

Ageing and occupational therapy in day centres

Starzenie się a terapia zajęciowa w ośrodkach dziennego pobytu

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Abstract

Optimization of care for the elderly is a challenge for all care systems in developed countries of the world. This optimization should be understood as prevention of dependence on others in the case of self-dependent people and minimization of its degree - in the case of the disabled. Occupational therapy is a commonly used method of improving people who are affected by different functional limitations, and it is also undertaken in the elderly. The aim of this article is to present the functioning and methods of occupational therapy as part of community self-help centres in Poland, which seem to be one of the best ways of creating conditions for social integration and active participation of seniors in their local environment. The authors analyse the usefulness of occupational therapy in the context of potential improvement, not only of physical fitness but primarily social, cognitive and emotional functioning in the elderly. (Gerontol Pol 2018; 26; 47-53)

Key words: ageing, the elderly, occupational therapy

Streszczenie

Optymalizacja opieki nad chorym starszym stanowi wyzwanie dla wszystkich systemów opieki w rozwiniętych krajach świata. Optymalizację tę należy rozumieć jako zapobieganie niesamodzielności w przypadku osób samodzielnych, a minimalizację jej stopnia – w przypadku wcześniej niesprawnych. Terapia zajęciowa jest powszechnie stosowaną metodą usprawniania osób dotkniętych różnymi ograniczeniami sprawności i podejmowana jest także u osób starszych. Celem artykułu jest przedstawienie funkcjonowania i metod terapii zajęciowej w ramach środowiskowych domów samopomocy w Polsce, które z założenia wydają się jednym z najlepszych sposobów stwarzających warunki dla integracji społecznej i aktywności seniorów w ich lokalnym środowisku. Autorzy analizują przydatność terapii zajęciowej w kontekście potencjalnej oczekiwanej dla osoby starszej poprawy nie tylko sprawności fizycznej, ale przede wszystkim funkcjonowania społecznego, poznawczego i emocjonalnego. (Gerontol Pol 2018; 26; 47-53)

Słowa kluczowe: starzenie się, osoby starsze, terapia zajęciowa

Introduction

Ageing societies force decision-makers to change their approach to the problems of older patients. More and more countries face such challenges. In this context, it should be noted that according to forecasts, by 2060 Poland will become the oldest European country - the sub-population of 65+ will have reached 36% in Poland by that time, while throughout Europe it will be just over 30%. It is easy to see that the pace of ageing of Polish society has far exceeded the pace observed in other co-

untries of our continent [1]. Based on the observed dynamics in the oldest age groups, demographic forecasts show that over the next 50 years, the population over 80 will increase by as many as 5 times [2,3].

In the ageing European population, as well as in Polish, the number of people with age-related illnesses, i.e. in the etiology of which age is the main risk factor, will increase in the near future. Therefore, care for the elderly and interventions that target their problems need to be implemented, monitored and improved.

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Holistic approach to the ageing process - ageing and disabilities

The idea that presents the modern view of ageing assumes that the ageing process itself does not cause disabilities but it clearly paves the way for many diseases, facilitates their occurrence, and thereby increases the risk of disabilities resulting from the coexistence of many diseases. Reducing the functional reserve, which begins between the ages of 30 and 40, and progresses over time, makes it difficult to maintain homeostasis. This increases the risk of occurrence of diseases, which means that the risk of developing pathology, with a potentially pathogenic agent working, is higher at old age than in young people. Moreover, it is the greater the older the analysed group is, and thus it grows stronger over time. The Main Statistical Office data shows that in the oldest age group (70 years and more) more than every tenth person is unable to turn the tap, more than every seventh - cannot afford to care for hygiene on one's own, and more than every twentieth - lie down and get out of bed, and almost every third person has a declared disability. At the same time, long-term health problems concern 81.8% of men and 85.7% of women [2].

