining the efficiency of processes: attention, memory, perception, thinking and other cognitive functions, which are not yet affected by the disease. It should also ensure patient access to fresh air, and adequate amount of sleep time. More than that care should be taken to minimize stress levels, respectively, with the position and avoid the use of drugs by the patient [12]. the time and amount of sleep. More than that care should be taken to minimize stress levels, respectively, with the position and avoid the use of drugs by the patient [12]. the time and amount of sleep. More than that care should be taken to minimize stress levels, respectively, with the position and avoid the use of drugs by the patient [12].

Before preparing the course, determine the strengths and weaknesses of the ward. A significant part of the memory exercises can be incorporated into every activity of the day, asking about the color dressed morning blouses, time, name of the neighbor we meet on the street and so on. One of everyday tasks should be to check the sense of time and place. It is important that at an early stage of the disease enter the habit of using the calendar. The patient receives a calendar book in which each page is a separate day. On each side you have to perform a simple task, for example. Complete a short sentence. In order to encourage the patient to use the calendar, you can ask for

a date or a task done. If the patient is not able to give the correct answer, you can ask him: "How can you check today we have a date? "If you have difficulty finding the answer should be recalled calendar to produce habit of using various aids everyday. It is also important to regularly check whether the patient is able to read and understand what the words read. A good way to activate the patient is his participation in group activities organized by professionals: doctors, psychologists, physiotherapists, therapists and trained volunteers. During such exercises the patient is surrounded by people struggling with similar problems. A good way to activate the patient is his participation in group activities organized by professionals: doctors, psychologists, physiotherapists, therapists and trained volunteers. During such exercises the patient is surrounded by people struggling with similar problems. A good way to activate the patient is his participation in group activities organized by professionals: doctors, psychologists, physiotherapists, therapists and trained volunteers. During such exercises the patient is surrounded by people struggling with similar problems.

Remember to adapt exercises to the possibility of the patient. They should be chosen from the so-called guarantee of success, ie. The patient should be able to perform them, to be able to feel satisfaction, satisfaction and competence - the only way you can encourage him to further activity. Classes must be taken together in the form of conversations, solving tasks, reading, without creating an atmosphere of competition, polling and time pressure. It is often helpful for the patient is to start the task in a similar way by the supervisor when given an example. Good results are obtained by combining the written word with the drawing. For example, talking about the Christmas holidays and exchanging related words - Christmas tree, carp, gifts, church - also uses graphic form (eg. Photos) concepts. If the exercise is too complicated,

Proposals exercises improve cognitive functions:

#### 1. Match the item to the profession

We give the patient a set of words - competition and instruments related to their execution, for example. Bricklayer and trowel. Please call the appropriate profession with the appropriate instrument. This task is make it easy for using words instead of drawings. We can also show pictures of sick loved ones, give the cards a set of names and ask to be matched or simply gave names. This exercise mobilizes primarily the ability to associate and memory.

#### 2. Category of words

This exercise is designed for pupils who are in the earlier stages of the disease. Letter of the alphabet randomly select and change with a sick exchange words beginning with that letter. You can create categories, eg. Plants, animals, depending on the capabilities of our ward.

#### 3. Sequences word and Figures

Prepare a piece of paper inscribed with the days of the week, months, numbers, etc. In such a way that during one of the missing items. Please patient to complete (written or oral) of the missing elements. E.g:

Monday, ....., Wednesday, ....., Friday, Saturday, .... ..

#### 4. Linking

To enhance the efficiency of the perception of visual-spatial draw on a sheet of numbers, letters or drawings that the patient has the task to connect the selection lines on the basis of the same pairs. For example:

in the case of numbers will be two singles, two tens, two three and so on. The points should be scattered on the sheet in such a way that the patient had to look for them, and then use their motor skills to call.

#### 5. Proverbs

We give the patient started on a piece set of sayings and proverbs and please their completion (written or oral), for example.

If the goat did not jump .....

## 6. Sensory Stimulation

Supporting psychomotor performance in a patient, we can not forget about activating all its senses (sight, touch, taste, smell, hearing). Simultaneous operation in several senses is especially important for patients lying, with whom verbal contact is much more difficult. Stimulation of sensory stimuli fills a need, thus preventing unfavorable, often self-destructive behaviors, for example. Bite fingers pick at wounds.

To stimulate the sense of sight, you can hang on the wall some nice photographs, pictures, decorations or adjust the bed so that the patient could see what is happening at home or could look out the window. It should be remembered that the seemingly ordinary views of the patient can be scary, eg. A neighbor wearing a black hat can be associated with a teacher who hit a child ward for any offense.

