

Pet Therapy Uses with Geriatric Adults

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Abstract

This paper is about the geriatric population of patients that had Pet Therapy and those that did not. The purpose of this paper to reject the null hypothesis and to prove the alternative hypothesis as correct, by showing how Pet assisted therapy is used with geriatric participants with the rehabilitation process : in the length of stay , physical and psychological attitudes.. This study is based on one hundred transitional care unit patients that were observed over a three month period. The patients are a geriatric age group over 65 plus. The diagnosis looked at are orthopedic, hypertension, aids, dementia and other medical conditios. The scope and delimitations of the study will be represented by a geriatric age group characterized by four disease srates. The gender and the ethnicity of the participants were not restricted.

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Chapter I Background of the Problem

Introduction

Pet Assisted Therapy (Pet) is the utilization of animals as a therapeutic modality to facilitate healing and rehabilitation of patients with acute or chronic ailments (Curran, 1996). Pet assisted therapy covers a wide range of activities, from a simple visit to a patient to provide company, through providing stimulation and muscle-coordination retraining to a stroke victim, or independent living assistant to the physically handicapped. The mere presence of a dog may facilitate interactions with the non-communicative patient, assist in recall of memories and help sequence temporal events in patients with head injuries or chronic degenerative diseases of the brain such as Alzheimer's disease, and teach appropriate behavior patterns in those with emotional disabilities (Goldman, 1990).

Many studies have been developed to measure aspects of human interactions with pets (Katcher, Friedman, Goodman & Goodman, 1988; Millot & Filatre, 1986; Stallones, Marx, & Johnson 1990) have demonstrated validity and reliability. Pets may provide unquestioning and constant sources of affection. Pets may teach patients people to enhance the self-esteem of the individual and may assist people in socializing with one another (Zimmer, 1996). Despite proven benefits of Pet Assisted Therapy, there are many obstacles. The local and state boards of health facilities were causing problems because of the risk of infection from animal to patient

(Wise, 1995). Additional problems include the temperament of the animal to be able to be steady in a stressful environment and not to be too distracted by various tubes and machines that may surround the patient (Hume, 1996). The other problem is proper animal training and assurance that there will be enough veterinarians to guarantee the pet has a clean bill of health (Perelle & Granville, 1991).

Statement of Problem

In the past two decades Pet Assisted Therapy has been used successfully with several populations: coronary patients (Friedman, Lynch, & Thomas, 1979), hospitalized psychiatric patients (Corson & Corson, 1981), emotionally disturbed (George, 1988), cancer patients, (Lee, 1984) and geriatric patients (Messent, 1986). Several studies report positive social behavior changes after introducing an animal into the nursing home environment or hospital. (Corson & Corson, 1981) found a decrease in patient's sense of loneliness and social withdrawal and an increase in patient's positive interactions with staff when dogs were brought to a nursing home or hospital.

The Australian Joint Advisory Committee on Pets in Society conducted a six-month study of the interaction of 60 nursing home residents with a dog. Using pre and posttest questionnaires they found positive behavior changes in interest and conversation, and an increase in participation in activities of daily living. (Salmon, Hogarth-Scott & Lavelle, 1982).

Studies show that pets can aid relaxation, lower one's blood pressure, promote heal and prolong life. They help us to unwind, by the affection they give. Stress and anxiety is eased. Many of our medical providers know that if you suffer from heart disease or stress, a cuddle a day by a pet may keep the doctor away (Robertson, 1990).

With the addition of a well-trained handler/health care worker, the mere presence of a dog may facilitate therapeutic intervention with the non-communicative patient, assist in recall of memories and help sequence temporal events in patients with head injuries or chronic degenerative diseases of the brain such as Alzheimer's disease, and teach appropriate behavior patterns to those with emotional disabilities.(Brickel, 1991).

Research Question

Pet therapy will result in shorter length of stay in institutions, improve physical outcomes, and enhance mental health attitudes in geriatric rehabilitation patients. The purpose of this study was to determine the outcome of geriatric patients that received Pet Therapy or do not receive Pet Therapy as part of their rehabilitation.