More recently, the holistic approach has been increasingly opposed to the organ-related medical approach. This is due to increasing interest in the quality of life of patients in the context of therapeutic effectiveness. This results in the willingness to optimize the care of disabled elderly patients, which means, among others, preventing or minimizing dependence on others.

In the context of the quality of life, the most important is the patient's situation as seen from its own perspective, because the quality of life is the distance between expectations and possibilities of meeting them. The quality of life has many determinants, and the presence of a disease, measured by the severity of symptoms, changes in physical examination or results of additional tests, is only one of the factors considered. The functional condition, i.e. independence, acceptance of change, control of emotion, and the socio-economic status [4] are also very important.

It is worth noting that the interest in the holistic approach to the patient is not intended to deny the unquestionable achievements of the many narrow specializations that are focused on particular systems or diseases. The point is to show that each treatment includes the whole patient. This is extremely important in geriatrics [5]. At the same time, holistic thinking should force us to continually seek new solutions not only in the scope of diagnostics and treatment of the elderly, but also in the aspect of care that is undertaken or actions that are taken to activate them [5].

As a result of ageing of societies there is a growing social problem of functional efficiency which is understood as "the ability of an individual to deal with all basic life activities", which is determined not only by physical conditions but also mental performance or emotional functioning. For example, one of the key traits of a functionally competent person is the ability to make independent, good decisions which do not endanger this given person. However, the decision-making process in each individual is closely related to the activity of many brain structures, especially those related to information processing, assessment and understanding of a given situation, and control of emotions.

Efficiency in decision-making depends on many factors, among others, experience, personality traits, cognitive efficiency. The affective temperament traits [6] which can be affected by diseases, among others, those concerning the elderly, also seem important. Negative changes of the affective temperament may also occur as a result of the ageing process itself. All of these aspects that limit efficiency can potentially be assessed and, if required, subjected to intervention which should be further monitored in terms of effectiveness [6,7].

If a functional impairment limits or even precludes a person from fulfilling its social role in relation to age, sex and social and cultural conditions in which this person lives, the person is considered to be handicapped [7]. Degradation of functional impairment is an indication for provision of care to such persons, and the observed progression of impairment is an argument for the obligation to periodically assess the functional ability of the elderly, also in terms of relieving the family.

One of the institutional forms of support for people with functional disabilities in our country is day centres, i.e. environmental help for the family that relieves the family of some of its duties. They have been created in Poland based on the provisions of Art. 51, Section 1 of the Act on social assistance.

The needs of the elderly and the local community day centres

The local environment, where old people live, is the primary area of their activity and place where they meet their needs.

The term "need" is differently defined. It is often assumed that the need is "an individual's perceived lack of something that, due to the organism's structure, individual experience and the place of this individual in society is necessary to keep the individual alive, enable it to develop, maintain a particular social role, maintain a mental balance" [8].

Susułowska, Pitt, Puchalska [9] argue that, in general, the structure and hierarchy of the needs of the elderly remain unchanged compared to the earlier years. The authors emphasize that all needs are still present at old age, and some of them are even stronger than in previous life stages [9]. At old age, only the importance and intensity of individual needs change, as they vary in different periods of life.

As ageing progresses, it becomes more and more difficult to meet the need for recognition (prestige, usefulness). The feeling of dissatisfaction is getting stronger and retirement, change of position and social roles or weakening of family ties are not conducive to fulfilment.

The need for belonging is also differently realized in this period. It is most often met by participating in small social groups, such as family or organizations. Being a member of any group gives a person a sense of self-worth, sense of life, recognition, usefulness. This need also creates situations that require taking actions [10].

With age, psychosocial needs (primarily safety and emotional support, acceptance, affection and love) and the need for material fulfilment become stronger, and at old age - the need for care given from other people and institutions.

At the old age, special attention is paid to the need for social usefulness, acceptance and emotional bonds. These needs at the old age are identified with the meaning of life [10]. An old person wants to be needed, appreciated, treated like a partner. Satisfying these needs is a prospect of a better, more dignified life.

