

Close to the Body

– The Ethics and Practice of Designing Patient Clothing and Assistive Technology

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Background & Aim

Ethical issues related to design appear to be more evident when the users are somehow in a vulnerable situation. In such situations it is also important to ask how users are included in the design process and who presents and represents their needs and desires. The main question in the study is: **How are ethical issues intertwined in the design of the functional, aesthetic and expressive features of the products that are used in care environments or that are used to compensate functional impairments?**

Patient Clothing: Psychosocial needs ignored

- Designers of patient clothing aim at designing clothes that are comfortable to wear. However, in the design process only perceptions of care staff and industrial laundry service are included. Patients' views are represented by the care staff.
- Whereas physical needs and durability are well taken into account in the patient clothing products that are available in the market, the psychosocial ones are often left with less attention. These needs include the cultural acceptance of patient clothing, such as possibility to dress according to one's gender and age, aesthetic acceptance and awareness of the semipublic nature of care environments.
- Many patient clothes available in the market display features which restrict action and agency of the patient.
- **Only very few products support action or enable it.**

The demands of economic efficiency in the industrial laundry services, understaffing and the lack of time of care personnel, and the limitations of industrial clothing production are the main challenges for the improvement of the design of patient clothing. The study is based on a survey of companies that design patient clothing in Finland, interviews and product assessments with designers and patients, and analyses of patient clothing product catalogues.



Assistive Technology: User participation beneficial & challenging

- The case study on assistive technologies showed that involving users in the development process may decrease the time spent on development and improve users' acceptance of the end product.
- User participation may also contribute to correcting the developers' images of users and their needs.
- Technology developers face difficulties in eliciting the kind of information from users that helps them in solving problems in design.

This study investigated the development process from initial idea to a commercial product of an assistive device for persons with severe functional impairments. **It offers an overview of ethical questions that may emerge in involving end users in the process of assistive technology development and suggestions for addressing them.** For example, displaying a respectful attitude toward users with disabilities in a research setting means that the techniques for user needs elicitation are selected based on the users' skills and abilities. In this way, participants can project positive images of themselves and experiences of failure can be avoided. This is one prerequisite for collecting useful data from users.

Main publications:

Rauhala, M. 2007. Ethics and Assistive Technology Design for Vulnerable Users: A Case Study. Research Report 165. Helsinki: STAKES, National Research and Development Centre for Welfare and Health.

Iltanen, S. & Topo, P. Ethical implications of design practices. The case of industrially manufactured patient clothing in Finland. Proceedings of Design Inquiries - The 2nd Nordic Design Research Conference. Konstfack 27-30.5.2007, Stockholm, www.nordes.org/upload/papers/111.pdf.

Iltanen, S. & Topo, P. 2007. Potilasvaatteet, pitkäaikaishoidossa olevan ihmisen toimijuus ja etiikka – vaatesuunnittelijoiden näkemyksiä (Patient clothing, agency of persons in long-term care and ethics – Designers' views). Gerontologia 21 (3), 231-245.

Iltanen, S. & Topo, P. Designing Clothes for Patients: A Design Survey and Visual Analyses of Product Catalogues, (submitted).