Statement of Hypothesis

The research objective of this study is to test the following null hypothesis: There is no difference in physical or psychological outcomes of geriatric patients that receive Pet Therapy and those that do not receive Pet Therapy with their rehabilitation. The data is expected to support the rejection of the null hypothesis and acceptance of the alternative hypothesis: There is a relationship between the introduction of an animal, and a patients' resulting mental health status in geriatric patients and psychological well-being that received Pet Assisted Therapy with their rehabilitation and those that did not.

Definition of Terms

The dependent variables were a) geriatric patient's reaction to therapy and the therapist when a

pet was used in therapy b) patient's progress after 12 weeks with the use of a pet during their therapy. The independent variable is a) study done in a transitional care unit using pets over a 12 week period, using a observational visual questionnaire to measure the degree of satisfaction of their therapy using pets b) control: the difference of the male and female patients over 12 weeks with the use of Pet therapy.

Importance of the Study

The medical literature contains numerous articles documenting the objective health benefits of pet assisted therapy in a stroke patient. Pets provide stimulation and muscle-coordination retraining to a stroke victim by having the patient pet a dog or throw a ball for a game of fetch (Edwards, 1994). Another study shows therapeutic interaction with the non-communicative patient, assist in recall of memories and help sequence temporal patients with head injuries or chronic degenerative diseases of the brain such as Alzheimer's disease. This study showed increase progress in memory of an Alzheimer's patient within just a 1-month time. Many studies have shown that pets are psychologically important to the elderly, as they help stimulate socialization by providing a topic of conversation and a reason to live, especially after the patient has suffered a loss of a husband or wife. A pet can help us cope not only with the loss of a loved one but help us adapt to changing circumstances such as an illness or a change in living arrangements (Robertson, 1990).

Animals do not just provide love and affection for people who need it. They are also used as a therapeutic tool. The importance of this study is an initial attempt to quantify the results of a Pet Assisted Therapy intervention.

Scope and Delimitations of the Study

The study will examine the increase in socialization that occurred with the use of pets and the positive socialization of geriatric age group participants. It is limited to geriatric patients requiring varying degrees of skilled nursing care. Their ages were, 55-85 years. Gender or ethnicity did not limit the scope. Control subjects were not matched for the degree of ambulating some were in wheel chairs others could walk without assisted devices. Only participants falling into four disease categories were included in the study, limiting the data extrapolation to patients with these types of diseases. The measurements and questionnaires were collected in the year 1999. The patient population of the Sherman Oaks Transitional Care Unit is primarily WASP; thus the ability to generalize their results is limited to other similar populations.

Chapter II: Review of Related Literature

This review of literature will focus on, a) increase in socialization of patients in a nursing home with the use of pets, b) the degree of improved physical therapy seen in patient's with the use of pets as part of their rehabilitation, and c) the improvement of psychological well meaning in Dementia and Alzheimer patients.

Animals have been associated with humans for at least fifty thousands years, initially perhaps as scavengers, then as working companions, as domesticated sources of food, and finally as pets and sources of pleasure (Lorenz, 1965). It is reasonable to assume an evolutionary advantage accrued to humans who maintained a beneficial relationship with animals, that is, humans who used animals profitably may have been able to reproduce at a greater rate than those who did not make use of animals may. Modern humans would be genetically predisposed to keep and derive comfort from animals. Vast numbers of urban and suburban dwelling humans have no

economic need to keep animals these days; a very large population of them does keep one or more companion animals. (Beck & Katcher, 1983)..

Lynch, Thomas, and Weir (1993) examined marked physiological response in-patients' that had a dog to pet. The heart rate of a patient with dementia decreased to 5 beats per minute when he was introduced to a dog and was allowed to pet him. The result was collected at a nursing home that specialized in dementia patients. The dogs were introduced to the patient's hourly for 4 hours then every other day this was the control group. The independent variables were represent by the nursing staff and the patient's family. Arguments against the study were voiced because they felt that the patients responded to their family members rather than the pets.

The beneficial effect of pet ownership has been suggested by the lower, one-year mortality rate of pet owners discharged from a hospital coronary care unit. Of a sample of 92 people admitted to a coronary care unit with a diagnosis of myocardial infarction or angina, 53 patients owned pets (Freidman, Katcher, Lynch, & Thomas, 1990). Eleven of the thirty-nine people who did not own pets died within a year of admission to the hospital while only three of the 53 pet owners died (Gunby, 1989). Those who owned pets represented the control group.