Hence in gerontology more and more emphasis is put on the need for adapted existence, which is the result of the majority of human needs of the elderly. It is met when there is a balance between the environment of human life and its psyche (sense of well-being) [11]. A condition for achieving such well-being is the acceptance of the stage of life which is adulthood but also one's own external and internal activity, satisfactory relationships with people, willingness to leave a good mark. Local community day centres in the local environment fit into this idea.

In Poland, as well as in other European countries, an important social issue is to help the disabled with mental disorders. In accordance with this idea, since 1995 there have been changes in the approach to this group of people and support systems in the home environment have been established. The Act of 19 August 1994 on mental health protection, which has been in force since 1995, has introduced a new social assistance institution - Local Community Day Centres (LCDC).

The LCDC is an organizational unit of day social support kept and maintained by a public or non-public enti-

ty. It can be used to support people with chronic mental illness (type A) or intellectual disabilities (type B) and (type C) people with different mental disabilities, among others, the elderly with chronic mental disabilities with an organic origin and diseases in the ageing process.

In our country a number of LCDC facilities have been established for more than 20 years, and they have mainly focused on persons qualified for type A and type B.

Due to ageing of society, it seems that the greatest needs in this area will exist for people with other mental disorders related to age.

Taking into account the financing of treatment in our country, in practice the only real chance of including this age group in comprehensive therapy exists within the framework of the LCDC, type C.

It is worth mentioning that at the local level there are the best conditions for social integration and the activity of seniors, whereas simultaneous living in one's own home deprives the sense of institutionalization. In the perspective of the next few years, there will be a further need to expand the social infrastructure, i.e. all social and health services for the elderly in their surroundings, but also to stimulate social awareness. In ageing society, it is a challenge to create such local communities where seniors will be an integral part thereof, and as Błędowski [8] says: "social policy towards old people cannot be solely a policy of helping old people but it should be a policy of helping people, organizing their lives".

Nowadays, more and more suggestions are put forward about the need to include the elderly and their environment in the local community system, as well as their daily activities as part of leisure time - to ensure health and well-being and to implement a variety of life passions. In many countries, such therapy programs are developed and implemented on a regular basis, primarily in the form of occupational therapy for the elderly (e.g. Sweden, USA) [11]. The potential of this form of improvement is enormous. The widely understood occupational therapy not only improves physical fitness, but it also can positively influence the social, cognitive and emotional functioning of the elderly.

Occupational therapy

Occupational therapy is a commonly used method of improving people who are affected by different functional limitations. The term is derived from the Greek words "ergon" (work) and "therapeia" (treatment). The translation of these words often gives an imprecise image of the subject matter and treats occupational therapy as vocational therapy. At the beginning when occupational therapy was developed, it was considered "treatment by work" in

various types of workshops created mainly in psychiatric units. Today, its content is fundamentally different.

The goal of occupational therapy is to achieve the maximum level of functional capacity of patients/clients, and the optimum quality of their lives. It is believed that in occupational therapy the focus is on the client-centred approach, which assumes the patient's participation in making decisions about what the patient wants to do and what activities the patient needs. The client, patient, participant is considered part of the context of his family, friends, culture and economic stratification [12].

Occupational therapy is a multi-directional approach based on using the potential in every human being derived from the natural vitality of organism that has long been suppressed by acquired age-related or disease-related disability. The purpose of occupational therapy is to re-teach a person such skills that will enable it to accept itself, but also to be satisfied with the activities it performs and to have the desire to acquire new ones in order to be more efficient despite existing disabilities. The idea mainly concerns the ability to deal with daily activities and life situations. Many researchers postulate setting up occupational therapy to daily activities and situations that are important to patients [13]. The authors have shown that social and productive activity, as well as physical activity, decrease mortality in older age. Activity improves survivability not only due to its motor movement effects but also psychosocial effects. What is more, it reduces dependence on others in daily activities, which is the only or one of the key frailty factors of the elderly [14,15].

