Abstract

This article aims to present and discuss a case-study of humanization through art applied to a children’s hospital. Art is considered herein as a resource to improve hospital environments. The experience related to the improvement of these environments took place in the Children’s Emergency Unit of the University Hospital in Salamanca (Spain). After describing the context of the case-study, some attention will be paid to the phases of the process, emphasizing the aspects linked to the care culture of children and their families, as well as the symbolic dimension of the space and the participation in the experience of diverse professionals. The case-study is assessed from different standpoints but special importance is given to parents' opinions. Parents rated the service positively and stated that the artists' intervention had been beneficial for the children’s emotional state.

Keywords: art, hospitalized child, children’s health service, environment design, health facilities, hospital design and construction.
Introduction

This article aims to present and discuss a case-study of humanization through art applied to a children’s hospital. The experience took place in the Children’s Emergency Unit of the University Hospital in Salamanca (Spain). Humanization of the physical space of the hospital represents a component of the broader concept of humanization of the hospital, which includes organizational, relational, and therapeutic aspects, in addition to environmental and social issues (Fornara, 2006). When we mention "more humane health settings," we are referring to the characteristics of the design that healthcare settings should have in order to reduce the level of stress, both of the patients and the health workers, and to promote and increase the well-being and quality of life of the health-system users (Nagasawa, 2000). Humanization of the hospital setting should be understood as a part of the culture of patient care. When the patients are children, this culture of care should start by acknowledging the particular needs of children and their families as they deal with the process of disease and hospitalization, and the way that children interpret and lend meaning to the environment that surrounds them (Ullán & Belver, 2008).

The impact of the quality of the physical and social environment of hospitals on patients' health is a topic of increasing interest (Devlin & Arneill, 2003). There is scientific evidence that the physical setting in which medical care is provided can play a considerable role in patients' health and well-being (Ulrich & Zimring, 2004). Just as we refer to "evidence-based medicine," we also refer to “evidenced-based design” as its
architectural analogue, in the sense of scientific justification that can endorse the importance of aspects of the physical setting for health and curing (Hamilton, 2004).

The relationship of art and artists with hospitals is a topic that has received much attention in the history of important hospital institutions (Marcetti, 1999) and is strongly linked to the meaning and the role of arts in the generation and reproduction of social representations and meanings (Ullán, 1995). Art can play an important role in the improvement of hospital environments, and some current experiences of cooperation in this realm are increasingly important (Roselli, 1999). There is evidence that integration of the visual and performing arts in health-care induces significant differences in clinical outcomes, reduces the amount of drug consumption, shortens length of stay in hospital, improves patient management, contributes towards increased job satisfaction, and enhances the quality of service (Staricoff, Duncan, & Wright, 2003).

In Spain, one of the most recent and innovative initiatives in the cooperation between artists and hospitals is the so-called “space prototype to manage emotions.” First presented in the 2008 Contemporary Arts Fair (ARCO) in Madrid by the artist Josep-Maria Martin, this initiative can be considered a case of the involvement of art in health-related environments. The prototype was based on an experience the aim of which was the creation of a transitional space between the home and the hospital to be used by patients, relatives, and the hospital staff. This space is located in one of the busiest areas of the hospital and it exhibits a piece of art (Martin, 2008) that aims to help deal with the new emotional situations that people undergo, directly or indirectly, while in a hospital.
Undoubtedly, children’s hospital units have been the most active when it comes to the promotion of humanization initiatives through the art. For a number a years, the French association Art dans la Cite has developed the initiative “art in the hospital” the aim of which is to introduce contemporary art into hospitals while promoting contact between artists and new audiences. Artists move their workshops to children’s hospitals and create their pieces of work with the children’s cooperation. When they are finished, these pieces of art remain in the hospital. The children can contribute to these creations, following the techniques that the artists teach them. The idea is to introduce contemporary art into children’s hospitals, thereby making their environments more humane. The goals were to improve children’s experience of the hospital, as well as to promote their imagination and creativity, and to encourage European cultural exchange. In the children’s unit of the University Hospital La Paz in Madrid, one of these initiatives took place: the Zapal project, the city of the senses. The artist working in this environment wanted to create a suggestive and stimulating environment that could facilitate day-dreaming, creativity, sociability, and communication through the arts (Rueda, 2006).

The experiences of humanization through art of health-related spaces are characterized by the convergence of a variety of professional approaches: artists, health staff, architects, psychologists… This article will describe and analyze an experience of humanization through art in a children’s hospital environment. After introducing the context of the experience, its different phases will be described, with particular emphasis on the aspects that are crucial because of their contribution to the culture of care for children and their families in the hospital. The experience will be subsequently assessed from different viewpoints, although special consideration will be given to the
opinions of the parents of children who had to be hospitalized after having been in the emergency unit.

