

A magical dream: A pilot project in animal-assisted therapy in pediatric oncology

By France Bouchard, Marie Landry,
Marthe Belles-Isles, and Johanne Gagnon

Abstract

For children with cancer, being hospitalized represents a great source of stress. Hospitalized children are not only deprived of their familiar and comforting world, but they must also face various and often painful treatments. They must quickly adapt to new people and to an environment that is very different from that of their homes. They have greater safety needs. Thus, it is important to offer these children concrete ways to better adapt to the stresses of hospitalization. Animal-assisted therapy, considered within this project as a novel approach to care, constitutes an interesting solution. It involves using the privileged relation between children and animals to foster the process of adaptation to illness and the hospital environment.

The experience described in this article is a one-year pilot project completed on a pediatric oncology unit. A priori, an already very heavy workload, the vulnerability of the patients, and many constraints added to the concerns related to the presence of animals on a tertiary care unit. A posteriori, the rigorous design and implementation process of the pilot project, the strong involvement and engagement of volunteers and professionals, the quality of the participating "therapeutic" dogs, the originality of the entire process, and the satisfaction of the patients and nursing staff contributed to its success and to establishing the basis for a permanent implementation of this special care program for children hospitalized with cancer.

This pilot project started as a heartfelt initiative. How could one reduce or alleviate the physical and emotional suffering of children undergoing cancer treatments? How could one mitigate their powerlessness over their physical condition and the physical environment in which they are placed? Animal-assisted therapy in pediatric oncology was considered as an external source of emotional support for children and their parents in order to facilitate adaptation to the illness and a new physical environment, and to improve quality of life within the harsh context of hospitalization. The goal of the pilot project was to design and implement a one-year animal therapy program for the pediatric oncology population that met safety, quality, and efficiency standards. This paper describes the project's implementation process and formulates some useful recommendations for nurses wishing to undertake such an initiative in their own health care setting.

Specific objectives of the pilot project

The specific objectives of the pilot project were to:

- Maintain the safety of the children and the facility
- Create a family atmosphere in a specialized institutional setting
- Stimulate the children's social interaction and communication (verbal and non-verbal)

- Promote a sense of responsibility and usefulness among the children
- Reduce the children's stress and anxiety related to hospitalization and accompanying interventions
- Offer a recreational activity reducing the children's loneliness, boredom and isolation
- Increase the hospitalized children's physical and psychological well-being
- Increase treatment receptivity and compliance among the children.

State of knowledge regarding animal-assisted therapy in a clinical setting

Animal-assisted therapy can be defined as a clinical approach that aims to foster the creation of beneficial links between humans and animals with both preventive and therapeutic goals. The rationale for this approach is that animals naturally stimulate an attraction and attachment response in most individuals that affects their well-being (Brodie & Biley, 1999). In the 1980s, animal-assisted therapy started to be implemented among handicapped people, autistic children, and the elderly. Since then, animal therapy has been used more and more frequently as a therapeutic tool in the United States, Canada, and Europe. The presence of an animal at the bedside of a sick person contributes to alleviating anxiety, loneliness, and boredom, and can reduce a depressive state. The simple fact of being able to see and talk to an animal encourages patients to better accept hospitalization and increases their receptiveness to the sometimes very painful treatments (Ruckert, 1994). Contact with an animal increases the sense of physical and emotional well-being (Jorgenson, 1997; Nebbe, 1998; Yamauchi, 1993), develops a sense of normalcy (Hawley & Cates, 1998) and the feeling of being essential to another being (Ruckert; Saylor, 1998), and constitutes a source of affection and attention (Martin, 1993). The presence of an animal encourages people to express their emotions, both positive and negative: fear, joy, pride, suffering, or discomfort.

A pediatric animal therapy program provides children with the opportunity to gain both self-esteem and confidence by increasing their sense of responsibility (Ruckert, 1994; Yamauchi, 1993). The

France Bouchard, BScN, is a Specialized Clinical Research Nurse in Pediatric Oncology, CHUQ (Centre Hospitalier Universitaire de Québec).

