

# Nurse's Opinion: Can Pet Therapy Be Used in the Treatment and Care of Chronic Diseases?

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## ABSTRACT

**Purpose:** Animal-assisted therapies are used to alleviate disease-related symptoms and are delivered independently by nurses. The aim of this study was to assess nurses' opinions on the use of pet therapy in the treatment and care of chronic diseases.

**Methods:** Data were collected through face-to-face interviews between October 2021 and April 2022. A total of 167 nurses were reached. The data collection used the Socio-demographic Characteristics Questionnaire, Views on Care of People with Chronic Diseases Questionnaire, Views on Use of Pet Therapy Questionnaire and Preferences on Use of Pet Therapy Questionnaire. A descriptive study design was used in adherence to the STROBE checklist.

**Results:** We found that the nurses had not heard of pet therapy, wanted to use incorporate it into their practices through training and indicated that it could done with live animals, especially for disadvantaged groups. It was also evident that they felt that animal-assisted therapy applications would provide psychosocial support to patients.

**Conclusion:** Given that pet therapy is considered to have positive effects in disease management, it is believed to be important for nurses as it can contribute to patient care processes.

**Keywords:** chronic diseases, nursing care, pet therapy

## ÖZET

**Giriş:** Kronik hastalıklar, yaşam tarzı değişiklikleriyle yönetilebilir olsa da, bireyler, aileler ve toplum için yıkıcı sonuçlar doğurabilir, sağlık sistemleri üzerinde büyük bir yük oluşturabilir. Pet terapiler, hastalıkla ilgili semptomları hafifletmek için kullanılmakta ve hemşireler tarafından bağımsız olarak uygulanabilmektedir. Bu çalışmanın amacı, hemşirelerin kronik hastalıkların tedavi ve bakımında pet terapinin kullanımına ilişkin görüşlerini değerlendirmektir.

**Yöntem:** Veriler Ekim 2021-Nisan 2022 tarihleri arasında yüz yüze görüşmeler yoluyla toplanmıştır. Toplam 167 hemşireye ulaşılmıştır. Verilerin toplanmasında literatür doğrultusunda hazırlanan Sosyo-demografik Özellikler Anketi, Kronik Hastalığı Olan Bireylerin Bakımına İlişkin Görüşler Anketi, Pet Terapi Kullanımına İlişkin Görüşler Anketi ve Pet Terapi Kullanımına İlişkin Tercihler Anketi kullanılmıştır. STROBE kontrol listesine uygun olarak tanımlayıcı bir çalışma tasarımı kullanılmıştır.

**Bulgular:** Hemşirelerin pet terpiyi duymadıklarını, eğitim yoluyla uygulamalarına dahil etmek istediklerini ve özellikle dezavantajlı gruplar için canlı hayvanlarla yapılabileceğini belirttikleri belirlendi. Ayrıca, hayvan destekli terapi uygulamalarının hastalara psikososyal destek sağlayacağını düşündükleri ve hemşirelik bakımına pet terapileri dahil etmenin, mesleki görünürlüğü ve gücü artıracığını da düşündükleri tespit edildi.

**Sonuç:** Pet terapisinin hastalık yönetiminde olumlu etkileri olduğu düşünüldüğünde, hasta bakım süreçlerine katkı sağlayabileceği için hemşireler açısından önemli olduğu düşünülmektedir.

**Anahtar Kelimeler:** kronik hastalık, hemşirelik bakımı, pet terapi

**C**hronic diseases, also known as non-communicable diseases, occur with a combination of genetic, physiological, environmental and behavioral factors, which are long-term, usually progress slowly, where pharmacological treatment is insufficient (1). With chronic diseases, it is important to provide periodic monitoring and support to stop the progression of the disease, improve self-care, and maximize the function and responsibility of the person (2).

Chronic diseases are responsible for almost 74% of all deaths worldwide according to the World Health Organisation (WHO) data for September 2022. Moreover, 77% of these deaths are in countries with low- and middle-income levels. Although people from all age groups, regions and countries are affected by chronic diseases, the increase in chronic diseases is caused by factors such as tobacco use, physical inactivity, excessive alcohol use and unhealthy diet (1).