Occupational therapy begins with a functional diagnosis. Based on this diagnosis, an occupational therapist prepares a short- and long-term occupational therapy plan. During the course of the occupational therapy, the occupational therapist re-assesses the patient's/client's functional status. It is optimal when the assessment is conducted by an interdisciplinary team, i.e. therapists, psychologists, pedagogists, physiotherapists. They assess the effectiveness of interventions and the possibilities of continuing, changing or ending the therapy. Completion of the occupational therapy process is justified only if the patient's/client's functional status has not improved within three months.

Before starting the therapy, it is necessary to set goals and plans for the occupational therapy for each patient/client. When setting them, it is necessary to take into account the opinions of patients and their priorities, as well as their families' attitudes. This improves motivation and the patient's motivation has a great impact on achieving the goals of occupational therapy. If the therapist does not take into account the patient's views and opinions, there is a high risk of losing its trust, and thus

there is a negative impact on future cooperation. If the patient has priorities for therapeutic goals and plans that differ from the therapist's opinion, the therapist must devote enough time to explain and determine their relevance and legitimacy to ensure a specific goal. Cooperation with family is essential as well.

Selected areas the occupational therapist's activity, especially important for seniors.

Occupational therapy focused on self-dependence.

The level of self-dependence is determined by the ability to perform daily activities. In the field of self-dependence, the occupational therapist assesses the patient's ability to perform daily activities (ADL - activities of daily living) that are crucial to live, and works on the possibilities of performing them. These activities can be divided into "basic activities", which include dressing, undressing, washing, eating and drinking, toilet use, etc., and on "extra activities" sometimes performed by a different person, even for functionally-competent persons: laundry, shopping, cleaning, etc. [16].

The ability to perform daily activities by an older person is often reduced and has many negative consequences. Hence the self-dependence therapy is considered to be one of the priority areas for a therapist.

Occupational therapy focused on motivation. Motivation of the elderly is a very important factor because it is not possible to achieve the goal without it. If the patient/client does not want to improve its functional condition, the therapist, after a thorough and detailed review of the history of the disease, should find such an activity that the patient would be able to perform in the future, and may or likes to perform in the present. The occupational therapist must positively motivate the patient so that he or she can perform certain activities. It turns out that motivation changes in a positive way when the patient performs activities that produce some positive emotions. The therapy should be planned with a given person and in the course of it the patient should be as motivated as possible. In order for the activity to be repeated many times it must be significant to the person and each person, with the therapist's help, should have the possibility [17] to find a therapy that matches its needs and find a way to perform it.

Therapy focused on deficiency of functions. The occupational therapy focused on motor skills is closely related to occupational therapy focused on self-dependence. The therapy can be focused on specific activities that is a problem for the patient/client, i.e. which is associated with a limited scope of certain activities. The therapist selects specific interventions, for example, such that

improve hand functions to achieve the optimum level of activity and functioning [18]. **Occupational therapy focused on cognitive functions.** Cognitive functions influence the level of daily activities. Functional diagnostics of cognitive functions is performed by a psychologist. Cognitive functions include memory, attention, visual-spatial abilities, linguistic skills, thinking, reading and writing, and speaking. More often, the elderly show distracted attention. The elderly often experience cognitive deficits. Age is also a factor in the development of dementia. The cognitive therapy is based on the fact that the occupational therapist uses training, exercises and compensation, as well as various aids and devices. Cognitive functions can be practised by performing a variety of tasks, such as memorizing of new material in a practical form. Short-term memory can be used, for example, to memorize images, words and numbers.

Cognitive functions are practised comprehensively as part of everyday activities. An example is cooking - the patient should be able to remember the recipe and how to use the ingredients. Verbal and non-verbal work helps to remember when recalling various logical relationships or ideas related to things and objects that the patient has to remember. To compensate for impaired cognitive functions, the occupational therapist uses a variety of commonly used tools such as keeping a record, using a pencil and paper, information and memory boards, graphs, computer programs, and more [19-21].

