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Protocol of the Animal Assisted Activity Program at a University Hospital

PROTOCOLO DO PROGRAMA DE ASSISTÊNCIA AUXILIADA POR ANIMAIS NO HOSPITAL UNIVERSITÁRIO

PROTOCOLO DEL PROGRAMA DE ATENCIÓN AUXILIADA POR ANIMALES EN EL HOSPITAL UNIVERSITARIO

Isa Rodrigues Silveira¹, Nanci Cristiano Santos², Daniela Ribeiro Linhares³

ABSTRACT

Animal-Assisted Activity (AAA) consists in visitation and recreation through contact with animals, aiming at entertainment and improving the interpersonal relationship between patients and staff. Permission for the animals to visit an Institution requires a protocol with rules and safety routines to avoid accidents and zoonoses. The objective of this study is to describe the important points of the protocol to implement the AAA program. The protocol includes: introduction, objectives, inclusion and exclusion criteria for animals, drivers and patients; recommendations to the handlers and the health team, responsibilities of the Nosocomial Infection Control Committee. zoonoses posters, vaccination schedule for dogs and cats, free-informed consent to take part in the program and records with behavioral analysis of the animals. We believe that disclosing the protocol, based on scientific studies, favors the implementation of new programs in institutions considering the lack of national publications.

KEY WORDS

Hospital care. Animals. Professional-patient relations. Cross infection.

RESUMO

A Assistência Auxiliada por Animais (AAA) consiste na visitação e recreação por meio do contato com animais, propondo o entretenimento e a melhora no relacionamento interpessoal entre pacientes e equipe. Para evitar acidentes e zoonoses, a permissão para os animais visitarem uma instituição exige um protocolo com normas e rotinas de segurança. Este artigo objetivou descrever pontos importantes do protocolo de implementação do programa de AAA. O protocolo contempla: introdução, objetivos, critérios de inclusão e exclusão dos animais, dos condutores e dos pacientes; recomendações aos condutores e à equipe de saúde, responsabilidades da Comissão Controle de Infecção Hospitalar, quadro de zoonoses, calendário vacinal de cães e gatos, termo de responsabilidade para participação do programa e ficha de análise comportamental dos animais. Consideramos que a divulgação do protocolo, fundamentado em estudos científicos, favorece a implantação de novos programas em instituições, visto a escassez de publicações nacionais.

DESCRITORES

Assistência hospitalar. Animais. Relações profissional-paciente. Infecção hospitalar.

RESUMEN

La Atención Auxiliada por Animales (AAA) consiste en la visita y recreación a través del contacto con animales, proponiendo el entretenimiento y la mejora en las relaciones interpersonales de los pacientes y el equipo. El permiso para que los animales visiten una institución exige un protocolo con normas y rutinas de seguridad para evitar accidentes y zoonosis. Este artículo objetivó describir puntos importantes del protocolo para la implementación del programa de AAA. El protocolo contempla: introducción, objetivos, criterios de inclusión y exclusión de animales, conductores y pacientes, recomendaciones a los conductores y al equipo de salud, responsabilidades de la Comisión de Control de Infección Hospitalaria, cuadro de zoonosis, calendario vacunatorio de perros y gatos, términos de responsabilidad para la participación en el programa y ficha de análisis comportamental de los animales. Consideramos que la divulgación del protocolo, fundamentado en estudios científicos, favorece la implantación de nuevos programas en instituciones, vista la escasez de publicaciones nacionales.

DESCRIPTORES

Atención hospitalaria. Animales. Relaciones profesional-paciente. Infección hospitalaria.

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INTRODUCTION

Relationships between human beings and animals, especially dogs, have existed for thousands of years. Historically, animals have developed an important role in the relationship with people as they serve them company, stimulus and motivation. Animals are excellent company, because during their visitation they do not discriminate or segregate any person, that is, they are free of prejudice⁽¹⁾.

The knowledge about the therapeutic use of animals was first evidenced in the IX century in Belgium, with a report about the use of animals in the care of people with some sort of incapability⁽²⁾. In 1860, a nurse of English origin recommended the presence of pets as excellent companies for chronic patients⁽³⁾. In 1961, the first record was obtained about the use of dogs as a therapeutic instrument in the interaction with pediatric and adolescent patients. Results demonstrate that the presence of the animals improved the communication during the therapy of the patients, decreasing the defenses and facilitating the relationship between doctor-patient⁽⁴⁾.