Marie Landry, RN, is Project Instigator and Bedside Nurse, Pediatric Oncology Department, CHUQ.

Marthe Belles-Isles, PhD, is a Clinical Biochemist and Volunteer in Pediatric Oncology, CHUQ.

Johanne Gagnon, PhD, is a Professor at the Nursing Faculty, Laval University, Pavillon Paul-Comtois.

presence of an animal provides the children with a sense of emotional safety by encouraging them to be active and involve themselves in the events that concern them. The intimacy born from the simple actions of speaking to an animal and caressing it contributes to reducing stress and providing a source of creativity, surprise, and even humour. In a hospital setting, these links facilitate the young patients' contacts with the nursing staff and make their stay more agreeable. Brushing a dog or taking it for a walk can foster physical exercise, but it can also increase the children's motivation to participate in their own care (Fick, 1993).

Several major animal-assisted therapy projects have been developed for the hospital setting in the United States. "The Prescription Pet Program" in the pediatric oncology unit at The Children's Hospital of Denver, Colorado, established in 1985, demonstrated meaningful results described in a report by the Health Sciences Center of the University of Colorado (Dolton, 1997). Patients at an intensive care unit in Manchester (New Hampshire) were visited over a 17-month period by eight dogs and two cats: no complications were reported and, generally speaking, patients and families were very satisfied with the program (Cole & Gawlinski, 1995). The Delta Society is one of the largest organizations in the field of pet therapy in hospital settings in the United States. Created in 1977, the Delta Society undertook the compilation of worldwide scientific research in animal-assisted therapy. Rules, criteria, protocols, and procedures were published and are enacted in a large number of American centres (Delta Society, 1996). Therapet, a Texas organization, supports hospitals by helping health professionals integrate animals in the treatment of patients, while optimizing care and safety for all participants. Therapet has published educational guides and assessment criteria for the animals used in pet-assisted therapy (Price, 1996). It supports and promotes clinical research on various aspects of animal-assisted therapy. Thanks to the support of the Pet Therapy Society of Northern Alberta, some Canadian

hospitals have already included animal therapy in the treatments they offer to various adult and pediatric populations (Bernard, 1997). However, there are no Canadian studies on animal-assisted therapy with a pediatric oncology population.

The pilot project in a university hospital centre

Context

The pilot project was conducted at the CHUQ (Quebec City University Hospital Centre) which has 12 pediatric tertiary care beds in oncology. On average, 40 cancer cases are treated annually. These cases fall into the following categories: leukemia, brain tumours, and solid tumours, with acute lymphoblastic leukemia being the most frequent in children under 15 years of age. The cancer diagnosis is usually established within a few hours of admission and closely-monitored treatment is quickly implemented throughout hospitalization. Length of hospitalization varies according to the disease and treatments required. Some treatment protocols are very aggressive and cause major side effects. Treatments may require hospitalization for each chemotherapy cycle.

Implementation stages for the pilot project

The current context in health care institutions promotes the quest for efficiency and efficacy and leaves very little room for initiatives of this type in a tertiary care setting. A very heavy workload, a vulnerable population, and numerous medical and departmental constraints add to the negative perceptions related to the presence of animals in a care unit. Thus, leadership, a professional approach to interdisciplinarity, and a rigorous process become essential to implementing an animal-assisted therapy program. Nevertheless, the development and implementation of such a pet therapy program on an oncology pediatric unit in a university hospital centre provides an extremely stimulating experience for a professional health team. It is nonetheless a daunting challenge! We will describe the stages of our approach by addressing its specific aspects: obtaining the approval of decision-makers; and organizing the activities of the pet-assisted therapy program and the dog selection process.