The sense of touch can be affected by rocking in a rocking chair, stroking, exercise, massage. These forms are of particular importance in contact with the patient, who no longer speaks.

Stimulating the sense of taste, drilling tongue and mouth muscles is obtained by the administration of foods that require chewing and sucking, the patient should be monitored in terms of risk of aspiration. It should also carry out exercises Eject language, laying it in a trumpet, etc. making min. Such fun can a great way to develop ties between the grandmother, grandfather and granddaughters. The sense of smell also requires stimulation - useful to the essential oils, pleasant smells of the past (eg. The young EDT years), paying attention to the smell of food, flowers blooming on the balcony or in the garden.

The sense of hearing can activate, including favorite music, relaxation music, together guessing coming to the ears of the patient sounds like. However, the best results will stimulate multi-sensory, when the patient will we mobilized for the simultaneous use of multiple senses, eg. With closed eyes will be guessed by study, shape, smell and taste, which keeps the subject in the hands [25].

Also, the use of music therapy during physical exercise helps to improve the language and cognitive functions. The best results, use music reminiscent, singing, listening to music known to the patient, to listen to well-known and popular songs, activities with music in the background, playing together on musical instruments, improvisation therapeutic singing therapeutic use of folk dances, ballroom dancing, integration, folk music [26].

Another form of occupational therapy used in working with patients with Alzheimer's is art therapy, or therapy through art. Art classes are commonly used as a proven form of support and activation of many social groups. According to many authors, creative activity has a beneficial effect on mental health, mobilizes the mind, strengthens the cognitive processes, gives a sense of agency, self-esteem and inner strength. Through activating the hormone of happiness, it comes to the many positive physiological changes in people with dementia.

The most important forms of art therapy include:

- plastictherapy (therapeutic effects with the use of visual arts: painting, sculpture, prints, drawings)
- Music therapy (use of sound and music, creating active forms of music, as well as their passive reception)
- choreotherapy (application dance excitation contact with the body).
- dramatherapy (theater and the use of elements of a play)



- bibliotherapy (therapy using books and the written word, associated with the reception of literature and independent creation)
- filmotherapy (induction and expression of impressions about the viewed image film). Especially popular by people with Alzheimer's exercises, including painting, coloring, cutting, tearing, pasting, which is the tangible reminder of their commitment to their work. Artworks positive impact on stimulating processes of imagination, visual-motor coordination improve, develop creativity, initiative, creativity, a sense of aesthetics. They also allow for the expression of unconscious feelings and emotions, reduce stress and anxiety, allow patients to relax and wind down. Collaboration can maintain social relationships, and its small number of members does not interfere with the patient's individual work. Often, the various forms of arttherapy joined together, for example. Plastictherapy with elements of therapy, which manifests itself primarily in the drawing and painting of music.

In occupational therapy for Alzheimer's patients often leads to singing songs known to patients from their youth. They are supposed to trigger memories, encourage patients to work together and give joy through the reference to "better times". As part of music therapy is also used to listen to music, creating songs together, classes with music in the background, therapeutic improvisation, singing therapeutic stimulation of music, the music combined with the movement of [29, 30].

During the course requires the constant presence of the therapist, unambiguous definition of the topic of work, the division of the stages of exercise, and amendments modifying only on the basis of what the participant himself initiated. Therapeutic success is not a perfect piece of the patient, only breaking any monotony and passivity, overwork negative emotions, creating that enhances self-esteem and provides a counterweight to deficits ever experienced. Dementia is an obstacle to learning new things for the patient, but does not take away the pleasure of creative work. The effectiveness of activities in the field of art therapy affects not only the choice of the appropriate method, but also the difficulty of the task. Too easy task entrusted to patient may cause him to feel that he is regarded as insufficiently resourceful and efficient. Properly selected therapeutic exercise should be a challenge for the patient, make certain difficulty adapted to his mental and motor skills, but do not be too hard to not cause frustration because of inability to enforce it. After successful completion of the exercise, praise from the therapist, especially that of the group denounced that makes the patient is proud of what he manages to achieve. As a result, the patient has a sense of success, not focusing on their deficits caused by the disease, and faith in their own ability gives you extra motivation to undertake further challenges in the field of therapeutic. The efficiency and functioning of a patient with Alzheimer's disease depends on the progressive changes in the brain that lead to the accumulation of memory disorders,

Occupational therapy is a kind of improving mental, physical, occupational, and social, aimed at engaging people suffering from Alzheimer's in different kinds of activities. Occupational therapy is used in working with physically and mentally disabled people including patients with Alzheimer's. It may also include the mentally ill, children with learning problems and the elderly [32].