The Animal-Assisted Therapy (AAT) was disseminated world-wide as of the decade of 1960 and consists on the use of animals with therapeutic purposes for patients with emotional, physical and mental diseases^(2,5-6). The AAT and the Animal-Assisted Activity (AAA) or animal visitation are the official names of the programs that aim at helping patients and their diffusion has been based on studies. The AAT uses, especially, a trained animal that, for long periods of time, interacts with the person and performs supervised exercises aimed at assisting in the improvement of the emotional, social, physical and cognitive aspects.

It is part of a certain treatment whose evolution is documented. The AAT has demonstrated an important therapeutic potential, and its use should be also broadened in other clinical situations and in the nursing care⁽⁷⁾. On the other hand, the AAA or visitation is a sporadic intervention aimed at recreation and entertainment. The visits may be made either by a single animal or by a group of animals of different species. The most frequently used animals are dogs, cats, fish, rabbits, chinchillas, turtles and hamsters. Dogs are the most used due to their natural affection to people, easiness to be trained and because they have more positive reactions to the touch⁽⁸⁾.

In the presence of animals, patients have their levels of anxiety and stress reduced during painful procedures, improvement in their interpersonal relationship, promotion of the self-care, improvement in depression, reduction of lone-liness feelings, stimulation of physical activity, improvement in the cardiovascular parameters and increase of welfare^(1-2,5,9). Some authors stated that the visit of animals benefits both patients and nurses, including improving the relation-

ship nurse-patient and reducing stress, besides promoting the humanization in the hospital environment^(2,10-11).

The presence of animals at a health institution brings visible benefits to everyone contemplated, however, the animal company may be associated to the acquisition of diseases in the hospital environment. Therefore, it becomes fundamental to consider the risks and complications that the transmission of zoonoses may cause to the patients and to the institution. Zoonoses are infectious diseases transmitted by vertebral animals to humans in certain circumstances⁽¹²⁻¹³⁾. The opposite may also occur, microorganisms with resistance to usual antimicrobials may be transmitted from people to animals, promoting the colonization of the animals by these agents(12,14). Therefore, in order to prevent risks, it is mandatory that the Nosocomial Infection Control Committee (NICC) implements and monitors strategies that minimize these exposures, that is, with the adoption of safety criteria and measures for everyone involved.

The objective of this study is to describe the protocol for the implementation of the Animal-Assisted Activity Pro-

gram at a Hospital University (HU), elaborated after a review on the international and national literature, including legislation and reference to the Brazilian National Health Surveillance Agency (ANVISA) and to the Health Surveillance Center of the State of São Paulo. Up until this moment, ANVISA does not have any recommendation for the presence of animals in health institutions.

As of 2000, the HU adopted the visitation of dogs in the Pediatrics Unit with the project 'Love in the collar'. It currently has the participation of the voluntary project *Pet Smile*, which performs monthly visits with animals of several species.

Protocol description

The Animal-Assisted

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The main objective of the AAA in the HU-USP is to provide patients, companions and the technical team with the interruption of the hospital routine for everyone involved, creating an atmosphere of human warmth and relaxation during the daily activities. The specific objectives are: creating a more humanized environment; encouraging interpersonal relations, stimulating the memory; developing the speech and the motor ability through recreational activities with the animals; developing channels of perception that make the patient more receptive to the treatment, motivating him to participation in his recovery.

Activities of the program coordinator

It was established that the AAA program must be coordinated by a professional indicated by the superintendence of the institution for the supervision and documentation of the activities, whose responsibilities are: captivation of volun-



tary projects for the AAA without any onus for the hospital and that comply with the recommendations of the protocol, providing material such as disposable gloves, coats, disinfectants and antiseptics^(10,12); coordinating and monitoring the visits of the animals according to the recommendations of the protocol; filing the documentation about the animal; obtaining the written consent of the patient, or the person responsible for him; reviewing and notifying the cases of

exclusion of patients and animals from the program; scheduling the dates and times of the visits; coordinating the activities of the instructors of animals; evaluating the behavior of the animals during the visit⁽¹⁵⁾; allowing only little food to the animals during the visit⁽¹⁰⁻¹¹⁾; being responsible for the inclusion and exclusion of animals; being aware of the possible diseases associated to the zoonoses of each type of animal included in the program (Table 1).

