Animal Assisted Therapy and Perception of Loneliness in Geriatric Nursing Home Residents

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A B S T R A C T

Use of animals for therapeutic purposes, animal assisted therapy or AAT is a method for improving quality of life for long-term inpatients. The object of this paper was to evaluate dog companionship as a form of AAT and its effects on perception of loneliness in geriatric nursing home residents. The participants were involved in a six-month program of dog companionship three times weekly for 90 minutes. There were 21 residents included in the program, with a mean age of 80 years. Loneliness was measured by the short version of the UCLA Scale of loneliness. Comparison of test results before and after participation in the program showed that dog companionship reduces the perception of loneliness.

***Key words**: dog, animal assisted therapy, geriatric nursing, loneliness*

Introduction

The use of companion animals in therapeutic programs is increasingly being discussed nowadays, although such use has been known since the 18th century when a psychiatric hospital in England utilized pets to facilitate achievement of self-control in psychiatric patients[1–3]. In the 1960s, the American child psychiatrist Boris Levinson initiated pet-facilitated therapy, or pet-therapy, as a method of treatment for a variety of disorders[4]. Not every animal is suitable for therapy, and each case requires an individual approach.

There is a difference between »animal-assisted activity« and »animal-assisted therapy«. Animal-assisted activity involves a patient passively observing the animal (e.g. fish in the aquarium), while in animal-assisted therapy the patients interact with the animal in a clinic visitation[5].

There are number of investigations on AAT and its effect on human physical health[6–8]. Evidence of benefits for psychiatric well-being appears to be even more profound[9–15]. Numerous authors point to the importance of AAT and, in particular, that the positive feedback between the patient, animal, and therapist reduces many symptoms and improves the quality of life[11].

Stasi et al.[16] reported a significant decrease in blood pressure values in nursing home inpatients after participation in a six-week pet therapy program. Ružić et al.[17] concluded that dogs may help to maintain continuous physical activity in elderly cardiovascular patients, promoting improved physical capacity. Cole et al.[6] found that AAT improves cardiopulmonary pressures, neurohormone levels, and anxiety in hospitalized patients with heart failure. Previous investigation also proved that recreational activities involving dogs benefits nursing home patients suffering from apathy[18,19].

People who are isolated or institutionalized often find comfort with friendly dogs and consider them as empathic listeners, so the presence of a therapy dog may be a catalyst to improve both verbal and nonverbal communication skills in nursing home patients[20]. The beneficial effect has been particularly demonstrated for depressive symptoms, loneliness, agitated behaviours and dementia[18,21,22].

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Depending on the facility, the animals taking part in the program can either be kept at the facility or brought in as visitors to participate in the AAT program with the goal of improvement in physical, social, emotional and cognitive functioning[10,23]. The animal is an integral part of the treatment of a specific condition or illness[4,24].

Most of the research examining AAT has been conducted in adults, especially the elderly population[9,25–27]. Animals influence the emotional well-being of patients in rehabilitation programs, hospitalized patients, and geriatric nursing home residents[28]. The quoted research showed that the presence of a pet in a facility enhances the day quality of life of nursing home residents.

Loneliness can be defined in different ways. Most of the definitions emphasise that it is an unpleasant emotional and motivational state caused by the inability to satisfy the necessity for intimacy and belonging. It is known that loneliness has a negative correlation with self-esteem, satisfaction and self-actualization[29].

The purpose of this paper was to determine whether the possibility of dog companionship as a form of AAT reduces the perception of loneliness in geriatric nursing home residents in order to evaluate the possibility of introducing AAT to facilities such as nursing homes.

Materials and Methods

Participants and procedure

The research was conducted in the »Trnje« nursing home after approval from the institutional review board. A group of 21 participants (4 men, 17 women), mean and standard deviation of age 80.5±6.6, volunteered in the research program over a period of 6 months. Seventeen participants were already involved in other social activities available in the nursing home (to include the acting section, clay modelling section, and choir). Some of the participants (14) were pet owners prior to their arrival in the institution, while the others experienced dog companionship for the first time during the program. All participants had no known allergies to animals.

There were four dogs chosen for the program (2 Golden Retrievers, 1 German Boxer and 1 Standard Schnauzer). The mean and standard deviation of their age distribution was 6.2±2.6 and the mean and standard deviation of their body mass distribution was 28.7±8.1. All dogs were socialized and of stable character, friendly, clinically healthy and regularly vaccinated against infectious diseases. They were brought to the facility and kept on leash several times prior to the beginning of the program for familiarisation with the environment and the staff.

