Innovations in nursing homes for people in situations of dependency: ARCHITECTURAL DESIGN AND CARE MODEL

The relationship between Architectural design and subjective well-being

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The presentation contains

Main results from: The research project “Well-being and Housing” about the establishment of assisted living residential care facilities in Denmark

1. Assisted living care facilities in DK
2. Who are the actors in the decision making-process, how the process proceeds and some key findings in the process
3. Architectural well-being elements for the elderly, empirical knowledge
4. Literature studies on evidence
5. Conclusions
1. Assisted living care facilities in DK

- ‘Live - dwell environment’
- residential unit with about 8-12 residences
- in rented 1, 1½, or 2 rooms apartments
- communal area with a kitchen and TV
- access to a private terrace or balcony
- communal green area
- here residents live there daily life
- 24 hours care
- helped by staff members
- often more units are linked together
- sometimes there is access to centre facilities
2. Who are the actors in the decision making-process, how the process proceeds and some key findings in the process

The research shows

- different actor profiles are represented: officials; politicians; staff members; users (the elderly); architect; engineers and the building owner.
- the actors have different professional knowledge, values and rationales and are weighing well-being elements differently
- that architectural well-being elements are treated implicitly by the actors!
- many decisions related to well-being were initiated in idea and planning phase
- but many well-being elements is not secure before in the final stages
- linked to the technical, functional and economic decisions!
➢ It’s important in the beginning to the well-being elements high priority, - or else they will never come

➢ actors as staff members and users (the elderly) participate in the process, - but if missing in the final stages
   - they can’t secure the well-being elements

➢ actors use experience or personal based knowledge

➢ actors not often use research/evidence-based knowledge

➢ replacement reduces actors’ overview and opportunity to make influence
Actors and well-being elements in the decision-making process

Main concept types

Physical and architectural elements

Elements of well-being

The well-being of the elderly

CASE X

F0  F1  F2  F3  F4  F5

Actor 1 2 3 4 etc

TIME

Knudstrup & Hovgesen 2008

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decisions are made over a long period of time 2 – 3½ year
risk of loss of knowledge from phase to phase

The real decision maker is the building owner!
he takes the final decisions
based on economy associated with the construction costs
in the final stages the well-being elements appear weak against technical, economical and rational decisions
3. Architectural well-being elements for the elderly

1. **Location:** in the local area, urban life, views, activity
2. **Main concept; type of building:** the general idea, architectural expression, functionality, materials, qualities
3. **Type of home:** private, homeliness, sleeping and living room, kitchenette, light
4. **Communal areas:** niches for relaxing, social meeting places, kitchen
5. **Accessibility:** functional and secure, accessibility in- and outdoor
6. **Interior design:** easy to furnish, functional and secure residence, light
7. **Technology:** comfort, internet, smart home or welfare technologies
8. **Colours and light:** light and colours are stimulating, light in the home
9. **Form:** proportions, furnish able, space qualities, seats in niches with views
10. **Outdoor areas:** direct access to terrace or healing therapeutic garden, shelter

Knudstrup 2008
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Location

In DK two main types of location

- The edge of urban areas but in a local area
- A more central location
- Not too expensive due to reasons of the restricted economy

Where is the housing policy!

Research shows:

- Wish to be in the local area, maintain social network, move to larger urban community, nearly no-one wishes to move to the suburbia, views
- Near availability to: shopping, services, transport, activities
- Unfortunately today located in outlying areas
Research shows:

- homeliness, privacy
- minimum of 40-50 sqm., 1½ - 2 rooms
- divided sleep / living room, flexibility
- hall / entranceway
- kitchenette
- bathroom
- good light conditions
- view to nature / activity
- view to communal areas
- accessibility, to outdoor balcony or terrace
Outdoor areas

Research shows:

- activity, recreation, passive participation
- extended year-round use
- social meeting places
- views
- outdoor areas close to the building, visible from inside
- safe access and comfortable: warm and shielded
- varied design
- experiences eg. senses
4. Literature studies on evidence

- A PhD project in North Jutland, where 288 nursing home residents in 10 nursing homes in four municipalities, shows that about 25% of residents suffer from depression (Sørensen L. U. 2001)
- Research shows that morning light have a positive influence on patients with depression (Benedetti et al., 2001)
- Research from nursing homes shows that the quantity of light can have a positive effect on excitable behaviour from people with dementia (Lovell et al., 1995)
- It gives a better rest-activity rhythm (Van Someren et al., 1997)

As logic consequence - no apartment should only have light from north, - but it happens to day!
Study from surgical patients at a Pennsylvania hospital.

“The rooms of some patients overlooked a stand of trees, while others faced a brown brick wall. A review of ten years of medical records showed that patients with tree views had shorter hospitalizations, less need for painkillers, and fewer negative comments in the nurses’ notes, compared with patients with brick-wall” (Ulrich, 1984).
5. Conclusion

1. Important that well-being becomes a matter of focus also for the building owner

2. The users influence is important in the hole process

3. Ensuring the architectural well-being elements with the use of research and evidence-based knowledge in the process is important

4. Well-being elements should carry at least as much weight as technical, rational and economical considerations in the process
Thank you for your attention!
References used:

- Sørensen, L. U. (2001) Psychiatric morbidity and use of psychotropihcs in Danish nursing homes Ph. D. Thesis; Department of Psychiatric Demography, Institute for Basic Psychiatric Research; Psychiatric Hospital in Aarhus.