Table 1 - Diseases associated to the transmission of zoonoses - São Paulo - 2009

Infectious disease/agents	Cat	Dog	Fish	Rabbit	*Réptile	**Others rodents	Transmission
Virus							
(Lymphocytic choriomeningitis)	-	+	-	-	-	+	Inhalation of aerosol originated from contaminated saliva or urine or feces and contaminated food
Rabies (Rhadovírus genus Lyssavírus)	+	+	-	-	-	-	Contaminated saliva (bite or contact of the saliva to mucous membrane and non-intact skin)
Bacteria							
Campilobacteriosis (Campylobacter jejuni, C. coli)	+	+	-	-	+	+	Fecal-oral, through contaminated hands, food and water
Infection by Capnocytophaga canimorsus	+	+	-	-	-	-	Contaminated (bite or contact of the saliva to mucous membrane and non-intact skin)
Cat-scratch disease (Bartonella henselae)	+	-	-	-	-	-	Scratch and bite or exposure to infected flea
Staphylococcal disease or carrier (Staphylococcus aureus)	+	+	-	-	-	-	Direct contact to the infected animal
Streptococcal disease or carrier (Streptococcus sp- group A)	+	+	-	-	-	-	Direct contact to the infected animal
Leptospirosis (Leptospira interrogans)	+	+	-	-	-	+	Direct or indirect contact to contaminated urine
Pasteurellose (Pasteurella sp)	+	+	-	+	-	-	Contaminated (bite or contact of the saliva to mucous membrane and non-intact skin)
Rat-bite fever (Spirillum minus, Streptobacillus moniliformis)	-	-	-	-	-	+	Contaminated (bite or contact of the saliva to mucous membrane and non-intact skin)
Salmonella (Salmonella spp)	+	+	+	+	+	+	Fecal-oral, through contaminated hands, food and water
Tularemia (Francisella tularensus)	+	-	-	+	-	+	Direct contact to an infected animal and bite by an hematophagous arthropod
Parasites Ancylostomiasis (Ancylostomiasis caninum)	+	+	-	-	-	-	Fecal-oral, through contaminated hands, food, soil and water
Cryptosporidiasis (<i>Cryptosporidium</i> parvum)	+	+	-	-	-	-	Fecal-oral, through contaminated hands, food and water
Giardiasis (Giardia lamblia)	+	+	-	-	-	-	Fecal-oral, through contaminated hands, food and water, and contact to infected animals
Scabies (Sarcoptes scabei)	+	+	-	-	-	-	Direct contact to the infected animal and contaminated materials
Toxocariasis (Toxocara canis)	+	-	-	-	-	-	Fecal-oral, through contaminated hands, food, soil and water
Toxoplamosis (Toxoplasma gondii)	+	-	-	-	-	-	Fecal-oral, through contaminated hands, food and water
Fungi							
Dermatophytosis (<i>Microsporum canis</i>)	+	+	-	+	-	+	Direct contact to skin scaling and parasitize hair of the infected animals
Cryptosporidiasis (Cryptosporidium parvum) Giardiasis (Giardia lamblia) Scabies (Sarcoptes scabei) Toxocariasis (Toxocara canis) Toxoplamosis (Toxoplasma gondii) Fungi Dermatophytosis (Microsporum	+ + + + +	+ +	-		-	- - -	Fecal-oral, through contaminated ha food and water Fecal-oral, through contaminated ha food and water, and contact to infect animals Direct contact to the infected animal contaminated materials Fecal-oral, through contaminated ha food, soil and water Fecal-oral, through contaminated ha food and water Direct contact to skin scaling and pa

^{*} Snakes, turtles and lizards. ** hamsters, monkeys and rats. The symbol + indicates that the microorganism is associated to the infection and was detected in the animals. Source: partially extracted from Duncan SL, 2000^{(12);} CDC, 2003⁽¹⁶⁾; Guay DRP, 2001⁽¹⁷⁾; Robertson ID, Irwen PJ, Lymbery AJ, Thompson RCA, 2000⁽¹⁸⁾.



Inclusion criteria for animals in the program

In order to be included in the program, the animals must be evaluated by a professional trainer or veterinarian, be previously trained for the activities that will be developed in the institution, be healthy and socialized in public areas, present docile behavior and respond correctly to the commands of the instructor^(1,2,10).

After this initial evaluation, it was established that only trained people, who know their health state and physical conditioning, should guide the animals at the HU.

