



Optimising Workplace Learning in Postgraduate Medical Education

Towards Supporting Residents and Supervisors in Clinical Practice

Marieke Robbrecht

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SUMMARY

The training of medical specialists, known as postgraduate medical education (PGME), focuses on workplace learning (WPL), where professional skills are developed in real-world settings. Recent advancements are driven by the rapid expansion of medical knowledge and educational research in medical training. This dissertation aims to contribute to that knowledge.

The first research objective investigates the facilitators and challenges of WPL for PGME in Flanders. An online focus group study was conducted, revealing three main themes: the dual learning path, feedback, and support for learning. Within each theme, facilitators and challenges were identified. This dissertation primarily focuses on addressing the identified challenges to enhance WPL.

The second research objective aimed to merge the co-existing frameworks of the Master of Specialist Medicine, CanMEDS, and the European Academy of Paediatrics. This was validated through a Delphi study with five expert groups, resulting in a validated competency set of 95 items.

The third research objective aimed to investigate the use of video review in clinical settings within PGME, as a way to address the limited opportunities for direct observation and inadequate self-reflection. A systematic review of existing literature on video use during WPL was conducted. While eleven studies showed a positive impact, their varied designs made it difficult to draw general conclusions.

The final research objective aimed to investigate the use of video-assisted self-reflection through a pilot study, in which pediatric residents in a neonatal intensive care unit recorded clinical activities. After reviewing their videos, residents

engaged in structured self-reflection, revealing a significant increase in identified areas for improvement, although self-satisfaction levels did not change. Residents reported more strengths than weaknesses both before and after the video review, indicating the feasibility of integrating video into training.

RECOMMENDATIONS

Optimise the available time for residents in the hospital with sufficient learning opportunities

Strengthen the complementarity between the WPL and the MSM curriculum

Enhance didactic competencies of all physicians somehow engaged in residency

Design a clear competency framework that is easily adopted in daily clinical practice to support learning for and assessment of residents

Facilitate the integration and investigation of video review in residency for learning purposes

Optimise feedback practices in WPL in a holistic manner

PROMOTORS

Prof. Dr. Steven Weyers¹

Visiting Prof. Dr. Mieke Embo^{2,3,4}

Prof. Dr. Twan Mulder⁵

SCIENTIFIC COMMITTEE

Prof. Dr. Martin Valcke⁶

Prof. Dr. Myriam Van Winckel⁷

Doctoral committee

Prof. Dr. Daniël De Wolf¹

Prof. Dr. Lien Dossche¹

Prof. Dr. Anneliese Moerman¹

Prof. Dr. Bram De Wever⁸

Prof. Dr. Danny Mathysen⁵

Prof. Dr. Katrien Bombeke⁵

Prof. Dr. Paul Brand⁹

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¹Professor at the Faculty of Medicine and Health Sciences, Ghent University

² Visiting professor at the Faculty of Medicine and Health Sciences, Antwerp University

³Post-doctoral researcher at the Department of Educational Sciences, Ghent University

⁴Post-doctoral researcher at the Expertise Network Health and Care, Artevelde University of Applied Sciences in Belgium

⁵Professor at the Faculty of Medicine and Health Sciences, University of Antwerp

⁶Professor emeritus at the Faculty of Psychology and Educational Sciences, Ghent University

⁷Professor emeritus at the Faculty of Medicine and Health Sciences, Ghent University

⁸Professor at the Faculty of Psychology and Educational Sciences, Ghent University

⁹Professor at the Faculty of Medical Sciences, University of Groningen

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SHORTENED CURRICULUM VITAE

2018-2026, University of Antwerp. Master of Medicine in Specialistic Medicine: Paediatrics

2021-2023, University of Antwerp. Educational Master in Health Sciences

2013-2017, University of Antwerp. Master of Medicine

KEY PUBLICATIONS

Robbrecht, M., Norga, K., Van Winckel, M., Valcke, M., & Embo, M. (2022). Development of an integrated competency framework for postgraduate paediatric training : a Delphi study. *EUROPEAN JOURNAL OF PEDIATRICS*, 181, 637–646.

Robbrecht, M., Van Winckel, M., Norga, K., & Embo, M. (2023). Exploring residents and supervisors' workplace learning needs during postgraduate medical education. *INTERNATIONAL JOURNAL OF MEDICAL EDUCATION*, 14, 65–74.

CONTACT

Marieke Robbrecht. Interdisciplinary, joint PhD. Main department: Department of Internal Medicine and Pediatrics, Ghent University

Marieke.Robbrecht@ugent.be

Marieke.Robbrecht@uantwerpen.be

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