The most important purposes of occupational therapy may include [32]:

- improving people weakened and lost mental and physical functions,
- improvement of mental and physical quality of life,
- improving self-esteem,
- expansion of professional skills: basic and specialized, allowing it to work,
- activation of persons with disabilities to take classes in order to eliminate the feeling

of boredom and inactivity,

- prepare patients for life in society, by increasing communication skills, planning, deciding and making choices.

The types of occupational therapy include [32]:

- sociotherapy (self-service training, folctherapy, social skills training)
- Art Therapy (drawing, painting, sculpture, music therapy, Dramatherapy, choreotherapy, bibliotherapy)
- occupational therapy (carpentry, metalwork, ceramics, pottery, basketry, sewing, knitting, gardening, weaving).

In summary, Alzheimer's disease therapy complex includes pharmacological and non-pharmacological measures. Acceptance by people with dementia drugs is the basis, however, the inclusion of non-pharmacological forms improves the quality of life of patients and their relatives. Furthermore, the objective is also to improve cognitive function, sick time organization, alleviating irregularities of behavior and preventing the effects of disorientation. Taking non-pharmacological measures should be selected individually for each patient, taking into account the severity of the disease and the ability of the patient to participate in that kind of activity. Introduction in the life of a sick person activates different classes of dementia, cognitive ability intensifies maintained, improves mood, reduces behavioral problems [33].

- occupational therapy - reinforcing the skills that are sick and have recently restore lost,

- cognitive therapy - training of memory,
- Validation therapy - patient restraint in the rightness of his views,
- Environmental therapy - creating a safe and friendly environment,
- group therapy - meeting people
- art therapy - art therapy (performing arts activities (eg. drawing, clay modeling) and music therapy (listening, singing and playing your favorite songs).

Standing order of the day, is scheduled to physical activity, socializing and leisure, ensure patient safety. Avoid any deviations from the daily routine that can promote sense of anxiety for the patient [33].

#### DIET

Proper diet is essential in preserving and maintaining health in a number of disease entities. The Mediterranean diet is recommended in the diet of people with Alzheimer's disease and its positive impact on improving the health of these people has been repeatedly confirmed [34,35,36]. The Mediterranean diet is composed of diversity of foods, low calorific value, high intake of fruits and vegetables, cereals, fish, legumes, olive oil, moderate alcohol intake and reducing meat and dairy products [37].

Caregivers of people with dementia should have knowledge of proper nutrition in this type of disease. To do this, you should know what nutrients are recommended for the patient and which products are present (Table 1). Properly educated guardian should also be able to identify the cause of poor nutrition and reluctance to eat meals for the elderly. These problems can arise due to biological and social, which include: general aging of the body, changes in sense of smell and taste, loss of appetite, malabsorption, dental problems, digestive diseases, medications, decrease in physical activity, decreasing participation in social life, mental state and the status of material.

Table 1. The list of food products which can meet valuable nutrients for people with dementia [37,38,39].

Chemical compound / vitamin products

Antioxidants (vit. C, E, beta-carotene, flavonoids) cereal seeds, algae cirrhotic, carrots,

linden flowers, rose hips, parsley, mountain ash, black currant, strawberry, blueberry, red wine, cocoa, dark chocolate, tea, yerba mate

Vitamin B1 almonds, black cumin, cumin seeds, bran, lentils and yeast

Vitamin B6 potatoes, beans, beets

Vitamin B12 seaweed, cheese, eggs, milk, beef liver

Folic acid oranges, potatoes, green peas, kale

Polyunsaturated fatty acids (omega-3, omega-6 fish, fish fat

phospholipids egg yolk, walnuts, peanuts, liver, soybeans, rapeseed, wheat germ, beans

nutraceuticals paprika, pepper, turmeric, licorice, cloves, garlic, ginger, cinnamon

The most valuable nutrients for the patient with dementia include:

- antioxidants - vitamins C and E, beta-carotene and flavonoids. Low levels of ascorbic acid, tocopherol and beta-carotene leading to cognitive impairment, increase oxidative stress (disturbs lipid metabolism results in synaptic dysfunction and neurodegeneration), and the so-called deposition. senile plaques in the brain. Flavonoids, in addition to antioxidant activity, regulate neuronal transduction, metabolism, increase the fluidity of cell membranes, reduce the inflammatory response, positive effect on mood, cognitive, behavioral and regulations and prolong the life of the cells,
- vitamins B1, B6, B12 and folic acid - vitamin insufficient supply of this group at the level of the central nervous system leads to disruption of neurotransmission (dopamine, serotonin, norepinephrine). As oxidants reduce oxidative stress and prevent the loss of synapses and in combination with other minerals and polyunsaturated fatty acids give rise to neurons.
- polyunsaturated fatty acids (omega-3, omega-6) - are part of the cell membrane of the brain. DHA (docosahexaenoic acid) protects the brain from beta-amyloid deposition, improves blood circulation in the vessels of the brain and extends the life of neurons. It is responsible for the growth of dense thinking, the ability to focus attention and recall,
- phospholipids - are part of the cell membrane and cytoplasmic. The main agent is lecithin and contained therein choline is the precursor of acetylcholine, which deficiency is associated with Alzheimer's disease.
- nutraceuticals - these include curcumin, camphor, capsaicin, anethole, eugenol and apigenin. They reduce the occurrence of plaque beta-amyloid and the aggregation [37,38,39].

#### FORMS OF SUPPORT

It is important to pay attention to the figure of a guardian. Caregiver has many needs, which if not met, will prevent a correct relationship with dependents. Its function becomes not feasible, and this in turn causes a lot of negative emotions and badly affects every aspect of her life. These include:

- recognition of its protective role - appreciation, respect and perception of effort you have to put in the care,
- psychological support - long-term care leads to mental burnout, loneliness and depression, and is often associated with long-term stress, therefore, support from family and loved ones is necessary,
- access to information - on the course and treatment of the disease itself, as well as the right of a patient and the caregiver,
- regular contact with your doctor - to ensure resolution of the many problems of both caregiver and patient and reduce stress levels,

- help care for the sick - self-care over a long period of time can lead to a variety of mental and physical guardian, because people need help loved ones to this institution called, neighbors and volunteers,
- material assistance - along with the progression of the disease also increases the cost of care. Guardian can apply for a refund of the purchase of the diaper pants, apply for care allowance from the Social Welfare Center, payment of rent subsidies, family allowance, food stamps and a ticket to ride public transportation,
- rest - to regenerate physical and mental, is necessary departure from home for a few days and leave the care of dependents trusted person [6.10].

Despite the good economic situation and support, caregiver experiencing negative feelings. In such a situation should relax, take care of yourself and your private life. A good solution is to use caregivers with counseling, which often allows to come to terms and accept the current situation, Interfamily solve conflicts and learn to cope with stress [6].As research indicates, one of the better types of aid caregivers is a support group. It includes participants equitably and psychologist. The purpose of the meetings is to provide mutual assistance and support in dealing with problems and an increase in effectiveness. Due to the fact that these people often face similar problems, the participants are more open to each other, to better understand and willing to share their ideas to cope with difficult situations. Guardian of the sick person can feel and understand that "is not alone" [40].

In order to meet the needs and requirements posed by this disease entity in 2011. Was developed by the Alzheimer Society of Polish Polish Alzheimer's Disease Plan. Due to insufficient knowledge society, it was intended to carry out educational campaigns targeting, among others, to the medical community, potentially elderly and a wide range of people [41].

In terms of the same patient care standards were developed, including palliative care was recognized in the home, created a network of specialized institutions (institutions daily, round the clock, therapeutic groups), provided access to fully refunded modern drugs, financial support for persons in care home in the form of credit caregiver time care for the contribution period for the purpose of pension in case of cancellation of work and professional "care vouchers." Also allowed patients and their caregivers participated in specialized turn rehabilitation and recreation. In the charge or free of charge may be provided in the orthopedic equipment (walker, wheelchair, mattress antibedsore, diapers), people with adjudicated disability shall also tax credits and for public transport [6.41].

The patient's guardian has the opportunity to benefit from the help of NGOs and voluntary. NGOs are mainly focused on organizing forms of self-help for families and carers, education and information exchange caregivers, cooperation with local authorities and voluntary and issuing instructions concerning the disease and patient care. Unfortunately, however, this form of assistance is usually limited to large cities. People living in rural areas away from the cities many kilometers just to have difficulty with the use of such forms of support [6,7].

In Poland there are also plants Caring Healing Nursing and Plant-Protecting offering fixed-line, round the clock, and comprehensive care financed by the NHF in terms of health benefits, but the costs of accommodation and meals shall be borne by the patient. Include in its scope the care and rehabilitation of people do not require hospitalization, provide pharmaceuticals, medical, food suitable for the health, accommodation and care of the cultural and recreational activities. The fee for using the services of approximately 70% of the retirement or disability benefits, and in special cases it is possible to partially or completely release from the charge [6,7].