Obtaining the approval of decision-makers

In 1998, a nurse had the idea of developing and implementing an animal-assisted therapy program for children hospitalized with cancer. However, this project was brought into realization only after a group of health professionals at the hospital centre volunteered to take it on. First, the project had to be properly documented and submitted to decision-makers. A review of the literature was completed and contacts were made with various specialists practising animal therapy in hospital settings in the United States and Canada. A pilot project proposal was submitted which contained the following elements:

- A survey of the literature on programs implemented elsewhere
- A description of modalities for recruiting and selecting dogs
- Protocols for veterinary evaluation and dog behaviour assessment
- Protocols for medical restrictions and monitoring allergies to dogs
- Information for dog owners: processes and requirements
- Information for parents
- Rules of operation: procedures, insurance policies, safety
- Evaluation questionnaires for parents/children and for nurses.

At the institutional level, it is obvious certain formal authorizations are crucial. The institution's board of directors, infection control committee, allergology department, and the pediatric oncology department medical team all investigated the project before giving their approval. The presence of pets in a care unit required a great number of precautions. The typical application modalities used for animal-assisted therapy cannot be readily transferred to a hospital context, much less to a pediatric oncology setting. Our institutions are managed under safety and cleanliness



standards that do not allow for the presence of animals within their walls. The most important aspect is the fear of transmitting infectious diseases. In this respect, the infection prevention committee at Huntington Hospital (California) reported that rigorously healthy and pathogen-free dogs did interact safely with patients: after some 3,281 visits with 1,690 children over a period of five years, not a single infection was reported as having been transmitted by the dogs (Jorgenson, 1997).

Apprehension over hypersensitivity or sensitization to animal allergens is also a significant factor that requires the implementation of protective structures for both patients and departmental staff (Brunedreef & Groot, 1997). Resistance to the project from patients, visitors, or institutional staff members is always possible and stems from their perception of the animals per se and their unusual presence in a health care setting. Therefore, the animal circulation and access areas must be restricted. The institution's security service is the partner to be consulted for these decisions. To ensure safety at the institutional level, one must assign specific functional modalities to pet therapy activities, so as not to harm anyone. For children wishing to take part in animal-assisted therapy, certain clinical conditions must be considered, with clearly-defined exclusion criteria: any child with one of these conditions must not be allowed to participate in any animal therapy session:

- Severe neutropenia (less than 500 neutrophils/ μ L of blood)
- Recent surgery or sterile-technique patient
- Splenectomized children
- Positive skin test to dog allergens
- Children with aggressive behaviour.

Incidentally, some exceptions can be made upon approval by the medical team, for example in the case of an end-of-life child receiving palliative care. The managerial staff's concerns are mainly related to organizational and financial impacts. The optimal result must be an animal-assisted therapy service that goes basically unnoticed throughout the daily routine, except of course to the participating children and their families. Therefore, the departmental infrastructure and procedures must be organized to facilitate the integration of the program. A clear and easy-to-deliver protocol that identifies all the steps between the offer of animal-assisted therapy and its implementation is a major asset if one wants to avoid any unexpected increase to the staff workload.

Financial support is also very important. Support should be sought from several sources, based on the interest they may have in encouraging such a project. The seriousness of the program must be demonstrated if one wishes to motivate organizations into supporting this type of humanitarian initiative. The animal-related expenditures remain the most costly element of a project of this type and they will be discussed elsewhere in the article.

Organizing the program activities

The duration of the pilot project was set at one year. In the summer of 1999, one private room was allotted to the experimental pet therapy program. This room was organized to create a warm space reflecting an intimate and family atmosphere. Moreover, a portable anteroom was installed at the entrance to the room in order to minimize the dispersion of animal allergens as required by the immuno-allergy protocol. Each animal-assisted therapy session involved the presence of a dog at the child's bedside, without its master, for an eight-hour period, with a parent in attendance at all times for safety reasons. The child could choose the dog from a catalogue of available dogs.

