

Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences

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Graduation Plan: All tracks

Submit your Graduation Plan to the Board of Examiners (Examencommissie-BK@tudelft.nl), Mentors and Delegate of the Board of Examiners one week before P2 at the latest.

The graduation plan consists of at least the following data/segments:

Personal information	
Name	Katarzyna Antoszyk
Student number	5483689

Studio		
Name / Theme	Designing for Health & Care Towards a Healthy and Inclusive Living Environment	
Main mentor	Birgit Jürgehake	Architecture
Second mentor	Lex van Deudekom	Building Technology
Third mentor	Leo Oorschot	Research
Argumentation of choice of the studio	I chose the Health & Care studio because of its emphasis on fieldwork as a research method. It allows to gain a much more in-depth understanding of a target group and its needs. I was also interested in healthcare design as a whole, as I had never worked on a project in that field, and this studio gave a lot of freedom in terms of exploration and direction of the research.	

Graduation project	
Title of the graduation project	The Architecture of Adolescent Palliative Care
Goal	
Location:	Rijswijk, the Netherlands
The posed problem,	Children's palliative care is a relatively new and continually developing specialty in the Netherlands. It provides support for families and children patients of all ages. However, within this group, the adolescent age group is particularly difficult to cater for. It has unique developmental and psychosocial needs, different from young children and adults. Adolescents start to establish autonomy from parents, decision making, sense of self or peer support network. Therefore, teenage palliative care requirements are often not adequately met.

<p>research questions and</p>	<p>The main research question is: What design interventions will improve the social interactions and psychological state of the users in an adolescent palliative care?</p> <p>To support it, I will also explore:</p> <ul style="list-style-type: none"> - What is the state and context of palliative housing facilities in the Netherlands? (Method: literature review and case studies) - What is the context of palliative housing facilities abroad? (Method: literature review and case studies) - What are the current findings on adolescent design preferences in the Netherlands and abroad? (Method: literature review) - What are the sub-groups within my target group and what are their needs? (Method: literature review) - What are the needs and preferences of adolescents in regard to their common spaces, play areas, private areas and outdoor environment and how to gather these information through engagement methods? (Method: design workshops, semi-structured interviews and literature review)
<p>design assignment in which these result.</p>	<p>A design for an adolescent palliative care facility</p> <p>The design will respond to adolescents' unique needs, aiming to improve their psychological comfort, foster social interactions and create bonds. Research shows, there is an opportunity to develop a new model of palliative care facility which compliments and supports adolescent home palliative care. It could merge services provided by the fragmented network, relieve parents from organising care at home and become a space where teenagers can socialise with their peers.</p>
<p>Process</p>	
<p>Method description</p>	

Research

Observation

Observation focuses on how young patients use healthcare buildings, as well as what architectural design features were implemented for children in the facilities. Observation also aims to study the surroundings of healthcare facilities.

Literature review

Literature review explores theories and studies regarding adolescent palliative care. It also addresses psychological theories of adolescent development and characteristics. The review summarizes findings on topics addressed in the research questions and helps identifying the research gap.

Case studies

Case study analysis examines and compares projects of children hospices and palliative facilities. It focuses on programmatic organisation, range and positioning of communal spaces, views and design decisions related to circulation and choice of places and activities.

Semi-structured interviews

Semi-structured interviews are used as a base for the design workshops. They explore participation and engagement methodologies, planning strategies and practices within participatory design. They also address motivation and analysis of the outcomes and data.

Design workshops

To cater to the need of adolescent independence and decision making, the research is going to lean strongly on participatory and engagement method, in the form of design workshops. They will examine young adolescents' preferences and needs for communal areas, play areas, outdoor space and private rooms.

Design

Finding from the research will be organised in the design guidelines, which will later inform the design of the facility.

The first step in the design process was the site analysis. The general analysis was done in a group, and I continued with a more detailed exploration on my specific plot.

Design guidelines and the site analysis were a base for the first volume studies, testing the massing, positioning on the plot and programmatic arrangement. These are primarily done through sketches, diagrams and models.

With these, I will further develop the preliminary floor plans, sections and elevations, through sketches, renders and model making. It will lead to an evaluation and progression towards the final design.

The whole process will be documented in a design booklet.

