

Nursing homes: engaging patients and staff in healing garden design through focus group interviews

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ABSTRACT

Patient-specific gardens can provide general benefits related to the restorative effects of nature and respond to the specific needs of a particular patient population. These needs are to be considered in the design of outdoor space for healthcare. Our goal was to design a patient-specific garden for elderly people who live in Nursing Homes and Adult Day Services (RSA Famagosta, Milano). A participatory design process was used through the organization of focus groups. A focus group is a form of qualitative research in which a group of people are asked about a topic. Focus groups allowed us to study residents and staff in a more natural setting than a one-to-one interview. With this approach, users work closely together to create a program that has been implemented by landscape architects to design a patient-specific garden. The participatory process involving designers and clinical staff and residents has been appreciated because the users felt involved in the decision process. Focus group approach has proved to be useful to provide information on healing garden user needs: the findings were useful to draw design guidelines that has been incorporated into the "garden design".

Keywords: Healing garden; Focus group; Content analysis; Qualitative approach

1. INTRODUCTION

The interest in healing gardens has rapidly increased around the world in the last 20 years, both from the practical and scientific point of view. Professions and researchers with very different backgrounds are approaching with this theme, exploring different areas of interest such as design principles, design implication of health and well-being, how to measure the health benefits of healing gardens, how to design patient-specific healing gardens, etc. However, how we define a “healing garden”? Do all agree with its meaning? Do all use the term “healing garden” to indicate the same thing?

Everyone thinks to know what a garden is and what “healing” means in relation to gardens: in this way is difficult, sometimes, to be understood. In fact, a garden can be “healing” because it is attached to a healthcare facility or because in some way it helps the healing process or because it is part of a process of care or because it is a place of care or simply because it is a garden. In this way, all the gardens are “healing”, and it is partly true, but when we speak about “healing gardens” we speak about something more specific: a garden specifically designed to be healing. Design is the key issue.

In this sense the healing garden concept perfectly meets the World Health Organization definition of “health”: “Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (WHO, 1948). Healing may be said to be a process that promotes overall well-being (Cooper, Marcus & Barnes, 1999): it is important that the illness is cured (from a medical point of view) but it is also important the individual experience of a personal feeling of recovery (Stigsdotter & Grahn, 2002).

It takes a change of mindset: from bodies to lives, from the “person-as-a-patient” to the “patient-as-a-person” view (Robinson, 1939; Ramsden, 1999). Modern healthcare facilities are designed almost exclusively for the treatment of diseases but the quality of the designed environment is in direct relation with health. We must work for “a world where every hospital, health clinic, treatment center, doctor’s office, and residential care facility is designed to improve both the quality of care and outcomes for patients, residents, and staff” (The Center for Health Design, 2012). The impact of the physical environment on people’s health and well-being is a research topic for different research disciplines, such as medicine, environmental psychology and landscape architecture (Stigsdotter & Grahn, 2002). Each discipline focuses on its own aspects, while trying to integrate more and more with the others.

In which way healing garden can benefit people? What people have to do in the garden in order to have benefits? Healing gardens can accommodate all users, patients (of all ages and with all kinds of diseases), visitors and staff, to

make different types of activities (from just sitting on a bench to take a walk, to do gardening). It is like a scale with two poles: from an extreme passive experience of the garden to an active one like horticultural therapy, that uses cultivation of plants as a therapeutic activity (Stigsdotter & Grahn, 2002). In the reality, often we can find a balance between “just being in the garden experiencing it and working with gardening” (Stigsdotter & Grahn, 2002).

The positive effects on health of experience and use of green outdoor environment are well documented (Cohen-Mansfield & Werner, 1998; Küller & Wetterberg, 1996; Rodiek, 2002; Ulrich et al., 1991; Ulrich, 1984 and 1999). Healing gardens can benefit people reducing stress (Adevi & Lieberg, 2012; Ulrich et al., 1991; Van Den Berg & Custers, 2011), mood (Rodiek, 2002), and the treatment costs (lower consumption of medicines and less permanence in healthcare facilities) (Ulrich, 2001 and 2002); and increasing the patient autonomy (Namazi et al., 1992; Seifert et al., 2005) and the overall quality of life (Sherman et al., 2005; Varni et al., 2004; Stigsdotter et al., 2003).

Nevertheless, the interpretation, quantification, and generalization of the research findings are often difficult for methodological limitations, lack in the study description and detailing, large heterogeneity in outcome measures used. Remains an open question: how to measure the benefits of healing gardens?