The animal's health must be monitored annually, with feces exams, anti-parasitological treatment and update of vaccines according to the vaccination calendar of dogs and cats (Table 2). The parasitological exam of feces must include a search for Giardia and bacteria such as *Salmonella spp* and *Campylobacter spp*. The animals must have a nega-

tive exam for parasitoses and acari, without excessive loss of hair, dermatological or oral diseases. If the result of the feces exam comes positive for any parasitosis, the animal's visit will not be allowed into the hospital. Before its return to the program, the animal must be evaluated again by the veterinarian^(6,13,15-16,19).

Another essential step is to guarantee that the imported animals meet the legal requirements of the Health Surveillance, in other words, they must have an authorization registration of the Brazilian Institute for the Environment (IBAMA) or an equivalent organ in other countries⁽²⁰⁾.

These recommendations are important to establish the AAA program in a health institution, since they contribute to increase the safety of the administrators, the health team, the patients and their companions, reducing complications that may emerge during the visits of the animals to the institution.

Table 2 - Vaccinal calendar according to the animal and period - São Paulo - 2009

Vaccines	Doses							
Dog	1st Dose	2 nd Dose	3 rd Dose	Reinforcement				
*Octuple or tenfold	45 days	66 days	87 days	Annual				
Antirabic	87 days	108 days	-	Annual				
Giardia	129 days	150 days	-	Annual				
Pneumodog	129 days	150 days	-	Annual				
Cat								
*Triplice, quadruple or quintuple	60 days	90 days	120 days	Annual				
Antirabic	-	90 days	120 days	Annual				
Н	amsters, rabbits	and other rodents	;					
**Unavailable vaccines								

^{*} To the veterinarian's discretion. ** Low risk of the rabies transmission considered. Source: http://www.programasaudedoanimal.ig.com.br/home-cuide.php#caes; http://www.clinipet.com.br/index.php?option=com_content&task=view&id=18

Exclusion criteria for animals

The AAA program excluded females in season, non-human primates (ex: monkeys and chimpanzees), due to their aggressive behavior (bites)^(12,19), difficulty to train these wild animals not to touch their own genitals, as well as young animals from any species due to the lack of control over the sphincters, difficulty to be trained and because they are more vulnerable to the development of zoonoses^(6,12-13,20).

The program will also exclude immediately the animals that present anti-social behavior and/or aggressiveness, triggered or not, signs of infection or presence of vomit, diarrhea, skin lesions, abundant secretion in the nose, ears or eyes, excessive itching. Therefore, these animals must be evaluated, treated and monitored, and their return will require a medical certificate^(6,12,19). In case of death of the participating animal due to unknown diseases or associated to any outbreak in the hospital, a necropsy is needed to investigate the cause of death⁽¹⁰⁾.

Recommendations to the animal instructors

The instructor or maintaining institution of the animals in the AAA program are responsible for presenting all the documentation regarding the vaccines and laboratorial exams necessary for the inclusion of the animals and for monitoring the animal during the visits^(6,12).

As for his identification, the instructor must wear some type of uniform and badge, as well as the animal, if possible. The identification must be fixed, mandatorily, in a visible place and the uniform for mammals of average build must cover their back $^{(7,12)}$.

It is considered extremely important to follow these recommendations regarding the maintenance of the animal hygiene and integrity:

• Animal hygiene up until 24 hours before the visit in order to reduce allergenic agents (bathing, cutting their nails, cleaning their eyes and ears), removal of excessive hair be-



fore the visit through brushing and allowing the animal the necessary time for its physiological eliminations $^{(6,10,12,15-16)}$.

• The transportation of the animals to the hospital must be made in an appropriate and clean vehicle. In case of walking, the distance must be short^(1,10).

During the activities developed by the animals with the patients, the instructor must have some precautions, such as: placing animals of small build in some type of basket (examples: cat, rabbit, hamster and chinchilla) in order to guide them during the activities, preferably made of washable material and that allows the animal to move^(1,10), not leaving it alone in the interior of the hospital. The instructor must also:

- Request the authorization of the nursing or the program coordinator to initiate the interaction of the animal to the patient in the bed quadrilateral area. The place occupied by the animal must be protected by a sheet from the institution, which will be sent to the Cleaning and Hygiene Hospital Service after the visit to that patient. It is important to remember that the sheet used for a certain patient cannot be shared with others.
- Always bring the animal near the opposite side to the region of the patient's body that is immobilized or has a dressing, venous access or tube⁽¹⁵⁾.

