

## Background

Staff shortages challenge nurses to maintain high-quality pharmaceutical care in hospitals [1,2]. To support nurses, a Flemish hospital in Belgium, Vitaz, implemented pharmaceutical technical assistants on nursing wards to manage stock and prepare medicines for subsequent administration by nurses [3,4]. However, evidence is lacking regarding the impact of pharmaceutical technical assistants on nursing wards on the quality of care and patient safety within the Belgian context.

## Aim(s)

This study aimed to explore nurses' experiences and perceptions of the implementation of pharmaceutical technical assistants on hospital wards. The process of implementation, role development, and the impact on safety and quality of care were investigated to determine critical success factors and opportunities for quality improvement.

## Methods

Semi-structured interviews were conducted with nurses of Vitaz between December 2022 and March 2023. All interviews were audio recorded and transcribed verbatim. Thematic analysis was performed in NVivo 1.6.1.

## Results

Sixteen interviews were conducted with seven head nurses and nine nurses on internal, surgical and geriatric hospital wards. Three main themes emerged: patient safety & quality of care, organization of care, and role development & collaboration. Implementation of pharmaceutical technical assistants on nursing wards to support the process of medication preparation was perceived to lower the risk of medication errors without compromising care quality. Nurses felt they could spend more time on direct patient care. The interviews showed successful implementation requires a clear and uniform communication procedure. It is perceived important to find a clear way to collaborate and share information about the medication between pharmaceutical technical assistants and nurses. To improve medication safety and care quality, all participants mentioned the importance of assigning the same nursing wards to the same pharmaceutical technical assistants for them to become part of the team. Being part of the team is considered an important aspect to ensure a smooth and optimal cooperation between nurses and pharmaceutical technical assistants. Nurses indicated that collaboration with pharmaceutical technical assistants challenged them in their role of supervising care and co-working in the team.

## Discussion

The nursing staff was convinced that the implementation of pharmaceutical technical assistants on nursing wards had a positive effect on workload, patient safety and quality of care. Organizational barriers mentioned were limited, yet, will help to further optimize processes and outcomes. This study only focused on the experiences and perceptions of the nursing staff. Another ongoing study focuses on the experiences and perceptions of pharmaceutical technical assistants and hospital pharmacists. In other European countries, pharmaceutical technical assistants with higher educational levels are allowed to perform more tasks on nursing wards. It may be interesting to look into possibilities to extend this support system for nurses in Belgium likewise..

## Implications and future perspectives

The findings of this study confirm the added value of pharmaceutical technical assistant in terms of medication management on the hospital ward. Critical success factors for the implementation include dedicated assignment of pharmaceutical technical assistants to hospital wards, clear role description and mutual expectations in the collaboration and communication between pharmaceutical technical assistants and nurses. Experiences and perceptions of health care providers involved in pharmaceutical care on nursing wards help to map what factors and outcomes should be considered in a quantitative measurement of the effects of the implementation.

## References

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