The program was monitored by facility's professional team consisting of a defectologist, social-worker, medical doctor, work-therapist and other medical staff. Having formed the group, a doctor of veterinary medicine introduced the dogs three times weekly in sessions for 90 minutes. The animal-assisted therapy was held in the facility garden, or in the activity hall in cases of inclement weather. Each visit was conducted according to the guidelines determined prior to the research. Dogs were introduced to the participants and participants were allowed to interact with the dogs through touch, play, walking and verbal communication.

The participants were not specifically directed to interact with the dogs and it was left to their own will to express their feelings. Staff helped and guided each subject to interact with dogs in accordance with participants' goals.

Measurement

The short version of the UCLA Scale of Loneliness, adapted by Lacković-Grgin et al.[30] was used in the research. The Scale was applied twice, at the beginning of and six months after the intervention. Allen and Oshagan[31] proposed a short form of the UCLA Scale, comprising seven units (Table 1).

Each participant's task was to evaluate statements about self-perception on the given scale from 1–5 (1 meaning »doesn't apply to me at all« and 5 meaning »applies to me completely«). The final result was formed as the linear combination of the results in each unit.

In addition to the Scale, a questionnaire made especially for this research was used. The questionnaire consisted of demographic data (age, gender), and questions related to everyday life in the nursing home (activities, contacts with the other residents and/or family members, feeling of contentment). There was also a set of questions considering residents' attitude towards animals (prefers cat or dog, previously owned a pet) and their experience of the AAT (evaluation of time spent with the animal, effect on their life quality, importance of taking care of a pet).

Social interactions observed during animal-assisted therapy as well as the residents' behavior towards the animals during their association was evaluated by the research team.

To determine whether the dog companionship as a form of AAT reduces the perception of loneliness for statistical analysis Students' t-test for paired samples was used. Statistically significant difference between the scale results was set at $p<0.01$.

Results

The data showed a statistically significant difference between the total score on scale of loneliness achieved before and after AAT ($t=4.261$; $df=20$; $p=0.003$). The most significant differences where present in the statement: I lack company ($t=6.821$; $df=20$; $p=0.000$) (Table 1).

The questionnaire developed to evaluate everyday life in the nursing home showed that 17 participants had different activities in the facility, 20 had contacts with friends/family, and also 20 felt good living in the nursing home. From a set of questions considering residents' attitude towards animals we can point out that the inclination towards owning a dog or cat between participants was equal (dog N=11, cat N=10), 7 of participants were not pet owners prior to our investigation, 7 were dog owners, 5 cat owners and 2 were both dog and cat owners.

TABLE 1
SCALE OF LONELINESS

1. I lack company.
2. I have not felt close to someone for a long time.
3. I don't share my thoughts and ideas with other people.
4. No-one knows me well.
5. My social relations are superficial.
6. Being unsociable makes me unhappy.
7. People are around me, but not with me.

Furthermore, we wanted to find out if the results on the Scale of loneliness differ between the participants who were pet owners prior to AAT program and ones that were not. Although our assumption that previous experience in pet ownership might be connected with greater effect of AAT on reducing the loneliness, the results revealed that there is no difference between participants that were and those that were not prior pet owners in the influence of AAT on perception of loneliness ($t=-1{,}099$; $df=19$; $p=0{,}285$).

The participants' behavior towards the dogs is shown in Figure 1. The most frequent reactions were: talking to the dog, petting the dog, expressing joy by smiling and cheerfulness. It was noted that all of the participants expressed joy, most of them petted and some talked to the dogs.

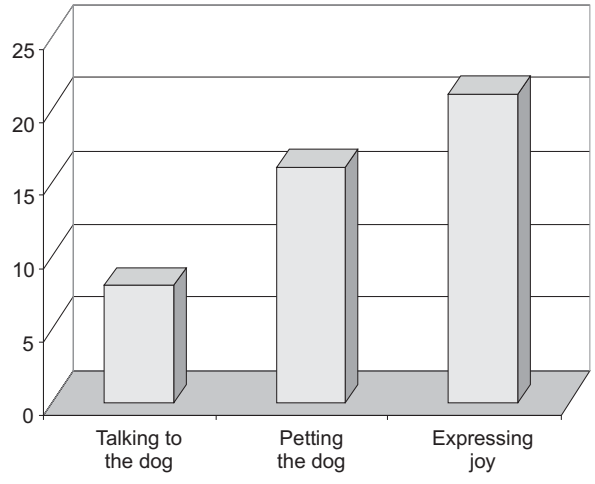

Fig. 1. Participants' behavior towards the dog.