Surfaces of the furniture that have any contact with the animals must be hygienized before and after the visitation, using a piece of cloth imbibed in antiseptic (alcohol 70%) when the contamination is not visible, in case there is any type of biological material, such as saliva, it is necessary to wash the surfaces with water and soap, dry and apply alcohol 70% once it is cleaned^(10,15,19).

All the complications, intercurrences or incidents observed during the visitation (bite, scratch or allergic reaction) must be communicated to the nursing team by the instructor, so that they may notify the occurrence and take the necessary steps. It is also the instructor's responsibility to partially clean and collect, with material provided by the health team, the feces or urine accidentally eliminated by the animals during visitation^(8,14,19).

Animals are not allowed to visit patients in isolation due to infectious diseases, into the Nutrition and Dietetics Service, places where the food is prepared, the dining hall, the Service of Specialized Hygiene, the Material and Sterilization Center, rooms of medication preparation, procedure rooms of the units, and any other that presents risks to the animal and to the patient, such as: the Pediatric or Adult Emergency Service, Nursery, Maternity, Dialysis Unit, Laboratory of Clinical and Laboratorial Analysis and Pediatric or Adult Intensive Care Unit.

In order to participate in the AAA program, it is fundamental to follow the protocol established by the HU, guaranteeing the safety of the involved subjects.

Inclusion and exclusion criteria for patients

The criteria are determinant so that the activities of integration to the animals take place, therefore, all patients, companions and members of the health team are allowed to participate as long as they do not present any aversion or allergy to animals⁽¹⁵⁾. In the case of the patients, a previous authorization (Term of Consent) must be signed by the person responsible for the patient, or by the patient himself, in case he is not underage.

This study was based on the risk factors known for patients likely to develop infections, thus, it excluded all the patients in immediate post-operative, who were submitted to a recent splenectomy, allergic patients, immunocompromised (oncologic or HIV seropositive patients in terminal stages) or phobic^(6,12-15). Patients in condition of isolation (contact, droplets or aerosol) may request the visit of the animals, as long as there is no direct contact with the animal, that is, the visit is performed in the corridor outside the room and the visualization through the glass on the room's door, which must remain closed.

Patients in splenectomy post-operative, allergic and considered immunocompromised may be reviewed, since they have a medical authorization and the written consent of their responsible.

Recommendations to the health team

Regarding the instructions aimed at professionals, they must be made public so that there are no doubts about the benefits offered by the AAA program to all the subjects that interact with the animals.

The necessary recommendations to reduce conflict situations and offer safety to everyone are:

- Hygienizing hands with water and soap or alcohol gel, before and after touching the animals or objects used by them during the visits, (1,10,12) with supervision on children under five years old washing their hands.
- The presence of animals is not allowed during the development of care procedures^(10,14).
- During activities between patients and animals, it is necessary to avoid the animal's contact to the patient's face and the contact of both of them with saliva, feces, urine, secretion, vomit, blood, wounds or other secretions^(10,14).

CONCLUSION

This article approaches the necessary care procedures for the application of the AAA program based on the necessary legitimacy for the acceptance and incorporation of the program in hospitals in the observation of the interaction between the patient and the animal, as the patient answers positively to the company and stimuli provided by the animal. It is fundamental that the access of the animals



to a hospital unit is performed with safety criteria and rules, and that these criteria are clear and applicable for all participants. The authors believe that the clinical risks are minimized with the adoption of the protocol, since it prevents the control of infections and potentially reduces the accidents. Besides providing more safety and consequently differentiated quality in the service, therefore, the therapeutic or care creative inclusion of the animal into the patient's routine promotes his welfare.

The inclusion of new concepts in the care to patients is still a challenge for the Nosocomial Infection Control Committee of hospital institutions, but also for their professionals and administrators. It is necessary to overcome the initial barriers and comply with practices like the AAA, since they provide the broadening of knowledge for students and professionals, besides promoting the care improvement for patients and companions. The AAA acting group is constituted by a multiprofessional type of work, both from the institution team and the voluntary professionals.

In the experience of the service through these years, there were no records of occurrences of zoonoses, accidents with the animals or even questionings of legal order, which guarantees the longevity and the success obtained with the AAA program.

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