

Patients care pathway in a radiotherapy service through a new architectural project: the waiting rooms

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Introduction

The environment of healthcare facilities has an impact on users' outcomes. A new generation of hospitals seems to be adopting this new type of environment to promote wellness for the individual. The effort to conceive hospitals as facilities that benefit their users can be seen as part of the broader context of implementing a model of patient-centered care: The Planetree model (Arneill & Frasca-Beaulieu, 2003). The Planetree philosophy encourages patients to become educated participants in the choices regarding their care by fostering patients' access to information, promoting positive staff-patient interaction, and involving both patients and their families in the healing process (Schweitzer, et al., 2004). Most of all, it is important to give voice to the stakeholders very often forgotten (Andrade et al., 2012).

A convergent mixed method

SAMPLE 1 is composed of 65 oncological patients (35 women); mean age was 61 years (SD = 12.64); the majority lived with a partner (66%); 59 % are retired and the sample included mostly patients with breast cancer (35%). **SAMPLE 2** is composed of a doctor, a nurse, two architecture professors, six architecture students, three patients, a caregiver and the facilitator of the group.

QUESTIONNAIRES : (Sample 1):

- Sociodemographic data (age, sexe, status, ...)
- The Hospital Anxiety and Depression Scale (HADS ; Zigmond & Smith, 1983, translation by Lépine et al., 1985)
- The Perceived Hospital Environment Quality Indicators (PHEQIs ; Andrade et al., 2012)
- The State-Trait Anxiety Inventory (STAI ; Spielberger, 1983 ; translation by bruchon-Schweitzer & Paulhan, 1993) ;
- The Perceived Stress Scale (PSS ; Cohen et al., 1983 ; translation by Quintard, 1994).

FOCUS GROUP : (Sample 2)

- Three waiting rooms projects produced by students of architecture
- Two working methods: SWOT and content analysis
- The session lasted three hours : each project was discussed for an hour

Aims of the study

1. To examine the perception of the quality of the healing environment of patients attending the radiotherapy department, in one French-speaking hospital.
2. To give more insight of three waiting rooms at the radiotherapy department, using the perceptions of the patients and the health professionals.

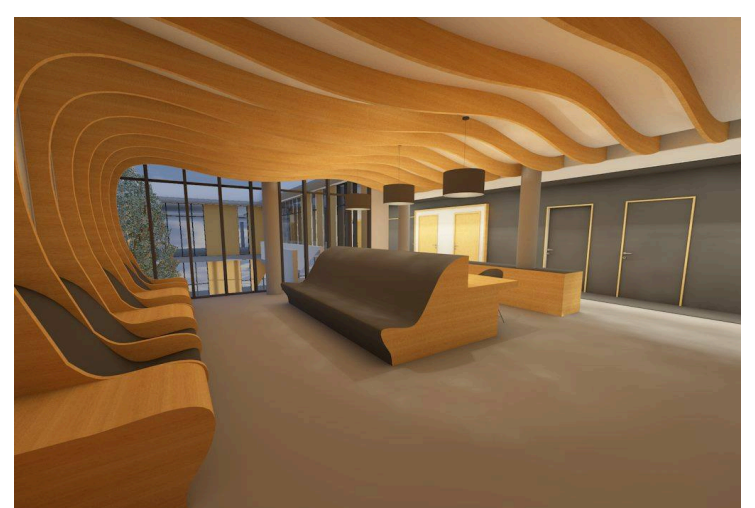
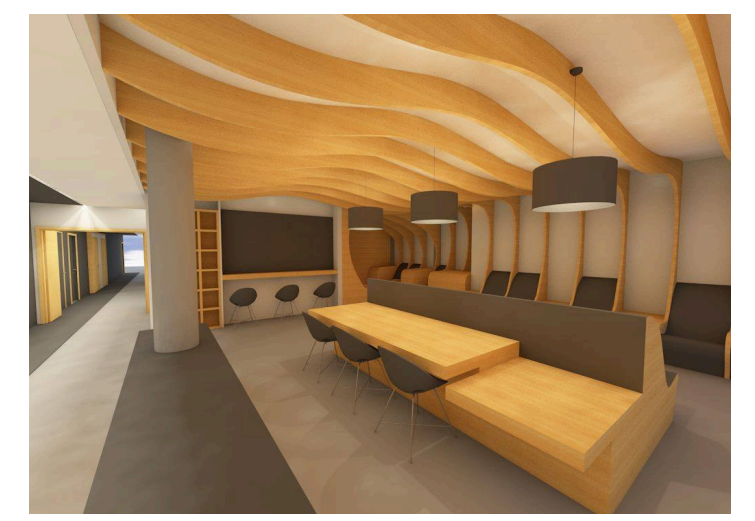
Project 1



Project 2



Project 3



Results

SAMPLE 1 :

- The mean scores and subscales scores indicate an absence of psychological distress, anxiety, perceived stress and a satisfaction of the perceived hospital environment quality (cf. Table 1).
- There were no statistically significant differences between sex means on Spatial physical environment as determined by one-way ANOVA ($F(1,63) = 0,076, p = .78 ; n^2 = 0.00$) and on Social functional features as determined by one-way ANOVA ($F(1,63) = 0,82, p = .36 ; n^2 = 0.01$).
- There were no statistically significant differences between age means on Spatial physical environment as determined by one-way ANOVA ($F(1,63) = 2.73, p = .10 ; n^2 = 0.04$) and on Social functional features as determined by one-way ANOVA ($F(1,63) = 0,67, p = .41 ; n^2 = 0.01$).

SAMPLE 2 :

Overall, during the focus group, the three most discussed topics were: spatial arrangement, atmosphere and décor, communication system

More specifically, regarding the spatial arrangement

- The positive elements are : able to choose between privacy and social contact or the presence of a relaxation area;
- The negative elements are: the seats back to back or non-modular or portable furniture items.

Table 1. Mean descriptions of the different questionnaires

	N	M	SD	Min.	Max.
HADS anxiété	65	6.42	3.02	0	17
HADS dépression	65	4.65	3.40	0	16
HADS total	65	11.06	5.52	1	27
STAI état	62	34.06	10.34	20	60
PSS	62	17.58	7.95	0	32
Spatial physical environment	65	2.69	0.48	1.55	1.55
Comfort	65	2.51	0.56	1.06	1.06
Orientation	65	2.90	0.65	1.29	1.29
Quietness	65	3.26	0.51	2.00	2.00
Views & lighting	65	2.52	0.85	0.50	0.50
Social functional features	65	3.01	0.48	1.88	4.00
Care for social and organizational relationship	65	3.19	0.54	2.00	4.00
Privacy	65	2.73	0.47	1.57	4.00

Conclusion

The combination of the results obtained (mixed method design) led us to make six recommendations regarding a more appropriate type of waiting room: to create areas of social interaction and privacy zones; promote the flexibility of the environment; availability of information; propose positive distractions; adapt the environment depending on the audience; encourage the installation of natural elements.