The person ill, lonely, unable to run the household alone, the elderly and unable to work may also take advantage of the offer of the Nursing Home, which includes all day stay, meal and various forms of activity. The main task of DPS is to ensure the existence, care (including medical) and care [6,7].

#### PROBLEMS IN CARE OF people with Alzheimer's

Alzheimer's disease is associated with a gradual progression of dysfunction in the physical realm. There are difficulties in maintaining personal hygiene, eating meals and walking. IN silhouette of the patient can be observed changes, impaired sphere is on physiology. The pupil often do not understand the necessity of personal hygiene, so you should explain the purpose of the action taken. Operations must be carried out previously planned and prepared equipment [6].

During hygienic procedures, it is necessary to observe the patient's body, in the skin lesions, lesions and the like. Also in the field on nutrition comes to disorders associated with weight loss and malnutrition, it is important that regular consumption of foods at the same time. It is advisable that the patient is always at the table occupied the same place. Ordinary chair can be replaced by a rotating chair with side rails, plates plate turned into a deep set of cutlery and instead give only a spoon, a cup with a large, comfortable grip. The patient should eat slowly, meals should be neither cold nor hot, it is good to prepare food that the mentee likes the most. The diet should be balanced and varied, and taken fluids within the limits of 1.5-2.0 per day [6].

As the disease progresses is significantly deteriorated physical and mental condition of the patient. In advanced stages of the disease it is necessary to care for sick Hour requiring professional skills and patience. In addition, there are problems associated with the occurrence of contractures and bedsores. Patients begin to consume food with your hands, you should not prohibit them. Persons lying exposed to the constipation, and so should be included in the diet supply a large amount of fiber, which stimulates peristalsis [6].

Toilet body should be done in bed, the body after the execution must be carefully drained, moist and talced. You have to remember on the execution of the toilet mouth. Persons lying require frequent changing diapers after which an implementation toilets and lubrication of intimate [6].

#### ROLE OF NURSE

- Patient and family education regarding nature of the disease, the causes, symptoms, treatment, complications and prognosis.
- Informing the family how to customize the apartment and the environment to the needs of the patient (the use of carpet anti-slip permanently mounted, the use of symbols indicating, for example. Toilet, eliminating the thresholds, mounting brackets in the bathroom, the supply of set meals for the elderly, the purchase of equipment and specialized beds depending on the financial situation of the family, ensuring a full seat in the shower or bath, installation of safeguards to prevent vacate the apartment unnoticed by the patient).
- The transmission of information in the field of family communication with the patient in situations of disease progression, or fear of aggression from the ward, of hallucinations and hallucinations.
- Ensuring patient assistance in carrying out daily activities and in case of disease progression - in basic activities.
- Performing with the patient to improve exercise systemic reinforcement of active, passive and breathing improve the general condition, locomotive functions, independence, recording daily activities, to prevent falls, muscular atrophy and bedsores, as well as performing training orientation in reality and reminiscencyjnych

depending on the stage and severity of the disease.

- Support and motivate the patient and his family to continue to exercise, learn, stay in touch with friends and peers.
- Family education in the application of a balanced diet, appropriate to the needs and condition of the patient. Transfer of knowledge on how to prepare meals, their supply and ward motivation to consume food.
- Provide information on existing support groups (Polish Association for Assistance to People with Alzheimer's Disease, Alzheimer Association MOST), rights and opportunities for financial aid.

#### CONCLUSIONS

1. Adaptation of housing will increase safety and minimize the risk of accidents people with Alzheimer's, as well as facilitate the work of the caregiver [10,11].
2. It is important that any changes were introduced gradually, because if they are too violent, can deepen the confusion and anxiety in a patient [10,11].
3. In order to reduce the risk of injury and should fall primarily to protect patient access to facilities and equipment including potentially dangerous sharp objects, chemicals, electrical equipment and remove all obstacles to the patient [10,11].
4. For effective and efficient communication with the charges of the caregiver should use techniques effective listening therapeutic touch and have a empathy and patience.
5. Slowing the progression of Alzheimer's disease is possible when the run is suitable rehabilitation patient.
6. Rehabilitation improves the overall condition improves motor functions, it contributes to the prevention of falls, bedsores.
7. The aim should be to improve memory through effective brain training, encouraging the patient to think logically.
8. Individually chosen diet is essential to slow down the progression of the disease.
9. The person having the care of a sick person should take care of their own mental and physical health.
10. Level replacing a sick person in daily activities should be adapted to its current self-care capabilities.
11. The nurse's role in the treatment process is based on pharmacological and non-pharmacological treatment, education of the patient and his family, information and care.

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