Occupational therapy focused on a daily program. Every person should have a sense of self-realization. If it has none, then the quality of life is limited, leading to feelings of dissatisfaction and depression. Sufficient activities in free time contribute to a sense of positive fulfilment. Therefore, this mentioned area is important and the occupational therapist must take it into account in practice. Free time activities can gradually become the basis for a long-term occupational therapy plan. The occupational therapist must be able to identify patients' favourite activities not only at a given moment but also that way before the disease, and to find ways to enable the disabled to continue doing them through interviews, standardized questionnaires or observation during therapy.

The occupational therapist leads the above-mentioned therapies in different ways. This can be done using, for example, **art therapy**, which is a kind of psychotherapy that expresses emotions through creative activities and can be realized by drawing, painting, carving, plasticine or clay modelling, colouring, collage making. [23,24]. It is often conducted in groups, allowing for a non-verbal expression of emotions by colours, forms or shapes. It allows deciding on the choice of material, theme of work, which gives a certain sense of indepen-

dence. Active creation supports motor movement and manual abilities, as well as space-construction praxia. It also stimulates creative thinking and promotes social interactions. The above-described therapy model concerns, among others, people with mild or moderate cognitive disorders that affect the elderly. This therapy can also be used in patients with deeper deficits to colour images. In some patients, especially with a high degree of motor impairment, attention and concentration deficits, the use of art therapy may be difficult and have the opposite effects. Therefore, the role of a qualified therapist who will match activities to the level of a given deficit is very important [22,23].

Music therapy. It involves the use of music or its components to obtain therapeutic effects. It offers many possibilities such as singing, playing instruments, clapping to rhythm or tapping, and thus it engages older people at various cognitive levels and with many deficits. This therapy can be carried out in therapeutic groups and consist in playing popular songs from the patients' youth (or religious songs), singing together, dancing or even clapping to the beat of music. Positive effects of music therapy on mood, emotional state, behavioural disturbances (sedative effects), and social interactions have been observed [24,25].

Sociotherapy. (Latin: socius - companion) aims to include the elderly in social life and, above all, to improve the functioning of the social group. Sociotherapy includes both the influence on a given person and organization of a friendly, "therapeutic" social environment.

Significant goals of sociotherapy should include the ability to abreact, develop self-esteem and identity, perform specific social roles, develop social skills (assertiveness, communication, relationship management, problem-solving), gain experience in identifying and exposing one's strengths, use the group's support, deepen the knowledge about oneself and the other person, which translates into more effective functioning in interpersonal relationships [26].

Another type of therapy is **reminiscence therapy**. It involves recalling experiences from the past with various stimuli such as old photographs, important events, old-fashioned objects, films, recordings from the youthful days. It is important to reach the best kept memories by avoiding negative emotions, and skilfully encourage older people to share their experiences and discuss them together. Apart from interacting with cognitive processes, this therapy also affects the mood, so try to invoke positive, joyful memories and avoid those unpleasant ones. It improves the ability of communication, both verbal and non-verbal [27].

Kinesiotherapy, which is physical therapy is carried out by physiotherapists. Physical activity is a very important treatment that prevents sudden chronic diseases. It can also be treated as a basic treatment to limit the use of other, more expensive ones [28]. Systematic physical activity - if it does not overload the system - contributes to an increase in fitness and shape, increasing exercise tolerance and fatigue resistance [18]. It may be beneficial for people who have a sedentary lifestyle to increase their physical activity during basic daily activities (ADL) [29]. This therapy concept is defined as a functional physical activity. It includes such activities as walking, ascending and descending stairs, or working in the garden. The patient's age cannot be a barrier to rehabilitation. Anyone, regardless of age and gender, should participate in regular physical exercises. Different forms of physical activity among the elderly, such as the Community Health Activities Model Program for Seniors (CHAMPS II), are the key strategy for reducing the effects of ageing of populations. This strategy includes measures leading to bringing backs the patient's autonomy and efficiency, and to improve the quality of life [30].