2. METHODS

The study was conducted at the Famagosta Nursing Home, sited in Milano (Italy), with 290 beds (included one Alzheimer unit with 20 beds) and a “day care center” for 30 people. The staff is composed of 246 people and 30 volunteers. Famagosta NH has a garden 12.500 sq.m wide (excluded parking and pertinences), with a ratio of 40 sq.m/patient.

Today nursing homes for older persons only accommodate the most fragile persons and very few of them can enjoy the outdoor environment on their own (they are dependent on the caregivers and next of kin to go outdoors). The use of the outdoor environment depends also on its capacity to be restorative and to provide users with desirable experiences: “being away, extent, fascination and compatibility” (Kaplan & Kaplan 1989; Kaplan et al., 1998); “sense of control, privacy, social support, physical movement, access to nature, positive distractions” (Ulrich, 1999 and 2001).

Patient-specific gardens can provide general benefits related to the restorative effects of nature and respond to the specific needs of a particular

patient population. The goal of this study was to better understand the factors that influence the use of the outdoor environment at nursing homes for older persons. We decided to pursue this goal involving users in the design process, by asking staff, residents and kin about their use and experience of the outdoors at the RSA Famagosta. The study focused on factors with implications for the design process of the outdoor environment. A participatory design process was organized through the use of focus groups, a form of qualitative research in which a group of people are asked about a topic. We used “focus group” technique both with staff and residents.

Focus groups are “carefully planned series of discussions designed to obtain perceptions on a defined area of interest in a permissive, nonthreatening environment” (Krueger & Casey, 2000). Focus group is “a technique involving the use of in-depth group interviews in which participants are selected because they are a purposive, although not necessarily representative, sampling of a specific population” (Thomas et al., 1995). Focus groups, as a means of qualitative data collection, are becoming increasingly popular in health research for exploring what individuals believe or feel as well as why they behave in the way they do (Rabiee, 2004; Curtis et al., 2007; Mansell et al., 2004; Webb et al., 2001).

Two focus groups, involving a total of 20 people were convened in March 2012. The first group was limited to the staff and was made up of 9 adults (7 female and 2 male) 30-55 years of age, recruited according to the following criteria:

- recommended by the direction,
- working closely with the residents,
- willing to be involved in the study.

The second group was limited to the residents and was made up of 11 adults (7 female and 4 male) 75-85 years of age, recruited according to the following criteria:

- recommended by the direction,
- able to use the garden,
- able to participate to the study.

The staff’s view is of particular importance and has a double value:

1. they have a comprehensive knowledge of the patients’ wishes, needs and capabilities in the outdoor environment; they usually take patients outside;
2. they use the outdoor spaces for themselves too (eating, relax, smoking, etc.).

The residents’ view is of particular importance but is very difficult to know:

1. what they say does not always coincide with the reality (lack of memory, perceptual disturbances, etc.);
2. what they say should rather help to understand what they feel.

For residents, “field observation” is very useful to collect qualitative data. We used both methods.

A structured focus group protocol, with the following characteristics, was used in each of the groups:

- 1 moderator guided the discussion in the group,
- 1 assistant-moderator took notes and asked follow-up questions,
- the focus group interviews were conducted using open-ended questions,
- the focus groups lasted 60-90 minutes and all of them were recorded,
- during the focus groups, a map of the area (building + outdoor) was showed to the group to further support the discussion.

Each of the focus group interviews was conducted according to the procedure described below. Informed consent procedures were adopted to assure the protection of human subjects. Participants were also given the opportunity to ask and have answered any questions concerning the study. After hearing a brief presentation of the moderator on the study and its purposes, participants were asked to provide some general information about themselves: age and civil status; professional qualification, professional role in the NH, specific activities carried out with residents, for the staff; previous job and time elapsed from the entrance in the NH for the residents. The moderator explicitly explained to participants that:

- there were no right or wrong answers,
- all comments were welcome,
- each participant can speak and the answers to the questions were completely voluntary,
- they were free to leave the group at any time,
- their comments would be kept confidential.

After this first phase of introduction and knowledge of the groups, the participants were asked to speak on:

1. the “garden today”: who use the garden and to do what, when the garden is used, which parts of the garden are more used, why some residents and staff do not use the garden, are there any special place (beautiful, meaningful, unattractive) in the garden? 12 images of “places” in the garden were shown, asking for an assessment (like/dislike);
2. the “garden tomorrow”: what do you like to do in the garden? What do you think the residents can/like to do (alone, with staff, with their kin)?

The analytic strategy included the use of audio recorded files, notes and memory (Kreuger & Casey, 2000).