Although chronic diseases can be controlled and prevented through lifestyle changes, they cause devastating health consequences for the individual, family and society and place a burden health systems (2). The burden associated with chronic diseases makes the prevention and control of these diseases a necessity for the 21st century. WHO emphasizes the importance of an evidence-based approach for international action in the diagnosis, follow-up, surveillance, prevention and control of chronic diseases to reduce the burden (1).

The aim of evidence-based nursing care is to strengthen individuals' coping with psychological, social and physiological changes and to increase their adaptation to the disease. At the same time, this care requires nurses to provide up-to-date and effective interventions and to evaluate the effectiveness of these intervention programs (3). Although there are many methods to support individuals with chronic diseases in terms of bio-psycho-social aspects, one of these methods is pet therapies based on human-animal interaction. Pet therapy has been included in the Nursing Interventions Classification (NIC) under the name "Animal Assisted Therapy" since 2004(4).

The results of the studies in the literature reveal that pet therapy is one of the effective methods to reduce anxiety and stress levels in the treatment and care of individuals with chronic diseases(5-7). Studies on pet therapy have shown that the presence of animals improves the individual's emotional expression, communication and self-care competencies(5), strengthens the immune system(8), helps in the treatment and maintenance

of chronic muscle nervous system diseases, provides treatment and rehabilitation of different motor disorders(5), regulates the cardiovascular system(6), alleviates pain and reduces pain-related insomnia(9), improves health perception(6).

Although published studies indicate the use of pet therapies in caring for people with chronic diseases, there are two experimental studies(7,10) and one descriptive master's thesis(11) that assess healthcare professionals' views on this topic in our country. Additionally, a descriptive study aiming to evaluate the perspective of other experts on this subject has been identified (12). Intervention studies have investigated the effects of pet therapies on pain during insulin administration in children with diabetes and the effects of pet therapies on stress and social anxiety levels in physically disabled children, and the studies yielded positive results(7,10).

The use of pet therapy, one of the nursing interventions, as a supportive measure in treatment and care centers in the world and in our country is very limited. We believe that it is important to assess our colleagues' awareness of this issue in order to actively use pet therapy, in the context of care and practice. The study will evaluate the opinions of nurses working with people with chronic diseases in order to expand the use of pet therapy and to determine the level of awareness of nurses regarding the use of animals in the care of these patients. This study was conducted to evaluate nurses' views on the use of pet therapy in the treatment and care of chronic diseases.

## Materials and Methods

### Design

This is a descriptive study.

### Recruitment and participants

The study data were collected face-to-face by contacting nurses working in Istanbul. Snowball sampling method was used to collect the data. The study was carried out with 167 nurses working in the internal medicine wards of hospitals where chronic patients were hospitalised and who volunteered to participate in the study. 97 people who had not been working in the clinic for at least 6 months and did not have the title of nurse were excluded from the study. 39 nurses refused to participate in the study for various reasons (work intensity, shift end time, etc.).

### Data collection

The study data were collected face-to-face between October and April 2021. The data collection consisted of a socio-demographic characteristics information form prepared in line with the literature, a form about their views on caring for a person with chronic disease, a form for determining the views on the use of pet therapy, and a form questioning their preferences for pet therapy application.

### Statistical Analysis

The data obtained from the research were analysed using SPSS 23.0 package program. Descriptive statistics such as frequency distribution, mean, standard deviation were used to describe the sample in the evaluation of the data.

### Ethical consideration

Consent was obtained from the ethics committee

of the university before starting data collection (09.28.2021/8480). The purpose of the study was explained to the participants who met the inclusion criteria, and their verbal and written consent was obtained. The Declaration of Helsinki was adhered to throughout the study.

## Results

### Sociodemographic characteristics of nurses

The mean age of the nurses was  $26.34 \pm 5.99$  years, 85.6% were female, 50.3% had a bachelor's degree or higher, 67.1% were single, the mean duration of their employment was  $5.33 \pm 5.56$  years, 50.3% did not have an animal with which they interacted in the past or present, 22.2% of those who interacted had birds, the mean duration of animal care was  $4.48 \pm 4.04$  years, 85% stated that they generally loved their animals. (Table 1).