Despite other complications that may represent greater importance to determine survival after admission to a coronary care unit, pet ownership may prolong survival after discharge from a coronary care unit (Wright & Moore, 1982).

Pet ownership may prolong survival after discharge from a coronary care unit though unknown mechanisms and uncertain variables (Friedman & Katcher, 1983).

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The Baker Medical Research Institute did a study of the risk of cardiovascular disease in pet owners and non-owners in order to see if there is a correlation between pets and physical well being. (Anderson, 1992). Men who owned pets had significantly lower systolic (but not diastolic) blood pressure than the man who was not pet owners did, and they also had significantly lower serum triglycerids and cholesterol levels. (Anderson, 1992). In the women group over 40 same blood pressure results as well as plasma blood levels with patients that had pets and those that did not. The reason for these results is that pet owners got more exercise than the non-owners did. The researchers came to the conclusion that the pet owners in their study had "lower levels of accepted risk factors for cardiovascular disease, and this was not explicable on the basis of smoking, diet, body mass index, or socioeconomic profile."(Anderson, 1992, p. 157).

Research done in Australia by Morgan Research had some interesting findings concerning the estimates of health savings for pet owners. Dog and cat owners visited doctor 4.41 times per year, whereas all others visited 5 times. Therefore, the savings were \$790 million on health expenditure annually after the figures were completed. The savings for internal medicine visits were \$44.754 million annually, pharmaceuticals were \$31.430 million and hospitalization was \$ 186.3 million. The grand total that the researchers came up with was \$262.484 million. (Humphries, 1994)

Beneficial effects of pet ownership on general health of senior citizens were suggested by a prospective yearlong study of 938 Medicare enrollees in an HMO. These pet owners had fewer visits to the doctor within that year (Siegel, 1990). Owning a pet can give us a great deal of pleasure and enjoyment. Having pets is beneficial for people with AIDS or HIV. (Siegel, 1992). Having a dog around constantly nuzzling and seeking affection can be a major high point in the life of someone who has AIDS or HIV, when people tend to shun them. The pet will not abandon them when times are tough and nobody seems to care. The pet will provide companionship and joy that is often difficult to find when he is infected with this deadly disease.

Pet Assisted Therapy in acute general hospital patients provides a home-like atmosphere. They are noted to have an uplifting effect on patients, visitors and staff. Goals of pet assisted therapy programs include the reduction of stress and anxiety associated with hospitalization (Kleczynski, 1994). The presence of the dogs on the wards of an acute care general hospital does enhance the therapeutic milieu.

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Improvements in the quality of life in nursing homes have been suggested by a survey of the effectiveness of a pet therapy program of monthly visits to nursing homes in Florida. Commonly reported effects of the visits included shared experiences among residents, more socialization among residents and it gave them something to anticipate. A pet therapy program appeared to improve the quality of life for some residents of nursing homes in Florida (Yates, 1987).

Several reports document the benefits of pets for senior citizens (Wilson & Netting, 1983; Ryder, 1985., Serpell; 1996). The participants in the study were represented by 59 senior citizens living in a group residence, to assess the desire to have contact with animals. Patients with good physical mobility, and no impairments of their eyesight represented the group that wanted to have the animals. Pet ownership is associated with evidence of psychological health in some senior citizens (Kidd & Feldman, 1981; Rogers, Hart, & Boltz, 1993).

In a prospective study of 66 seniors citizens residing in two facilities, attendance at dog activity sessions was higher than attendance at other activity sessions (Neer, Dorn, & Grayson, 1987). In pet therapy the pet functions as a catalyst to facilitate human contacts. The pet provides emotional support, and motivated walks and other activities resulting in interaction with other human beings (Gagman, 1992).