The research also showed that half of the participants considered the availability of animal companionship very important, while 16 participants felt that pet animals enhanced their quality of life in the institution. Most of the residents included in the investigation (90%) found taking care of a pet important and enjoyed spending time with animals (100%). Nearly all participants (96%) stated that spending time with the animal enhanced their mood improvement (Table 2).

TABLE 2
PARTICIPANTS' EVALUATION OF CONDUCTED AAT

		N	%
Overall time spent with the animal	Pleasant	21	100
	Unpleasant	0	0
Importance of time spent with the animal	Low	8	38
	Medium	3	14
	High	10	48
Mood improved during association with the animal	Yes	20	96
	No	1	4
Quality of life improved due to AAT	Yes	16	76
	No	5	24
Did you find caring for the animal fulfilling	Yes	19	90
	No	2	10

During the six-month AAT program, the authors of this study noticed additional impacts of the AAT on the participants. Several residents included in the program had been living a solitary life and had minimum or no communication with other inpatients. With time, they started reminiscing about pets they had previously owned, and sharing their experiences with other participants. By the end of the study, the group would meet earlier than the time scheduled for the therapy and would engage in the free communication. The same was true after the dogs were removed at the end of the session.

Discussion

In adults, taking care of an animal is related to taking care of oneself[32] with respect to daily activity, expressing emotions and communication. Animal care contributes to improvement of emotional and psychological well-being of nursing-home residents in a quantitatively measurable way.

In our study we evaluated psychological effects of visiting dogs in a geriatric nursing home resident population, demonstrating an effect of AAT on the reducing the perception of loneliness. Of all 21 participants involved in the study, 14 of them had previously owed a pet. The interest for AAT among these participants was expected, since Banks and Banks[9] found out that the desire for AAT strongly correlates with previous pet ownership.

The results of the investigation showed that the time spent with the animal reduces the feeling of loneliness. Besides that, it increases social behavior and thus improves psychological and psychosocial condition of participants. Our results are in agreement with the previous research demonstrating that pet therapy enhances the daily quality of life of nursing home patients[28,33,34].

Although the results of this study cannot be generalized because of the low number of participants, we find them to be promising. Also, there was no control group in the investigation, rendering it impossible to definitively conclude that only AAT itself had an effect on improving life quality and reducing the feeling of loneliness. How-

ever, we can discuss the connection between these variables and the AAT.

To conclude, this investigation showed that participation in a dog visitation program during a six-month period reduced the perception level of loneliness in all participants. During the program, all participants enjoyed spending time with the dogs and considered taking care of the animals and the program itself significant for the enhancement of the quality of life in the institution. Our observation and subjectively evaluation showed that physical activity and interaction among participants increased in the AAT.

The results of the investigation offer a possibility of introducing effective and economic AAT programs that would help reduce physiological and psychosocial health problems related to institutionalization in elderly adults.

Most geriatric nursing homes offer a variety of activities with the purpose of enhancing quality of life through social interaction and physical activity. We believe that offering an AAT program as a low cost therapeutic intervention would significantly contribute to improving the quality of life for nursing home residents.

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TERAPIJA POTPOMOGNUTA ŽIVOTINJAMA I OSJEĆAJ USAMLJENOSTI KOD OSOBA U DOMU ZA STARIJE I NEMOĆNE OSOBE

SAŽETAK

Korištenje životinja u terapijske svrhe (engl. animal assited therapy, AAT) jedan je od načina pozitivnog utjecaja na kvalitetu života ljudi koji dulji vremenski period borave u ustanovi. Cilj rada bio je utvrditi da li mogućnost boravka sa psom kao oblik AAT utječe na smanjenje osjećaja usamljenosti kod osoba smještenih u domu za starije i nemoćne. Korisnicima doma je u razdoblju od 6 mjeseci omogućen boravak sa psom tri puta na tjedan u trajanju od 90 minuta. U istraživanju je sudjelovao 21 ispitanik prosječne dobi 80 godina. Kao mjera usamljenosti korištena je kratka verzija UCLA skale usamljenosti, a u obradi rezultata t-test za zavisne uzorke. Usporedba rezultata prije i nakon programa AAT pokazale je da boravak sa psom smanjuje osjećaj usamljenosti.