**Table 1: Nurses' views on caring for individuals with chronic diseases (n=167)**

Age (X $\pm$ SD) (Min-Max) (26.34 $\pm$ 5.99) (18-56)		
	n	%
<b>Gender</b>		
Female	143	85.6
Male	24	14.4
<b>Education</b>		
High school	33	19.8
Under graduate (2 years)	50	29.9
Bachelor's degree or higher	84	50.3
<b>Marital status</b>		
Married	55	32.9
Single	112	67.1
Employment duration (X $\pm$ SD) (Min-Max) (5.33 $\pm$ 5.56) (1-35) Year		
<b>Is there an animal you interact with/have taken care of in the past or present?</b>		
Yes	83	49.7
No	84	50.3
<b>Which animal/animals?*</b>		
Cat	35	21
Bird	37	22.2
Fish	30	18
Dog	24	14.4
Other	12	7.2
Animal care duration (X $\pm$ SD) (Min-Max) (4.48 $\pm$ 4.04) (1-21) Year		
<b>Your thoughts on animals in generally?</b>		
I love them	142	85
I'm afraid of them	13	7.8
It doesn't matter if they exist or not.	12	7.2

In the internal medicine clinic, 45.5% of the nurses stated that the group to which they provided the most care was adults (55.7%), female (40.1%), and patients with internal medicine diseases (35.3%). 94.6% of the nurses found it correct to apply pharmacological and psychosocial interventions together for the care and treatment of individuals with chronic diseases, 88%

preferred psychosocial interventions when caring for their patients, 71.9% stated that they had difficulty from time to time while caring for patients, 67.7% stated that they had difficulty in meeting the characteristics and care needs of chronic disease, and 95.2% stated that they provided training to facilitate the patient's coping with the disease (Table 2).

<b>Table 2: Determination of nurses' opinions on the use of pet therapy</b>		
<b>Age (X±SD) (Min-Max) (26.34±5.99) (18-56)</b>		
	<b>n</b>	<b>%</b>
<b>Currently working clinic</b>		
Family health center	14	8.4
Pediatric	13	7.8
Infection disease	12	7.2
Physical therapy and rehabilitation	3	1.8
Internal medicine	<b>76</b>	<b>45.5</b>
Other	49	29.3
<b>Which patient group are you most interested in?*</b>		
Female	<b>67</b>	<b>40.1</b>
Child	43	25.7
Adults	<b>93</b>	<b>55.7</b>
Older people	55	32.9
Neurologic patient	40	24
Psychiatric patient	18	10.8
With alcohol substance use disorder	21	12.6
Internal medicine clinic	<b>59</b>	<b>35.3</b>
Respiratory diseases	50	29.9
Oncologic diseases	24	14.4
<b>Opinions about care and treatment methods of individuals with chronic diseases</b>		
Only pharmacological or only psychosocial intervention is effective.	9	5.4
Pharmacological and psychosocial interventions should be applied together.	<b>158</b>	<b>94.6</b>
<b>Preferred interventions when caring for patients*</b>		
Psychosocial interventions	<b>147</b>	<b>88</b>
Physical interventions	136	81.4
Non-pharmacologic interventions	37	22.2
Supporting human-animal interaction	14	8.4
<b>Do you have difficulties in caring for patients?</b>		
Yes, I'm difficulting.	22	13.2
I have difficulty from time to time	<b>120</b>	<b>71.9</b>
No, I'm not difficulting.	25	15
<b>Reasons for difficulty in caring for patients*</b>		
High need for care	<b>147</b>	<b>88</b>
Reasons attached to the nurse himself/herself	113	67.7
From physical working conditions	39	23.4
<b>To make it easier for the patient to cope with the disease*</b>		
Educating	<b>159</b>	<b>95.2</b>
I support psychosocially	115	68.9
I support the regulation of physical conditions	13	7.8
<i>*More than one option is marked.</i>		

59.9% of the nurses stated that they had not heard of animal assisted practice/pet therapy before, 47.9% of those who had heard of it had heard about it from the news, 52.1% stated that pet therapy could not be applied in our country, 78.4% stated that it could not be applied in the institution where they work, 91% thought that it

could be applied to patients in childhood, 79% stated that it could be applied in disadvantaged groups, 93.4% stated that it could be applied in health institutions and organizations and 73.1% stated that it could be applied in psychiatry clinics (Table 3).

