Tumori, 93: 645-646, 2007

LETTERS TO THE EDITOR
DESIGN AND ARCHITECTURE IN ONCOLOGY AS SUPPORTIVE CARE FOR CANCER PATIENTS

Enrico Aitini and Giovanna Cavazzini

Medical Oncology and Hematology Department, Carlo Poma Hospital, Mantua, Italy

Many oncologists have experienced the discomfort of their patients during their stay in hospital caused by the cold, impersonal hospital environment which does absolutely nothing to alleviate the physical and mental suffering of these gravely ill patients; on the contrary, it exacerbates their condition.

Recent medical and psychological thought, together with a changing cultural sensibility and an increased awareness of the fundamental needs of patients, have led to the designing of projects aimed at humanizing medical institutions. At first glance this kind of concern may seem paradoxical. The ancient "hospitalitas", which was consolidated in the Middle Ages into a place of treatment to receive pilgrims or entire populations struck by famine and epidemics, was characterized as a place to relieve pain of the body and the spirit and this objective has remained through the centuries until today. It is therefore legitimate to ask why hospitals today are perceived as places where long-term patients are depersonalized and where they lose those important points of reference relating to their individual identities. It is not easy to find satisfactory answers. Maybe a correct analysis should take other aspects of our lives into account such as the social and cultural transformations we have lived through and continue to experience throughout our existence. Opinions vary greatly. There is, however, wide agreement on the necessity to develop programs and carry out research which would once again make our medical institutions "liveable". Although there are many reasons for promoting this objective, there are probably only two principal ones.

Firstly, by definition the hospital is a place for sick people and time spent in hospital usually means a loss of autonomy for patients. Because of the organizational needs of the hospital, patients are usually subjected to routines and environments which are totally alien to their normal habits and time schedules; waking up, going to sleep and eating meals at different times from normal, loss of space or having to share space with others, and inactivity. Time slows proportionally to the passivity of letting the hours and minutes go by. Making plans or organizing for the future is usually non-existent or reduced to a minimum.

The environment, or better, the space, which is almost always characterized by inexpressive cold and monotonous colors on the walls of the rooms, corridors and waiting rooms, induces patients to withdraw even more into themselves and dwell on their worries and anxieties regarding their state of health.

The second reason is instead a consequence of the technological transformations which have taken place in the field of medicine and which have inevitably impoverished the doctor-patient relationship (CT scan, MRI, PET, etc.). Symptomatology, which at one time was the basis of a possible diagnosis, has gradually faded, often reduced to a quick listen to heartbeat and chest murmur and an abdominal examination. Time shared by doctor and patient is continually reduced, above all because time dedicated to meeting and talking, to gradually giving and receiving complete information, and to positive communication tends to be compressed by productivity needs and requirements that are in no way compatible with the dramatic situation the patient is going through in certain moments[1,2].

In order to modify this tendency (apart from projects to improve the psychological aspects of communication, the patient-doctor-hospital relationship, and generally how to receive the patient in hospital), the possibility of using different artistic forms has been studied. Some of these ideas have already been experimented in different fields of medicine, for example in pediatrics and psychiatry as supportive care for patients and as ways of managing time and space in a more constructive fashion[3,4].

It is, however, more complicated to consider the architectural restructuring or planning of new cancer units or day hospitals. The literature on this subject is sparse but we are beginning to see a gradual tendency to focus more attention on the problem[5-9].

Architecture and design, particularly in this field, must address the impact that artistic expression can have on the patient's general physical and psychological condition; living through the experience of a grave illness, the fear of pain and suffering, the fear of death. Space, in terms of light, materials, shapes and dimensions, must consider these difficult and painful feelings

Correspondence to: Enrico Aitini, Medical Oncology and Hematology Department, Carlo Poma Hospital, Viale Albertoni 2, 46100 Mantua, Italy. Tel. +39-0376-201652; fax +39-0376-201653; e-mail: enrico.aitini@ospedalimantova.it; dorothycampbell@email.it

Received January 29, 2007; accepted March 19, 2007.

and as far as possible alleviate them or at least not make them worse.

The effects of our surroundings on us and our reaction to them have been well documented[10]. The walls of our medical facilities should avoid the cold monochromatic colors of the past and be full of rich colors of different hues, of changing intensity, of attention-catching shades, of diverse perspectives. The furnishings should be light and graceful to facilitate the patient's daily routine, the corridors and walkways should be designed to make movement easier. Apart from the benefits in terms of long-term costs and daily operations, this kind of environment would have beneficial effects not only on patients but also on family members and staff[11].

In short, the architect must have in-depth knowledge of the existential problems these patients face and to gain this knowledge he or she must collaborate with the various specialists involved, i.e., doctors, nurses, psychologists, sociologists, and others, with the objective of offering patients a new definition of time and space in hospital. It is essential to analyze the problems relative to the illness, such as weakness, pain, anorexia, loss of autonomy; those relative to treatment, such as nausea, vomiting, myelotoxic effects, alopecia; and also those relative to loneliness and at the same time loss of privacy, a sense of living in a foreign environment and of being deprived of one's independence.

Changes in space and time, for example the total lack of difference between day and night areas as present in our everyday lives, has a profound effect on the sense of being in a foreign environment that patients experience in hospital.

It is therefore necessary to gather the expectations and the most common needs of patients to identify time and space solutions which can become part of a global concept of treatment and cure, while keeping in mind that throughout the history of hospital architecture the models which inspired many projects from the beginning of the last century were army barracks and prisons.

It will not be easy to transform these needs into reality; on the contrary, it will be extremely difficult, but we believe that it is possible to envision hospitals where the patient is at the center of these projects, where organizational necessities and the needs of patients do not contrast, and where architecture can provide the human values that time and space occupy in medical facilities primarily for patients affected by grave and potentially fatal illnesses.

References

1. Aitini E, Aleotti P: Breaking bad news in oncology: like a walk in the twilight? Ann Oncol, 17: 733-734, 2006.
2. Fallowfield L, Jenkins V: Communicating sad, bad, and difficult news in medicine. Lancet, 363: 312-319, 2004.
3. Gallagher LM, Huston MJ, Nelson KA, Walsh D, Steele AL: Music therapy in palliative medicine. Support Care Cancer, 9: 156-161, 2001.
4. Magill L: The use of music therapy to address the suffering in advanced cancer pain. J Palliat Care, 17: 167-172, 2001.
5. Easter JG Jr: Comprehensive care plus creative architecture. J Oncol Manag, 14: 11-19, 2005.
6. Easter JG Jr: Planning for patient privacy and hospitability: a must do in oncology care. J Oncol Manag, 12: 19-23, 2003.
7. Edvardsson D, Sandman PO, Rasmussen B: Caring or uncaring – meanings of being in an oncology environment. J Adv Nurs, 55: 188-197, 2006.
8. Fountain M: Design of the ideal workplace: strategies and lessons learned. J Oncol Manag, 14: 29-34, 2005.
9. Porter S: Almost home. Health Prog, 71: 46-48, 1990.
10. van Dijk P: Combining aesthetics and practicality in health care architecture. J Ambul Care Manag, 18: 1-7, 1995.
11. Easter JG Jr: Architectural programming for the workplace and the careplace. J Oncol Manag, 11: 18-23, 2002.