3. RESULTS AND DISCUSSION

Qualitative content analysis (identifying, coding, and categorizing data) was used to analyze the data (Coffey et al., 1996; Morgan, 1997). The study produced two types of results. On the one hand, both the staff and the residents agreed on the localization of the garden areas that needs to be recovered and re-designed to meet their agreement (Figure 1).

On the other hand, has been very interesting to note some discrepancy between the staff vision of what the residents would like and what the residents say they would like. When asking to tell the activities they would prefer to do in the garden, in some cases the answers were very different (Table 1).

Table 1. Comparison among the staff and residents answers

ACTIVITIES	STAFF FOCUS GROUP (9)		RESIDENTS FOCUS GROUP (11)
	STAFF	RESIDENTS	RESIDENTS
Contact with nature	9	9	11
Walking	9	9	11
Being alone	7	9	3
Socializing	8	9	11
Eating	7	/	/
Barbecuing		6	11
Reading	6	9	6
Dancing		9	3
Playng (bowling, cards, ...)		9	11
Observing		9	11
Gardening /horticulture		9	11
Sunbathing	5	9	8
Picnic		9	11
Gymnastics		9	11
Taking care of cats		9	1
Feeding birds		9	0
Smoking	1	9	0

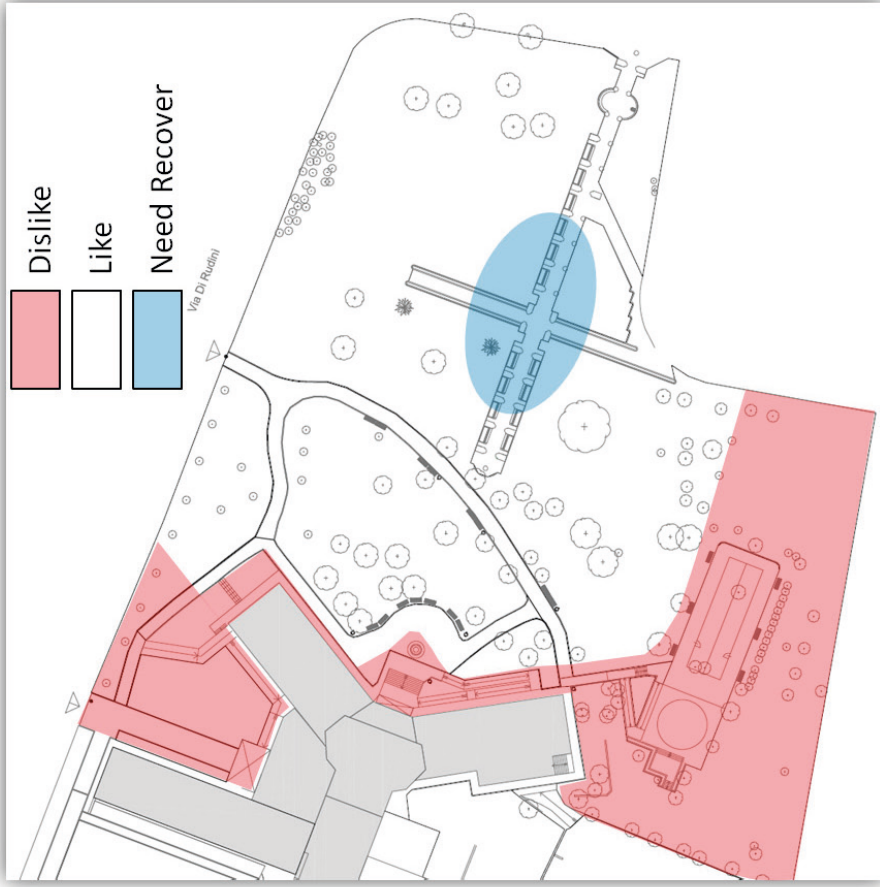


Figure 1. Localization of the garden areas that needs to be recovered and re-designed

In some cases the answer by staff is conditioned by their own wishes or by referring to few specific residents without having a more comprehensive look: for the activity “Being alone”, some resident answered underlining “Why should I want to be alone? I am always alone”. In this sense should be interpreted also the answer related to “Barbecuing”: the activities that involve socialization are sought and desired by residents able to use the garden. In other cases the answer by staff is affected by not having sufficiently considered the physical ability and stamina (“Reading” and “Dancing”). A special case are the activities related to animals (“Taking care of cats” and “Feeding birds”): the residents speak about cats (currently present in the garden) and birds in a very “enthusiastic” way, but when they are asked “Would you like to ...” they respond decisively “No”. Finally, another special case is related to “Smoking”: a good number of residents and staff smoke, but nobody “admit” that this activity should be planned in some way in the garden. Furthermore, the staff unanimously think that “smoking” should be an activity to be planned in the garden for the residents. It is clear the “smoking” carries a negative social value that cannot be publicly admitted. Anyway, people smoke only outdoor and this has several negative consequences on the garden (especially related with the cigarette butts).