**Table 3:** Determination of nurses' opinions on the use of pet therapy

Age (X±SD) (Min-Max) (26.34±5.99) (18-56)		
	n	%
<b>Have you heard of animal-assisted practice/pet therapy before?</b>		
Yes	67	40.1
No	<b>100</b>	<b>59.9</b>
<b>If yes, where did you get this information?</b>		
News	<b>32</b>	<b>47.9</b>
Social media	26	40.1
Literature	9	12
<b>Can pet therapy be applied in our country?</b>		
Yes	80	47.9
No	<b>87</b>	<b>52.1</b>
<b>Can pet therapy be applied in your institution?</b>		
Yes	36	21.6
No	<b>131</b>	<b>78.4</b>
<b>In which developmental stages can pet therapy be applied? *</b>		
Childhood	<b>152</b>	<b>91</b>
Adult	133	79.6
Older people	132	79
<b>In which patient groups can pet therapy be applied?</b>		
Healthy individuals	78	46.7
Disadvantages groups	<b>132</b>	<b>79</b>
Individuals who have/will undergo a surgical operation	36	21.6
Individuals with chronic diseases	102	61.1
<b>In which institutions can pet therapy be applied in our country?</b>		
Health institutions and organizations	<b>156</b>	<b>93.4</b>
Institutions that care for disadvantaged groups	135	80.3
Units related to legal processes	28	16.8
Schools	90	53.9
<b>In which clinics can pet therapy be applied?</b>		
Oncology clinics	83	49.7
Pediatrics clinics	96	57.5
Surgical clinics	54	32.3
Psychiatry clinics	<b>122</b>	<b>73.1</b>
Internal medicine clinics	65	38.9
Pain management clinics	79	47.3
Sleep disorders clinics	86	51.5
* More than one option is marked.		

74.9% of the nurses stated that if they were to apply pet therapy, they would prefer live animals, 77.8% would prefer cats, 95.2% stated that applying pet therapy would have positive psychosocial effects, 91.6% thought that

pet therapies could be applied as a nursing intervention in people with chronic diseases, and 79% stated that they wanted to apply pet therapy after receiving the necessary training (Table 4).

**Table 4:** Nurses' preferences for the application of the pet therapy

Age (X±SD) (Min-Max) (26.34±5.99) (18-56)		
	n	%
<b>What kind of animals would the pet prefer if she/he was going to practice therapy?</b> Live animals Stuffed animals Robotics (NAO-Humanoid robot) Robotics animals (PARO-pet robot) Stories about animals	125 47 19 15 44	74.9 28.1 11.4 9 26.3
<b>Which animal would you prefer to use? *</b> Cat Dog Bird Fish Rabbit Hamster Farm animals Other	130 122 123 117 80 44 40 39	77.8 73.1 73.7 70.1 47.9 26.3 24 23.4
<b>What kind of effects can the application of pet therapies have on the individual?*</b> Supports personal development. Positive psychosocial effects. Positively affects the individual physically. It supports the interaction between the individual and the health professional. It increases the motivation of the employees. Negative psychosocial effects.	156 159 155 129 136 100	93.4 95.2 92.8 77.2 81.4 59.9
<b>Your opinion on the applicability of pet therapy as a nursing intervention in patients with chronic disease</b> It can be applied by nurses. Nurses may be insufficient in terms of both quantitative and qualitative aspects.	153 14	91.6 8.4
<b>Would you like to apply pet therapy as a nursing intervention in patients with chronic disease?*</b> I would like to apply after receiving the necessary training. I would like to apply it with a professional who knows the subject. I don't think nurses should do it.	132 124 65	79 74.3 38.9
* More than one option is marked.		

30.6% of nurses believe that implementing pet therapy in nursing practice would enhance the professional scope and visibility of the nursing profession, while 32.2% think it

would increase professional strength. Therefore, they have expresses a willingness to implement pet therapy as a nursing intervention in their practice areas ( $p=0.000$ ) (Table 5).