Dog selection process

Some dogs are innately very good 'therapists.' In a foreign environment, with unfamiliar people, and for several hours on end, the selected dogs must show their ability to be above reproach in all circumstances. A pool of dogs was established by soliciting the local residents through posters placed in a few veterinary clinics. The

selection of six dogs seemed to be sufficient to meet the needs of the target population. The selection process followed strict evaluation protocols for both health and behaviour. Mostly inspired by those of the Denver Prescription Pet Program, the selection criteria were revised in order to meet the particular needs for the project, i.e., the type of population and the length of the dogs' visits without their masters. Dog owners had to sign a declaration to have proper veterinary follow-up and abide by hygiene standards. All health and behaviour tests were repeated on a six-month basis. A compulsory vest, identifying the dogs as belonging to the animal-assisted therapy program, was worn for all travel within the institution. While making the project visible, this vest showed respect for the public desire for control and prevented any potential hair loss by the dog. Trusted individuals were selected for taking the dogs outside when they required it, and for a compulsory break at lunch time. The very first animal-assisted therapy session was held on October 6, 1999 for Lysanne, a young patient, and Martha, a Bernese Mountain dog... "A magical dream" was born.

Project implementation evaluation

Summary of services

Of all the proposed dogs (over 100), 58 had their behaviour assessed and only 12 were selected to become part of the team. Over the 12-month period, there were 53 visits with 27 children aged three to 16 (0 to three visits per week). The protocols for the visits evolved as certain amendments were made as a result of comments from parents and staff.

Impact of animal-assisted therapy on children

The clients' satisfaction was assessed throughout the year by administering questionnaires to children, their parents, and to the nursing staff. The goal was to guide the permanent implementation and formal evaluation of the animal-assisted therapy program. A future article will examine in detail the assessment study results.

It was noted that parents confirmed several positive aspects of the experience. The perception of the parents was such that they would all recommend a visiting dog for any hospitalized child. They reported that in the presence of the dog, their child was able to gain confidence in him or herself, developed a friendship with the animal, and was happier as a result. "For him, the dog has really been a source of affection, attention, comfort, warmth, and encouragement." Not a single child described the experience as non-favourable. Nurses agreed that the dogs' visits promoted the children's adaptation and helped them to recover after chemotherapy or surgery.



Impact on nursing work

According to nurses, the program was very important and well-structured. They were satisfied with the procedural adjustments that were made where necessary. On a personal level, they became more positive on the visiting days where their work with the child was made easier for them. From a professional standpoint, they were able to use the children's relationship with the dogs as a therapeutic tool within an intervention process. The child takes care of the dog and centres his or her attention on his or her friend of one day rather than on the aggressive interventions. Finally, only a few minutes are required to promote the program with parents at the time of admission and to arrange for the allergy test. For recurring patients, integrating animal-assisted therapy in the treatment plans becomes a possibility, i.e., ensuring the children can benefit from the presence of a dog during their future hospital stays.

Appropriateness of prevention measures

The infection prevention and immuno-allergy protocols were adhered to faithfully. Consequently, no infectious or allergic problems were reported. Moreover, not a single incident was reported regarding any breach of the institution's safety standards or departmental regulations. There were no material damages, no aggression on the dogs' part, and no complaints from the public or the staff at the hospital. Exclusion criteria of a medical nature were adhered to in every case. Only one child was unable to participate in the program because of a positive result on the allergy test.

What to make of this initiative?

Yes, animal-assisted therapy is possible! The original work team reached its initial objectives. The pilot project year was a great adventure with a constant desire to improve on the quality of the services offered to children. Animal-assisted therapy is possible, but it requires a united front on the part of the people who believe in the initiative and who take it upon themselves to identify all the issues in their most minute details. There is simply no room for error. Other care settings wishing to start this type of program must pay particular attention to the characteristics of the target population and those of their agency, because the process must be completely safe before it can take place and become beneficial. The experience shows that implementing such a program requires daily coordination by the person in charge who, ideally, should work in the care unit.