Putting together all the information gathered from residents and staff, it is possible to delineate some specific design guidance that could allow the garden to be more used:

- the garden has already a good number of trees that should be better valorized (e.g. by adding name tags);
- there is a need to have a good balance between sun and shadow, giving people more possibilities to choose the “microclimate” they prefer (both for residents and staff);
- the garden should be designed to enhance the possibility to do rehabilitation and physical activity outdoor;
- the garden should be designed to enhance the socialization opportunities and the contact with nature;
- the garden should have the presence of water: it was pointed out that water is important for visual/sound reasons, but also for “playing with” and “walking in” (this last wish was outlined by both residents and staff);
- the garden should have areas dedicated to edible plants and horticultural activities;
- the garden should be used even in winter;
- it is necessary to improve accessibility to the garden, providing paths of different length and difficulty;
- the maintenance and cleanliness of the garden have to be improved (also in relation to cigarette butts).

Whatever the method, the analysis of the benefits of healing gardens aims to provide useful information to those who must design these spaces. The research carried out allow to identify some guiding principles:

1. contact with nature,
2. autonomy and possibility of choice,
3. safety,
4. comfort,
5. accessibility,
6. flexibility,
7. heterogeneity of spaces (types and functions),
8. familiar atmosphere.

The guidelines have been incorporated in the *Healing garden project* of the Famagosta Nursing Home sited in Milan (Figure 2).

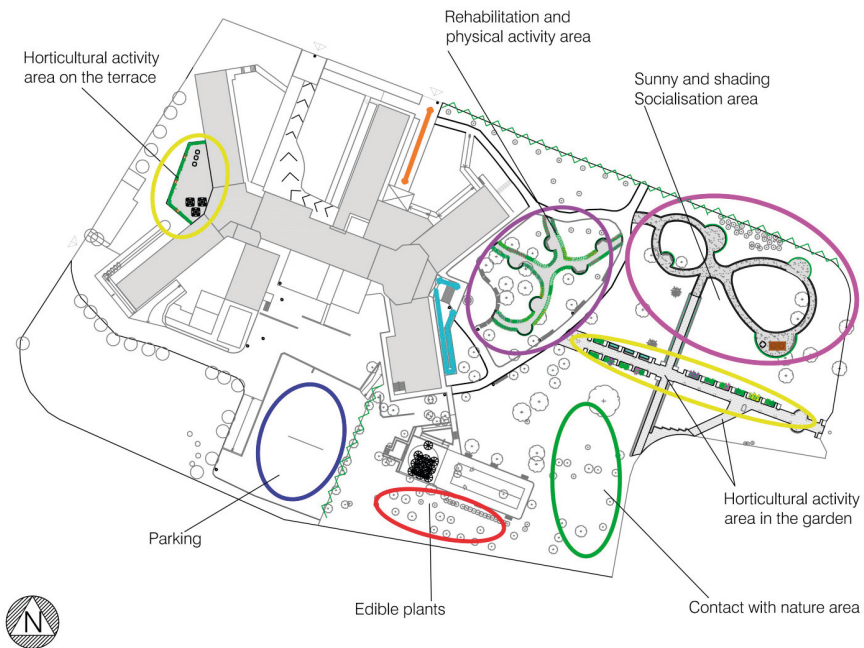


Figure 2. "Healing garden project" of the Famagosta Nursing Home (Milano, Italy)

4. CONCLUSION

The strategy of including residents and staff in focus groups proved to be informative (Rosen et al., 2008). We assumed that staff could well interpret the residents' wishes and needs (Bengtsson et al., 2006); the study shown that the perspectives of professionals and residents sometimes differ: this study tried to "give voice" to the residents.

The study had some limitations. First, the number of participants was relatively small. Secondly, because of the recruitment methods used, the sample of residents wasn't representative: because this research was qualitative, the data are intended to generate hypotheses. Caution should be exercised in attempting to generalize the results of this study to a broader population.

Focus group approach has proved to be useful to provide information on healing garden user needs: the findings were useful to draw design guidelines that has been incorporated into the "garden design". The next phase of the project provides for other two focus groups (with staff and residents) with the aim to discuss the proposed design.

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