**Table 5:** The relationship between the desire for the implementation of pet therapy and its potential effects

Do they think that nurses should implement it?							
	Yes		No		Partially		χ2
	n	%	n	%	n	%	
It increases the visibility of nursing							
Yes	51	30,6	2	1,2	4	2,4	0.000
No	29	17,3	12	7,1	8	4,8	
Partially	35	21,0	5	3,0	21	12,6	
It increases professional strenght							
Yes	54	32,2	1	0,6	2	1,2	0.000
No	17	10,2	15	9,0	17	10,2	
Partially	31	18,6	3	1,8	27	16,2	

## Discussion

In this study, which was conducted to determine the awareness of caregivers caring for chronic patients on the use of pet therapy, we believe that several important findings were obtained. We found that due to the nature of the disease and the increased need for care, caregivers find it difficult to care for chronic patients and provide training to support them. Another important finding was that although most nurses had never heard of pet therapy, they indicated that it can be used with live animals and that they would like to use pet therapy after receiving training. It was also clear that nurses felt that animal-assisted therapies would provide psychosocial support to the patient when treating chronic diseases.

Pet therapies are used by nurses in the treatment and care of chronic diseases(13).A study conducted in the United Kingdom to determine nurses' views of pet ownership found that most participants had been employed for 3 to 5 years, were 40 years old or younger, and were full-time working women(13,14).A pilot study comparing various parameters between nurses with and without a pet reported that most participants were female, married, had an average age of 40.28 years and had been employed in the health sector for an average of 18.31 years (15). The majority of the sample in this study consisted of single, middle-aged females with university degrees and an

average length of employment of  $5.33 \pm 5.56$  years, and these characteristics were similar to those of nurses in human-animal interaction studies reported in the literature.

Almost half of the nurses who participated in our study reported that they had pets in the past or currently and that they generally liked animals. In a pilot study conducted to determine the potential benefits of human-animal interaction between nurses with and without pets, it was reported that slightly more than half of the nurses had pets(15). In this context, it can be said that the sample is similar. It was hypothesized that the fact that the majority of nurses also have a pet in their daily lives could be an important facilitating factor in increasing the predisposition to and willingness to practice animal-assisted therapy practices in nursing and in practice. Additionally, the literature indicates that nurses who are younger and have a higher level of education tend to have a more positive attitude towards innovative approaches(16). The participants in this study were young on average( $26.34 \pm 5.99$  years) and had a high level of education (50.3% had a bachelor's degree or higher). The fact that the majority of the nurse population in our study is young and has a bachelor's degree or higher level of education explains their willingness to implement pet therapy, an innovative approach, as a therapeutic intervention.



From past to present, various ties have been established between humans and animals, and animals have been included in artistic materials, religions, fairy tales, mythologies, and academic studies (17,18). Animals are frequently included in various stories in literature. For example, while various animals such as cats and birds appear in Djoha(17), there is a relationship between stereotypes and identities related to animals in children's storybooks. In these sources, cats and birds are identified with the female gender, while cats, birds and fish are grouped as animals suitable for urban life (18). Again, King(2007) emphasized the different characteristics of animals in human-animal interactions within the scope of health promotion(19). In our study, we determined that most of the nurses who kept animals kept cats, birds and fish and observed that the animals kept by the nurses were compatible with the animals identified with the female gender in the literature. The reason for this may be related to the fact that most of the sample consists of nurses of female gender. In addition, nurses fed animals referred to in the literature as urban pets.

There are studies examining nurses' opinions about pet therapies that reveal the benefits of human-animal interaction. It is understood that the nurses in these studies are paediatric(14), veterinary nurses(13) and health professionals in general(20). We found that most of the nurses worked in internal medicine wards and cared for adults. Although the study refers to nurses, it differs from the literature in that the nurses in our study predominantly care for adult patients and work in internal medicine.