Physical therapy caters for the need for competition, emotional release, recovery, relaxation, and rivalry. Before taking a new form of therapy, it is important to take into account the patient's state of health, particularly if it is a senior participant, his or her lifestyle, level of physical activity and personality traits. Of course, the occupational therapist has many other therapies that can be adapted to the elderly. In centres that provide support mainly to the elderly, occupational therapy classes are sometimes difficult to distinguish from other methods of activating older people. Occupational therapy can also help to minimize the consequences of dementia that can develop in this group of patients.

Conclusions

One of the basic pillars of social policy on the elderly is the active ageing concept. The World Health Organi-

zation (WHO) presented the most comprehensive definition of this term. Active ageing aims to improve the quality of life for the elderly by increasing the chances of improving health but also by participating in different spheres of life. For the patient, the goal of the rehabilitation is mainly the possibility of the longest self-dependent life possible, and therefore independence of third parties.

Especially occupational therapy - thanks to its diversity - plays a significant role in this aspect. Its measurable effects can be seen almost immediately. Experiencing new situations and participating in various social activities changes the image of the participants' world, gives them the opportunity to build relationships, acquire new social skills, and through properly targeted activity it improves physical fitness or allows remembering forgotten skills.

It is important to realize that patients' abilities are not necessary to conduct the therapy because the relationship between the participant and the activity is the most important [12].

The conducted therapy uses the process of creation to raise the mental, emotional and motor levels in everyone, also in the elderly. It helps to treat anxiety, depression, affective disorders, addictions, problems in family and social relationships, as well as somatic diseases. It also contributes to the growth of self-esteem, self-reliance, openness and creative inventiveness. It also has a positive effect on cognitive functions and memorization, it is a contributor to feeling the joy of collaboration. As a consequence, it improves the quality of life.

It should be remembered that at every stage of life its quality should be as good as possible, and its absence should accelerate the inevitable ageing process.

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Conflict of interest

None

References

1. Wasilewski P. Opieka medyczna nad osobami w wieku podeszłym. Warszawa: Departament Zdrowia Najwyższej Izby Kontroli; 2015.
2. Marciniak G. GUS – Stan zdrowia ludności Polski w przekroju terytorialnym w 2004 r. Warszawa; 2007. s. 18-34 (tab. II/20; II/21).
3. Nowak L. Prognoza ludności Polski. Warszawa: Główny Urząd Statystyczny; 2009.
4. Wieczorowska-Tobis K. Specyfika medycyny geriatrycznej. *Pol Med Rodz.* 2004;1(6):557-60.