Yes, animal-assisted therapy is efficient! The level of satisfaction as well as the benefits and advantages mentioned by both

parents and nurses are similar to those reported in the literature. These observations strongly support the relevance of animal-assisted therapy in pediatric oncology. Even in the so-called conventional and institutional context in which we work, children taught us that we can reach for the "impossible" and that small joys can often soften great sorrows. Eyes that light up, a sudden boost of energy, the pain made more bearable, shared moments of pleasure, and frequent laughter confirmed the legitimacy of animal-assisted therapy on a daily basis. Finally, through all of these impacts, animal-assisted therapy had direct positive implications on the quality of nursing care at CHUQ's pediatric onco-hematology department.

Yes, there is a future for animal-assisted therapy! Upon completion of the pilot project, the program was officially recognized by CHUQ's board of directors in the fall of 2000 and has been supported by an operating budget from CHUQ to the pediatric oncology department. In addition, "Fondation Maurice Tanguay," an organization that is very involved with sick children in the Quebec City area, contributed generously towards continuing and improving the program. That funding is mainly used for physical and behavioural veterinary tests, for the upkeep of the dogs, and for the purchase of various accessories such as treats, toys, a cage, photographs, room decorations, etc.

Future implications

To our knowledge, this experience is unique in its approach in North America. The people in charge of the initiative were rewarded with the positive testimonials they received. The evaluation of the pilot project implementation (mentioned here summarily) will be published soon. The positive impacts observed during this first evaluation phase will be documented. However, the animal-assisted therapy program has not yet been assessed through a rigorous research protocol. A second evaluation phase is currently underway to tackle this aspect.

Acknowledgements

This project was funded primarily by the "Fondation Maurice Tanguay", "Le Groupe Daubigny" ("Hôpital Vétérinaire") and by Leucan Québec, a provincial association for children suffering from leukemia or cancer. The authors would like to thank Louise Hagan, PhD, Professor at the Nursing Faculty, Laval University (Quebec City) for her support in editing. They also wish to thank the management of CHUQ for its support, the staff of the pediatric onco-hematology department and the numerous volunteers.

References

- Bernard, S. (1997). **Paws for a visit**. The Pet Therapy Society of Northern Alberta.
- Brodie, S.J., & Biley F.C. (1999). An exploration of the potential benefits of pet-facilitated therapy. **Journal of Clinical Nursing**, *8*(4), 329-337.
- Brunedreef, B., & Groot, B. (1997). Pets, allergy and respiratory symptoms in children. **International Journal of Epidemiology**, *21*(2), 338-342.
- Cole, K.M., & Gawlinski, A. (1995). Animal-assisted therapy in the intensive care unit. **Nursing Clinics of North America**, *30*(3), 529-537.
- Delta Society. (1996). **Standards of practice for animal-assisted therapy**. Author.
- Dolton, J. (1997). **Prescription Pet Program**. Denver, CO: University of Colorado Health Sciences Center.
- Fick, K. (1993). The influence of an animal on social interactions of nursing home residents in a group setting. **The American Journal of Occupational Therapy**, *47*(6), 529-534.
- Hawley, K., & Cates, M. (1998). Paws for comfort. **Nursing**, *28*(2), 57.
- Jorgenson, J. (1997). Clinical scholarship. Therapeutic use of companion animals in health care. **Image – the Journal of Nursing Scholarship**, *29*(3), 249-254.
- Martin, S. (1993). What criteria should be used for pet therapy in critical care? Are you aware of any hospitals doing this? **Critical Care Nurse**, *13*(2), 74, 79.
- Nebbe, L. (1998). Animal-assisted activities: Therapy as an animal and human welfare project. **Animal-Assisted Activities/Therapy**, Sept., 1-8.
- Price, C.L. (1996). Patients improved with therapy. **Texas Medicine**, *92*(8), 12-13.
- Ruckert, J. (1994). L'animal thérapeute. **Éditions du Roseau**, 231-235.
- Saylor, K. (1998). Clinical outlook. Pet visitation program. **Journal of Gerontological Nursing**, *24*(6), 36-38.
- Yamauchi, T. (1993). Pet programs in hospitals. **The Pediatric Infectious Disease Journal**, *12*(8), 707.