Literature and general practical preference

1. Christie, D., & Viner, R. (2005). Adolescent development. *BMJ (Clinical research ed.)*, 330(7486), 301–304. <https://doi.org/10.1136/bmj.330.7486.301>
2. Coad, J., & Coad, N. (2008). Children and young people's preference of thematic design and colour for their hospital environment. *Journal of Child Health Care*, volume 12 (1): 33-48 <http://dx.doi.org/10.1177/1367493507085617>
3. Eriksen, A. (2000). Participatory planning and design of a new children's hospital. 2nd Design & Health World Congress & Exhibition (WCDH 2000, Stockholm), 141- 145 The International Academy for Design and Health <https://www.brikbase.org/sites/default/files/Aase-Eriksen-WCDH2000.pdf>
4. Francis House Children's Hospice. (2022). Teenagers and young adults. Francis House Children's Hospice. Retrieved January 3, 2023, from <https://www.francishouse.org.uk/what-we-offer/support/teenagers-and-young-adults/>
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6. Hutton A. (2003). Activities in the adolescent ward environment. *Contemporary nurse*, 14(3), 312–319. <https://doi.org/10.5172/conu.14.3.312>
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8. Jencks, C., & Heathcote, E. (2010). *The architecture of hope : Maggie's cancer caring centres*. Frances Lincoln
9. Kars, M. C. (2012). *Parenting and Palliative Care in Paediatric oncology (thesis)*. Utrecht University. Retrieved 2022, from <https://dspace.library.uu.nl/handle/1874/237054>
10. Lundgren, J., Norell-Clarke, A., Hellström, I., & Angelhoff, C. (2020). Adolescents' Experiences of Staying Overnight at Family-Centered Pediatric Wards. *SAGE open nursing*, 6. <https://doi.org/10.1177/2377960819900690>
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12. Pritchard, S., Cuvelier, G., Harlos, M., & Barr, R. (2011). Palliative care in adolescents and young adults with cancer. *Cancer*, 117(10 Suppl), 2323–2328. <https://doi.org/10.1002/cncr.26044>
13. Schepers, S., Schoffelen, J., Zaman, B., & Dreessen, K. (2019). Children's roles in participatory design processes: Making the role of process designer 'work'. *Interaction Design and Architecture(s)*, (41), 87-108 <https://www.semanticscholar.org/paper/Children%27s-roles-in-Participatory-Design-processes%3A-Schepers-Schoffelen/272f13fd60c4931114c17b7acc2f9e43c2aeded9>
14. Ulrich, R. (2000). Effects of healthcare environmental design on medical outcomes. *Proceedings of 2nd International Congress on Design and Health*, 49– 59. Karolinska Institute Stockholm. www.researchgate.net/publication/273354344_Effects_of_Healthcare_Environmental_Design_on_Medical_Outcome
15. Vallianatos, S., Huizinga, C. S. M., Schuiling-Otten, M. A., Schouten-van Meeteren, A. Y. N., Kremer, L. C. M., & Verhagen, A. A. E. (2021). Development of the Dutch Structure for Integrated Children's Palliative Care. *Children* 8(9), 741, Basel, Switzerland.. <https://doi.org/10.3390/children8090741>
16. World Health Organization. (2018). Integrating palliative care and symptom relief into paediatrics. World Health Organization. Retrieved December 28, 2022, from <https://www.who.int/publications-detail-redirect/integrating-palliative-care-and-symptom-relief-into-paediatrics>

Reflection

Children's palliative care (CPC), and adolescent palliative care, is an ever evolving field. It is predicted that more children's diseases and chronic conditions are going to develop in the upcoming decades. In the light of this discovery, the Dutch Knowledge Centre for Children's Palliative Care is rapidly expanding its structure, beyond the existing facilities. My graduation project is aiming to make use the opportunity created by the expansion, and rethink the typology of care facility, which responds and tackles an issue of care fragmentation within the CPC. As such, the project aligns with the studio's focus on finding solutions to existing and future problems within the realm of health and care architecture.

My project's research methodology heavily relies on participatory practices which lead to a better understanding of and immersion in the target group, which is one of the most important aspects of this design studio. It also follows the architecture industry's growing inclinations towards community engagement and participation.