Indications hypothesized to benefit from pet assisted therapy include loneliness, depression, inactivity, fatigue and arterial hypertension (Bustad, 1989). A prospective study analyzed the effects of the introduction of a resident dog to a nursing home. The majority of the residents felt that the dog was good for others. The data was collected through interviews of 50 patients. The independent variable of patients and the dog were recorded by audiotape. The dependent variable of increase socialization was measured via a five point Likert scale questionnaire. The hypothesis that there was increase socialization with the introduction of the dog was supported. The findings suggest that the patients were more social and verbal after the session with the dog than before (Verderber, 1991)

Nursing homes use dogs to interact with the residents. Bonds develop between the dogs and the residents. Bringing the dogs in fulfill the elder's need to nurture. The residents become more

alert after being with the dogs. Many nursing homes have different ways of using dogs as therapeutic tools. One in Oregon has its residents observe the dogs being trained in their parking lot, and then ask the residents to play with the dogs. This stimulates conversation among the residents. Dogs also seem to make the residents smile. (Sanderson, 1994)

Bringing dogs into nursing homes is also used as physical therapy. Most of the residents love to pet animals. This is better than physical therapy for their arthritic fingers. Mentally it gives them something to think about. Seeing the same faces every day can be very boring. So when the dogs are brought in they strive to remember their names and when they do they are very proud. According to the National Institutes of Health, among older people the ownership of pets does not help the general illness status but does act in combating depression. Pet Therapy has had more positive response in nursing homes in comparison to arts and crafts or visitors coming in to visit for the day. The benefits of interaction with pets are many. Visits with therapy pets encourage reminiscences and social interaction, and result in stress relief and incidental physiotherapy. (Island, 1996). Often a visit with a pet is the high point in a shut-ins day, bringing happiness and a sense of well being.

Chapter III: Methodology

Introduction

The purpose of this research was to prove an increase in socialization of geriatric patients in a transitional care setting that have been exposed to pet assisted therapy; and improvement of psychological well being and socialization skills with the use of pet assisted therapy as part of their rehabilitation. This study is significant to other forms of rehabilitation on geriatric patients with or without the use of pet therapy. This was done in a case control design. The research goal was to evaluate geriatric patient's socialization skills and psychological well being with the use of pet assisted therapy to measure improvement, failure or no change. This is needed to determine if the co-variable pet assisted therapy was directly proportional to the improved socialization skills and improved psychological well being.

Selection of Participants

A total of 100 patients were examined for change in psychological well being and socialization skills over a 3 month period of time. These patients were screened and those having the following conditions were included in the study, 1) hypertension, 2) CVA, 3) cardiac problems, and 4) Alzheimer's or dementia, and 5) Aids or HIV. The subjects were geriatric age but there were no gender or ethnic restrictions in this study.

Research Design

Once meeting the criteria, the patients were introduced to pet assisted therapy 1.5 hour per day once a week for three months. Besides petting the dog, more than half of the subjects let the dog lick them. The researchers was not able to observe the patients that did not have pet therapy because less than 1% of the population at the transitional care unit at Sherman Oaks refused to see the dog. Observation of the participants who saw the dog more than once was a bond growing and the desire to give the dog a treat.

Instrumentation

The success of Pet Therapy was measured by a self- designed questionnaire given to the transitional care patients by myself based on how the dog made them feel. The instrument used will be similar to the Lakers scale. The quantitative measurement were records of the times a

participant had pet therapy as well as the increase positive behaviors that was observed before and after Pet Therapy was initiated.

Treatment of Data

The data was analyzed in terms of physiological and emotional statistical differences between measured variables; in this case the differences by gender.

Chapter IV: Data Presentation and Analysis

Presentation of Data

The sample was comprised of 100 TCU (transitional care patients). There were 34 male patients and 66 females patients. The age range was 50-70+; they were convalescing from their various ailments. Table 1 presents the number of visits that were made by the pet and therapist and the emotional effect of having the patient visit more than once. The largest effect on emotional well being is the ability to forget emotional and physical pain; this data was not discriminated by sex but by all participants in this study.

Table 1 How does Pet Therapy make you feel?

<u>No. Of visits</u>	<u>Emotion displayed</u>
Five + Visit	Emotional pain diminishes the most Physical pain diminishes the most Less boredom the most Happiest the most Less anxious the most
Three Visit Emotional pain less	Physical pain less Less bored Happier Less anxious
One Visit Happy	Less bored Less anxious

Presentation of Data

The sample was comprised of 100 TCU patients, ages 50-70 plus. This graph shows ages of patients with the diagnosis of Orthopedics. The largest age groups for this diagnosis is the 70 plus group and the oldest and the smallest group is the 50 plus group the youngest age group.