The hospital demand

The experience of humanization through art described herein took place in the University Hospital in Salamanca (Spain). Until the year 2007, the emergency unit was shared both by adults and children and their families, with the exception of a small children’s waiting-room located at the entrance of this area. In order to improve children’s care, some refurbishment was undertaken, leading to the design of a new children’s emergency unit, physically separated from that of adults. The new unit was located in the hospital basement and had direct street access for the children and their families, a waiting-room relatively far from the entrance, a few consulting rooms, a breathing-therapy area, a three-bed surveillance unit, a cardio-recovery unit, a nurse’s office, a reception and admission service, and a work-room for the health professionals. The renovation was carried out throughout the year 2007, and the new unit was due to start functioning during the last term of that year. In the final phase of renovation, the hospital managerial board requested the support of the research team of games and creativity for children in hospitals of the Salamanca University. The board wanted the team to suit the premises of the emergency unit to children. This research team already had experience in a number of initiatives related to the humanization of the children’s admission unit in this hospital. On the whole, these initiatives had revolved around the introduction of artistic symbolic elements in the hospital environment. These elements had proved useful to help reduce the children’s awareness of the distressing experience
associated with hospitals, identifying pediatricians’ services, and reinforcing the idea of the special emotional needs of this type of patients and their families (Ullán, Gándara, & Fernández, 2006). Previous experiences in other hospitals (Ullán & Belver, 2005) made it clear that the emotional meaning of the hospital premises for children and their families should be borne in mind, as well as the analysis of the perceived quality in the environment. The children’s fear of medical treatment and the best way to deal with it were also considered.

Preparing the design

Once the hospital had requested the support of the research team, the first phase of the process was to present a number of proposals to improve hospital environment. These proposals counted on previous experiences in the same hospital, in other centers, and also drew on the existing literature. A number of working sessions with the participation of diverse professionals (artists, psychologists, health staff, and, occasionally, teachers responsible for the hospital area, children’s relatives, and maintenance personnel) took place. These sessions were hosted by the hospital itself, both in the admission unit and in the yet unfinished new children’s emergency unit. These gatherings were basically informal and functioned rather as brainstorming experiments amongst the various participants, all of them perfectly aware of hospital dynamics. The topics that were dealt with were: a) the emotional implication of the hospital for children and their families, b) children’s fears of medical treatments, c) reactions and behavior of children’s relatives in the emergency unit, d) the importance of stress reduction in children’s emotional state, e) the reciprocal transmission of emotions between children and families, f) sense of humor in hospitals, and g) children’s games in hospitals.
After the brainstorming sessions, the solution reached concentrated on changing the premises so that the children who accessed the emergency unit from the street would not perceive the environment as threatening but rather as the opposite. The idea was to introduce elements that could divert children’s attention from the hospital itself and, if possible, to change the emergency unit so that it represented a friendly children’s environment that could transmit happy vibrations and promote games and relaxation, thus increasing the children’s welfare and that of their families so that the reciprocal perception of emotional stress could be avoided (Fernández-Castillo & López-Naranjo, 2006). This aim had to take into account the limited space of the unit, the complexity of functions that took place in it, the virtual absence of daylight, and its restrictive views. A design that had a substantial positive impact on children, that fit in the little space available, that could endure heavy daily usage, and was easy to preserve were some of the main aims of the project.

With these limitations, the artists linked to the Museum of Children’s Art of the Complutense University of Madrid suggested putting two strategies into practice: the color of the walls and the creation of children’s narratives conducive to the transmission of emotionally positive meanings to the children and their families. Light and luminous colors for the areas lacking daylight were selected (lobbies and nurse offices) and happy and brilliant colors for the consulting offices, reception, waiting-rooms, etc., were also chosen. The colors most frequently associated with hospitals (white, light green...) were consciously avoided.
An especially relevant aspect was the capacity of symbolic elements in the hospital to provoke fear as well as to calm down and relax children. Health staff had systematically observed that children paid enormous attention to these elements. They could easily become afraid of medical tools and white coats. Nurses, hospital teachers, and the parents emphasized the way in which little details of the children’s artistic decoration introduced into the pediatric unit were valued by the children, thus contributing to their distraction and relaxation. This was the idea around which the project of humanization revolved. A narrative (entailing an axis of meaning) was presented so that it could provide some homogeneity and coherence to the whole service, at the same time allowing for enough variety so that different elements could be incorporated. This narrative was associated with a garden: the children’s emergency unit should look like a garden. To symbolically transform a dark and unfriendly hospital cellar into a happy and friendly garden was the idea defended by the artists. For this idea to take shape, the artist Paula Nuñez designed a setting and a number of characters that, once reproduced in high quality vinyl material, could be glued onto the walls of the new emergency unit. This material was chosen on account of its good results in previous experiences, especially in the units of new-born babies.