Having a chronic disease brings many negative emotions such as coping with the symptoms of the disease, the limitations of the treatment, and concerns about the future. These negative emotions reduce the quality of life by affecting the cognitive, physical, and social life of the individual(21). Problems related to the disease not only challenge the patient but also the nurses who care for the patient. As it is understood from the literature, it is necessary to address the patient in a multidimensional way and contribute to improving the quality of life. It is thought that the nurses participating in this study also had difficulty in caring for their patients for similar reasons. Findings from a study examining the views and opinions of nurses regarding pet therapy indicate that pediatric nurses working with pets experience greater personal satisfaction at work, reduced burnout, express more positive feelings about their work, have higher job satisfaction, and experience less work-related depression

compared to the control group of nurses working under standard conditions without pets(22). Considering that pet therapy has positive effects on both patients and practitioners, it is thought that implementing pet therapy could be effective in enhancing the mental well-being of nurses who have significant responsibilities and face challenges in the treatment and care of chronic diseases.

Nurses face different problems while caring for chronic patients and pharmacological and non-pharmacological approaches are used to cope with these problems(23). Almost all of the nurses in our study found it correct to apply pharmacological and psychosocial interventions together in individuals with chronic diseases and preferred psychosocial interventions while caring for patients. While focusing on pharmacological treatment of patients as a student, non-pharmacological approaches are used more and more as experience and knowledge are gained. A study conducted with nurses caring for palliative care patients found that nurses mostly focus on self-care practices, symptom management and improving quality of life(24). The opinions of the nurses participating in the study were similar to those reported by the literature.

Nurses provided training to empower their chronic patients. In chronic diseases, not only the patient but also the patient's relatives should be included in care. Education is used to help patients and their relatives cope with the symptoms of chronic diseases and to support the patient's self-care. Education is one of the most effective methods of coping with the disease, although it can be provided in different ways, such as face-to-face, internet-based or written materials(25).

There are studies in literature examining the knowledge and opinions of nurses regarding pet therapy(11,26). In a study conducted in Turkey, it was stated that 15.7% of the participants (nurses, doctors, patients, and relatives) heard about animal-assisted applications and 2.2% of them applied it(26). It was found that 40.1% of the nurses participating in this study had heard of pet therapy practices. Pet therapies that can be applied by nurses can be applied in hospitals, nursing homes, nursing homes or through home visits(27). Nurses who implement pet therapy programs can take part in the intervention team(16) or can do this alone(7). Therefore, the underlying reason why a higher proportion of people heard of pet therapy practices in this study may be that only the nurse group was included. Since pet therapy or animal-assisted



practices are non-pharmacological methods, the nurse group is more familiar with this practice.

Most of the nurses participating in our study stated that they had not heard of pet therapy but wanted to learn about it, and that if it was to be applied, it could be applied in children and disadvantaged groups. In a pilot study conducted to evaluate the possible benefits of human-animal interaction in nurses, it was stated that the interaction has psychological benefits and can be applied even in a busy clinic(15). In a study conducted with nurses and parents of children in an oncology clinic, it was reported that dog-assisted therapy can contribute to alleviating psychological distress in children and parents, facilitating their adaptation to the therapeutic process, and improving their well-being during their hospital stay(14). Again, it has been reported that animal-assisted applications have positive results in pain management in paediatric patients (28). In another study, it was reported that animal-assisted practices had positive effects and reduced aggressive behaviors in chronic psychiatric patients(29). Studies on animal-assisted practices are generally carried out with disadvantaged and child groups. The opinions of nurses were similar to those reported by the literature.

In our study, the majority of participants also indicated that using pet therapy as a nursing intervention would increase the visibility and strength of nursing. Being powerful is part of being professional and maintaining a professional image. The study indicates a positive relationship between nurses' empowerment and quality of care, good patient outcomes, patient satisfaction, and job satisfaction (30). The willingness of participants to use pet therapy as a therapeutic intervention in their care and practices to enhance professional visibility and empowerment is considered an important finding both professionally and in terms of care quality.

## Limitations

The number of nurses participating in the study( $n=167$ ) was relatively low; participation could have been higher. Unfortunately, as is the case worldwide, nurses in Türkiye also face high workloads. As a result, the participation of nurses was lower than desired. Therefore, the results may not represent the general situation in Türkiye. Another limitation is that the data for the research were collected using a data collection form created by the researchers based on the literature. Using a scale with established

validity and reliability could have strengthened the study. On the other hand, 19 questions were asked to measure nurses' perceptions specific to pet therapy in the care of chronic patients. Thus, it is believed that this approach provided an opportunity to view the topic from a broader perspective. Nevertheless, it is advisable to use scales with established validity and reliability in future studies.