5. Rubinstein LZ, Rubinstein LV. Multidimensional geriatric assessment. In: Tallis RC, Fillit HM (eds.). *Geriatric medicine and gerontology*. Elsevier Science Limited. 2003;291-301.
6. Szczupacki Ł, Falkowska N, Jaracz M i wsp. Temperament afektywny, funkcje czołowe i styl decyzyjny u osób zdrowych. *Psychiatria*. 2010;2:47-52.
7. Skalska A. Ograniczenie sprawności funkcjonalnej osób w podeszłym wieku. *Zdrowie Publiczne i Zarządzanie*. 2011;9(1):50-9.
8. Błędowski P. *Lokalna polityka społeczna wobec ludzi starych*. SGH: Warszawa; 2002.
9. Susułowska M, Pitt B, Puchalska BM i wsp. Realizacja potrzeb ludzi starszych a zadania samorządu terytorialnego. Częstochowa: *Prace Naukowe Akademii im. Jana Długosza w Częstochowie*; wyd specj. 2012:301-28.
10. Trafiałek E. Człowiek stary. W: Pilch T (red.). *Encyklopedia pedagogiczna XXI wieku*. Warszawa; 2003. s. 583.
11. Rudolf S. Kontrowersje wokół państwa opiekuńczego na przykładzie Szwecji. W: Okoń-Horodyńska E (red.). *Socjalne aspekty społecznej gospodarki rynkowej, materiały konferencyjne*. Wisła, 3-5 czerwca 1996. Katowice: *Akademia Ekonomiczna im. Karola Adameckiego*; 1996. s.275-276.
12. Kuc M. Stosowanie terapii zajęciowej w procesie aktywizacji podopiecznego. Radom: *Instytut Technologii Eksploatacji – Państwowy Instytut Badawczy*; 2007.
13. Wilcock W, Townsend EA. Occupational justice. In: Willard and Spackman's occupational therapy. Crepeau E.B., Cohn E.S., Schell B.A.B. (eds.), 11th ed. Philadelphia: Lippincott, Williams and Wilkins; 2009. s. 192-193
14. Borowicz AM. Testy służące do oceny sprawności funkcjonalnej osób starszych. W: Wieczorowska-Tobis K, Kostka T, Borowicz AM (red.). *Fizjoterapia w geriatrici*. Warszawa: *Wydawnictwo Lekarskie PZWL*; 2011.
15. Jones J, Rikli E. Measuring functional fitness of older adults. *J Active Aging*. 2002; march, april:24-30.
16. Rockwood K, Fox RA, Stolee P, et al. Frailty in elderly people: an evolving concept. *Can Med Assoc J*. 1994;150(4):489-95.
17. Szulc W. *Arteterapia. Narodziny idei, ewolucja teorii, rozwój praktyki*. Warszawa: *Wydawnictwo Difin*; 2011.
18. Pasek T, Kempniński M, Pasek J i wsp. Postępowanie fizjoterapeutyczne w geriatrici. *Fizjoterap Pol*. 2007;4:455-64.
19. Pąchalska M. *Rehabilitacja neuropsychologiczna*. Lublin: *Wydawnictwo UMCS*; 2009.
20. Mroziak J. *Rehabilitacja neuropsychologiczna osób z zaburzeniami pamięci*. Warszawa: *Wydawnictwo Naukowe SCHOLAR*; 2008. s. 96-122.
21. Łojek E, Bolewska A (red.). *Wybrane zagadnienia rehabilitacji neuropsychologicznej*. Warszawa: *Wydawnictwo Naukowe SCHOLAR*; 2008. s. 96-122.
22. Timoszyk-Tomeczak C, Bugajska B. Satysfakcja z życia a perspektywa przyszłościowa w starości. *Opus Sociol*. 2013;2:83-95.
23. Tobis S, Kropińska S, Cylkowska-Nowak M. Arteterapia jako forma terapii zajęciowej w aktywizacji osób starszych. *Geriatria*. 2011;5(3):194-8.
24. Karolak W, Kaczorowska B. *Arteterapia w medycynie i edukacji*. Łódź: *Wydawnictwo AHE*; 2008.
25. Józefowski E, Stefańska A, Szabelska-Holeksa M. O arteterapii, edukacji i sztuce-teksty rozproszone i niepublikowane. Poznań: *Wydawnictwo Naukowe UAM*; 2012.
26. Schönbrodt B, Veil K. Zjawisko wycofania społecznego w kontekście „aktywnego starzenia się”. *Potrzeba działania i przykłady dobrych praktyk*. *Problemy Polityki Społecznej*. 2012;18:63-76.
27. Susułowska M. *Psychologia starzenia się i starości*. Warszawa; 1989. s. 329.
28. Opara J. Aktualne możliwości oceny jakości życia u chorych z chorobą Parkinsona. *Neurol Neurochir Pol*. 2003;5:241-50.
29. Writing Group for the Activity Counseling Trial Research Group. Effects of physical activity counseling in primary care: the Activity Counseling Trial: a randomized controlled trial. *JAMA*. 2001;286:677-87.
30. Żak M, Gryglewski B. Ocena wyników rehabilitacji osób po 85 roku życia z zaburzeniami sprawności funkcjonalnej. *Reh Med*. 2006;10:20-4.