The leading idea adopted the shape of a garden where children could spend time and enjoy themselves. Trees, fences, suns, and flowers integrated the setting. Children were painted playing normally in the garden, in spite of being injured or bandaged. Some humorous health-related characters were also included. As the itinerary to be undertaken by the children and their families to reach the waiting-room from the entrance was long and somewhat complicated, a large-scale drawing of a train full of children was painted, which indicated the direction to be taken. All the illustrations share the same humorous,
informal, and innovative style that the artist had already used in other areas of the hospital, especially in the pediatric consulting service and in the admission unit.

**Participation to maximize resources**

Once the graphic designs were ready, two serious problems were still pending. The first one had to do with the preparation of the material and the second one with its definitive placing on the walls. In order to maximize the vinyl, a giant puzzle-like composition of the illustrations was chosen. Planks of 1.5 x 8 meters, designed to avoid blank spaces, were made. A large number of illustrations was obtained through this technique but the planks arrived at the hospital as whole units. From an organizational point of view, cutting out the planks was not only a challenge but also one of the main pillars of the whole project. In all, 150 square meters of drawings that fitted into each other had to be prepared, cut out, distributed, and finally glued onto the walls. Once the material (the vinyl planks with the still-to-be-cut out drawings) arrived at the hospital, its preparation was coordinated by the hospital area and the children’s nurses’ unit. Under the surveillance of the hospital teachers, hospitalized children, their families, nurses, and some health staff started to cut out the drawings painted on the planks. Due to these people’s high degree of engagement, the results were maximized and, most importantly, diverse sectors of the hospital were highly motivated to attain a shared goal.

Once the material had been cut out, the drawings were fixed on to the walls by volunteer university students under the surveillance of the artists. The participation of students working on their degrees in the campus where the hospital is located improved
the formation of this sector and also contributed an enriching experience to this heterogeneous group of people who, at different moments, took part in the experience

**Assessment of the experience**

The assessment of the experience can be undertaken from different standpoints. In the first place, the degree of involvement and participation of diverse professional and hospital users is highlighted. In a previous case-study (Ullán & Belver, 2005), in which the same hospital had participated, the research team had noted that the nurses had requested that the services responsible for the maintenance of the hospital should be more involved in the improvement of the premises. But the team had also noted that these demands had met some resistance. Four years later, the situation in the hospital was entirely different. Nurses’ and external collaborators’ (such as psychologists, artists, etc.) suggestions were heard and discussed, and cooperative practices were implemented. Different perspectives did not prevent achieving a common goal: the fulfillment of children’s interests. In a short time, important proposals that have become reference points in the hospital and in other health-related centers were adopted. In all, some 240 linear meters of walls and furniture in the children’s emergency unit have been refurbished. Further, due to the vinyl maximization program, other hospital areas (entrance to the consulting area, lobbies, children’s intensive care unit, and new-born sections) have also benefited from the initiative. In Figures 1 and 2, the final result can be contemplated. The high participation and personal involvement of nurses, teachers, doctors, technicians, managers, families, artists, researchers, and students are in themselves a very positive element to be taken into account.
The parents’ opinion of the initiative of the hospital was considered an important part of the assessment of the experience to improve the pediatric service by means of artistic resources. To determine the parents’ perspective, we performed interviews for one month with the parents of hospitalized pediatric patients who had been admitted to the hospital after being in the emergency ward. A total of 40 mothers and 11 fathers of 51 children (26 girls and 25 boys) were interviewed. The interviews were semi-structured and were carried out according to the guidelines that appear on Table 1. We performed an analysis of the thematic content of the responses of the interviewees, using the categories shown on Table 2.

In general, the parents rated the change very positively. When rating, they emphasized that the children should not have to share spaces with adult patients and that, as soon as they were admitted in the pediatric emergency service, it should be obvious that such facilities were designed for children (Table 3, quotation 1). Various parents commented that the initiative should have been carried out sooner (Table 3, quotation 2), whereas others said it should be extended to other hospital areas (Table 3, quotation 3), even to adult areas (Table 3, quotation 4).

Many parents stated that the new decoration of the hospital helped their children to be more relaxed and calm (Table 4, quotations 1 and 2), although others noted that the effect depended on the disease and the child's degree of distress (Table 4, quotation 3). Some parents said that the new decoration of the emergency service had also helped them (Table 4, quotation 4).
The feelings transmitted by the drawings, according to parents, were related to positive emotions such as joy, humor, and tranquility (Table 5, quotations 1 and 2) and they also stressed the originality of the illustrations (Table 5, quotation 3).