## Conclusions

The results of this study revealed that nurses had difficulty in caring for chronic patients, provided training to help patients cope with their illnesses, had not heard of pet therapy and wanted to apply it after receiving training, and thought that it could be applied with live animals, especially in disadvantaged groups. They thought that pet therapy applications would support patients psychosocially. It has been determined that nurses consider pet therapy to be an effective intervention in increasing professional visibility and empowerment.

## Declarations

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None.

### Conflict of Interest Statement

None.

### Data Availability Statement

The data that support the findings of this study are available on request from the corresponding author.

## References

1. World Health Organization. (2022). Noncommunicable diseases. <https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases> Accessed 24 March 2023
2. Özpulat, F. Kronik hastalıkların birey ve aile odaklı bakımında halk sağlığı hemşiresinin rolü. Türkiye Klinikleri J Public Health Nurs. 2017; Special Topics, 3: 77-82.
3. Bekiroğlu, S. and Attepe Özden, S. Psychosocial interventions for individuals with severe mental illness and their families in Turkey: A systematic review. Current Approaches in Psychiatry. 2021; 13(1):52-76. doi:10.18863/pgy.72198

4. NIC, (2004). Nursing Interventions Classification (NIC). 4th ed. 2004. <http://www.seaponline.org/uploads/documentation/Metodolog%C3%ADa%20Enfermera/labeldefinitions-NIC.pdf> Accessed 26 March 2023
5. Elmacı, D.T. and Cevizci, S. Dog-Assisted Therapies and Activities in rehabilitation of children with cerebral palsy and physical and mental disabilities. *International Journal of Environmental Research and Public Health*. 2015; 12: 5046-5060. doi:10.3390/ijerph120505046.
6. McCullough, A., Ruehrdanz, A., Jenkins, M.A., et al. (2018). Measuring the Effects of an Animal Assisted Intervention for Pediatric Oncology Patients and Their Parents: A Multisite Randomized Controlled Trial. *Journal of Pediatric Oncology Nursing*. 2018; 35:159-177.
7. Demiralay Ş. and Keser, İ. The Effect Of Pet Therapies On The Stress And Social Anxiety Levels Of Disabled Children: A Randomized Controlled Trial. *Complementary Therapies in Clinical Practice*. 2022; 48:Article 101574. doi: 10.1016/j.ctcp.2022.101574.
8. Charnetski J.C. and Riggers S. Effects of petting a dog on immune system function. *Psychological Reports*. 2004; 95: 1087-1091.
9. Rodrigo-Claverol, M., Casanova-Gonzalvo, C., Malla-Clua, B., et al. Animal-assisted intervention improves pain perception in polymedicated geriatric patients with chronic joint pain: A clinical trial. *International journal of environmental research and public health*. 2019; 16: 2843.
10. Yıldırım, C. (2018) The effect of pet therapy in children with type 1 diabetes on pain that occurs during insulin application. Istanbul University, Institute of Health Science, department of pediatric nursing. Master's Thesis, Istanbul
11. Koçak, İ. (2009) Huzurevlerindeki yaşlıların ve sağlık personelinin evcil hayvanlar ile terapiye ilişkin görüşlerinin belirlenmesi. [In english: Determining the views of the elderly and health personnel in nursing homes regarding therapy with pets.] Master's Thesis. Ankara
12. Demircioğlu, N. (2022). Hayvan destekli tedavi ve aktivitelerin otizmli bireylerin eğitim süreçlerine etkisi hakkında uzman görüşleri. Yüksek Lisans Tezi. (Danışman: Dr. Öğr. Üyesi Süheyla Bozkurt Balcı). Çankırı Karatekin Üniversitesi / Sosyal Bilimler Enstitüsü, Çankırı.
13. Kogan, L. and Oxley, J.A. Nurses' views of pet owners: online pet health information. *The Veterinary Nurse*. 2020; 11: 379-383. doi:10.12968/vetn.2020.11.8.379