Table II Diagnosis –Orthopedics

<u>Age</u>	<u>No. patients</u>
50-60	4
61-65	50
66-69	10
70 plus	64

Presentation of Data

The sample was comprised of 100 TCU patients, age’s 50-70 years of age. This graph shows the ages of patients with the diagnosis of hypertension. The youngest age group is represented by the smallest amount of patients, while the oldest age group is represented the by the largest

amount of patients. The population is both male and female.

Table III Diagnosis Hypertension

Age	No. Patients
50-60	3
61-65	8
66-69	4
70 plus	15

Presentation of Data

The sample was comprised of 100 TCU patients, ages 50-70 plus. The graph shows patients with the diagnosis of Aids and their age group. The largest age group is the oldest 70 plus yr., while the smallest no. is the age group represented by 66-69 yr., no is 0. The population is both male and female.

Table IV Diagnosis Aids

Age	No. Patients
50-60	2
61-65	1
66-69	0
70 plus	3

Presentation of Data

The sample was comprised of 100 TCU patients, ages 50-70 plus. The graph represents patients with the diagnosis of Dementia, the smallest group 50-60, represents 9, the largest group represents the oldest 70 plus, 5 patients. Men and women represented this group.

Table V Diagnosis Dementia

Age	No. Patients
50-60	0
61-65	4
66-69	1
70 plus	5

Presentation of Data

The sample was comprised of 100 TCU patients, ages 50-70 plus. The graph represents patients with the diagnosis of other diseases, ages 50- 70 plus, the smallest group is represented by the youngest group, 50-60, while the largest group is represented by the oldest group, 70 plus. Men and women represented this group.

Table VI Diagnosis Other Diseases

Age	No. Patients
50-60	1
61-65	8
66-69	4
70 plus	13

Presentation of Data

The sample was comprised of 100 TCU patients, for this graph only women were represented. This graph shows the feelings and emotions brought out by Pet Therapy. The largest emotion displayed was the show of affection by the pet; the smallest group was represented by other emotions.

Table VII what do you like about Pet Therapy? Women

Emotions	% female patients
Feel of the animal	14
Interaction (Visitor)	18
Show of Affection	22
Break with monotony	3
Happiness/Joy	23
Way to release emotion	7
Draw person out	9
Other	4

Presentation of Data

100 TCU patients comprised the sample, for this graph only men were represented. The largest emotion displayed was the feel of the animal and the smallest percentage was represented by show of affection.

Table VIII what do you like about Pet Therapy? Men

Emotion	% Male Patients
Feel of the Animal	24
Interaction (Visitor)	21
Show of Affection	0
Break with monotony	3
Happiness/Joy	7
Way to release emotion	8
Draw person out	16
Other	3

Appendix A

Questionnaire used for 100 TCU Patients

1. What do you like about Pet Therapy?

- _____ Feel of the animal
- _____ Interaction (Visitor)
- _____ Show of Affection
- _____ Break with Monotony
- _____ Happiness/ Joy
- _____ Way to release emotion
- _____ Draw person out
- _____ other

2. How does Pet Therapy make you feel?

- _____ less anxious

- _____ Less bored
- _____ Happier
- _____ Less pain
- _____ Do you forget about physical pain?
- _____ Do you forget about emotional pain?

3. Repeat visit with dog

- _____ Once
- _____ More than three times
- _____ More than five times

Chapter V: Summary, Conclusions and Recommendations

The data has supported the alternative hypothesis that there is a difference between the emotional well being and psychological attitudes of patients participating in Pet Therapy than those who did not received Pet Therapy. The purpose of this study was to prove that Pet Therapy has a place for rehabilitation in the health care setting. The limitations of this study were time, (only had 12 weeks), and the ability to visit more than one facility that uses Pet Therapy.

Pet Therapy began in the state of California more than 20 years ago. The program is designed to share animals with people of all ages in facilities such as convalescent homes, hospitals, mental health centers, abused children's homes and juvenile detention. Volunteers play a large role in the success of this program.

To conclude, a study done on premature babies and in hospice unit representing the beginning and end of life would expand the domain of this research.

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