The parents made many observations about the reactions of the children in the hospital towards the drawings that were a part of the atmosphere. They referred to the capacity of the illustrations to facilitate some medical procedures (Table 6, quotation 1). They placed special emphasis on the drawings that distracted the children and facilitated their playing while they were at the hospital (Table 6, quotations 2 and 3).

Another element to be considered is the impetus that this initiative has given to some other initiatives that are still in an embryonic state. Currently, similar projects in various Spanish hospitals are being undertaken (Hospital Río Hortega in Valladolid, Hospital Materno-Infantil Gregorio Marañón in Madrid, and Hospital Vall d’Hebron in Barcelona). These initiatives emphasize the importance of symbolic artistic elements in hospital environments because of their contribution to the improvement of patients’ emotional state. If the patients are children, art and humor seem to interact especially well to achieve this goal.

**Conclusion**

The physical space—in this case, the hospital—can be understood as a space of meanings for those who inhabit it. The meaning of an environment is the set of contents that allow a person to understand what a place means to him or her. These meanings are constructed from the interpretation of the signals that are present in the environment.
This process of attributing meaning is the basis of the emotional experience of the space (Corraliza, 2000). Art can be understood as a powerful symbolic environmental mediator that can transmit positive emotional meanings to the children and their families in health-care settings (Belver & Ullán, 2010). Some authors (Berg, 2005) indicate the need for a more exhaustive review of the benefits of the physical care settings on health, a review that should be based on a consensus of the taxonomy of the relevant physical dimensions. Among these dimensions, the symbolic dimension of the space should be included (Belver & Ullán, 2010). Thereby, a new perspective would be incorporated, to take into account when making decisions about the interpretation and the meaning that children and families lend to health settings, with the repercussions of such interpretations and meanings on their health and well-being. It is easy to see that the hospital, as a physical and social space, has emotionally negative meanings associated with it for the patients and their families. It is a setting that is linked to disease and its consequences, and part of its intrinsically aversive nature has to do with this. But the hospital is not only a place where we are sick and suffer. It is also a place where we are cured. The hospital should not be perceived as a setting of disease, but a health setting. The conception of the hospital as a health setting is especially important in the case of pediatric hospitalization. Due to the psychosocial features of pediatric patients, their perception of the environment and the emotional experiences associated with the hospitalization process should receive special attention. Art emerges as an especially useful tool because of its capacity to generate and transmit meaning.

Art, as a vehicle of social meanings and as a means to express emotional experiences associated with health and disease, becomes a protagonist in the health sphere (Camic, 2008; Stuckey & Nobel, 2010). The assessment of the impact of art programs in the
health setting is the subject of discussion. The incorporation of art and health programs requires the development of assessment tools than can provide evidence to support the continuity of these intervention models, showing us what, when, and how to introduce diverse art forms to achieve the most effective results (Staricoff, 2006). The problem is: what should be understood as evidence within this context (Putland, 2008)? Moreover, the development of these programs requires us to use shared languages and multidisciplinary vocabularies that reflect interests and values that are inherent to the perspectives of health and of art (Putland, 2008). In this sense, case-study provides a type of knowledge that depends on the context needed for professional expert performance, which requires the mastery of many concrete cases in its specialized sphere (Flyvbjerg, 2006). It presents the limitations inherent to its design (Campbell, 1975; Yin, 1999), but it also generates applied knowledge in the settings in which the experiences of interest take place. Such knowledge is useful to increase our understanding of the psychological and organizational processes involved in the sphere we have analyzed, in this case, the improvement of the hospital setting through art.

A number of works of research (Fornara, 2006; Varni et al., 2004) stress the relationship between the perceived quality of the physical-spatial elements and the social and functional ones of the hospital: that is, the higher the degree of humanization in terms of the architectural design, the higher the perceived quality in the relational, organizational, and functional dimensions. Moreover, there is evidence of the positive impact of art programs and projects implemented in health-care environments (Staricoff, 2006; Stuckey & Nobel, 2010) that are coherent with the experience analyzed in this article.
The authors consider the following conclusions of this work. First, the way in which the hospital is perceived by children and their families and the meaning that they attribute to it are considered factors that can condition the effect of hospital stressors on pediatric patients' well-being. Second, art can contribute to the improvement of the perceived quality of health-care settings, modifying the meanings and emotions associated with such settings. Lastly, the incorporation of case-studies of humanization of hospital environments through art in the research agenda can contribute to the progress of multidisciplinary knowledge about the benefits of arts in health.

References