14. Gagnon, J., Bouchard, F., Landry, M., et al. Implementing a hospital-based animal therapy program for children with cancer: A descriptive study. *Canadian Oncology Nursing Journal/Revue canadienne de soins infirmiers en oncologie*. 2004; 14: 217-222. doi:10.5737/1181912x144217222
15. Acquadro Maran, D., Gianino, M.M., Serra, G., et al. Potential benefits of human-animal interaction among nurses' pet owners and non-pet owners: A pilot study. *BPA-Applied Psychology Bulletin (Bollettino di Psicologia Applicata)*. 2022a; 294: 1-14. doi: 10.26387/bpa.2022.00005
16. Sönmez, B. (2011). Hemşirelerin Yenilikçi Davranışları ve Etkileyen Faktörler: Niteliksel Bir Çalışma. Doktora tezi. İ.Ü. Sağlık Bilimleri Enstitüsü, İstanbul (Danışman Prof. Dr. Aytolan Yıldırım)
17. Dağcı, Ö. F. and Arıkan, A. A comparative study of Turkish and Ladino literatures: Nasreddin Hodja and Djoha stories. *Mediterranean Jews, Sephardim. Ladino language and culture*, 2022; 9: 20-41.
18. Soyer, A.Ç. (2009). Storybooks of the Pre-school kids: Stereotypes and Identities. *Mehmet Akif Ersoy University Journal of Social Sciences Institute*, 2009; 1: 13-27.
19. King, C. Psychiatric Nurses' Views on Caring: Patients and Canine Companions. *Journal of Psychosocial Nursing and Mental Health Services*. 2017; 55: 46-52. doi: 10.3928/02793695-20170301-06
20. Acquadro Maran, D., Capitanelli, I., Cortese, et al. Animal-Assisted Intervention and Health Care Workers' Psychological Health: A Systematic Review of the Literature. *Animals*. 2022b; 12: 383. doi:10.3390/ani12030383
21. Lebel, S., Mutsaers, B., Tomei, C., et al. Health anxiety and illness-related fears across diverse chronic illnesses: a systematic review on conceptualization, measurement, prevalence, course, and correlates. *Plos one*. 2020; 15: e0234124.
22. Jensen CL, Bibbo J, Rodriguez KE, et al. The effects of facility dogs on burnout, job-related well-being, and mental health in paediatric hospital professionals. *J. Clin. Nur*. 2021; 30:1429-1441. doi: 10.1111/jocn.15694.
23. Svendsen, M. L., Andersen, T. V., Soendergaard, H. Developing quality measures for non-pharmacological prevention and rehabilitation in primary health care for chronic conditions: a consensus study. *International Journal for Quality in Health Care*. 2023; 35: mzad097.
24. Alıncak, G., Acavut, G., Soyaslan, B.D., et al. Nurses' views on palliative care and death: A qualitative study. *University of Health Sciences Journal of Nursing*. 2022; 4: 69-76. doi: 10.48071/sbuhemsirelik.1125775
25. Allegrante, J.P., Wells, M.T., & Peterson, J.C. Interventions to support behavioral self-management of chronic diseases. *Annual review of public health*. 2019; 40: 127-146.
26. Karakas, M., Gurhan, N., Demircan, U., et al. An Investigation on the knowledge, attitudes and behaviours to complementary and alternative therapies among physicians, nurses, patients and patients' relatives. *International Journal of Caring Sciences*. 2020; 13: 343.
27. Official Journal of ANA (2008). "Unleash the Healing Power of Pet Therapy". Official Journal of ANA 3/5 <https://www.americannursetoday.com/unleash-the-healing-power-of-pet-therapy/> Accessed date: 05 March 2023
28. Locher, C., Petignat, M., Wagner, C., et al. Animal-assisted psychotherapy for pediatric chronic pain: Case series of an open pilot study to test initial feasibility and potential efficacy. *Journal of Pain Research*. 2023; 1799-1811.
29. Nurenberg, J.R., Schleifer, S.J., Shaffer, T.M., et al. Animal assisted therapy with chronic psychiatric inpatients: Equine-assisted psychotherapy and aggressive behavior. *Psychiatric Services*. 2015; 66: 80-86.
30. Başaran, S., & Duygulu, S. Hemşirelikte güç kavramının analizi. *Hacettepe Üniversitesi Hemşirelik Fakültesi Dergisi*. 2014; 1: 62-73.