

EXPERIENCES, VIEWS AND ATTITUDES OF HOSPITAL NURSING STAFF TOWARDS THE IMPLEMENTATION OF THE UNIT DOSE DISPENSING SYSTEM FOR INPATIENTS: A QUALITATIVE INTERVIEW STUDY

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Background and Objective:

Medication errors pose a major economic problem and, more importantly, a major cause of avoidable harm in medical care. With the Global 'Patient safety action plan 2021-2023' the World Health Organisation (WHO) calls for a rethink of processes and structures within the healthcare system to ensure optimal patient safety.¹ One such optimisation measure could be the introduction of the Unit dose dispensing system (UDDS), which is thought to have multiple benefits from avoidance of medication errors to improved patient autonomy. In keeping with their expertise on medication safety and management the UDDS is prepared by the hospital pharmacy department and delivered to all wards daily.

The aim of this study was to determine hospital nurses' attitudes towards the UDDS, examine their perceptions of opportunities and barriers in everyday practice and explore their experiences with its implementation.

Design:

A prospective qualitative interview study with 23 nurses from the Barmherzige Brüder Hospital Linz, Austria was conducted. The validated and piloted semi-structured interview guide was based on existing literature, best practice guidelines for qualitative interview studies and the constructs of the Consolidated Framework for Implementation Research (CFIR).² Interviews were transcribed verbatim and mapped against the Framework of Implementation of Services in Pharmacy (FISpH) by two researchers independently.²

Results:

- Nurses' satisfaction with the UDDS was high as it affords them a considerable time saving, ease of use in daily practice and reduced workload.
- UDDS is considered to reduce medication errors and improve patient safety.
- Medication changes and non-blistered medication challenges - often result in re-dispensing the UDDS blisters into individual patient dosette boxes - as well as mechanical handling of the blisters.
- Nurses are concerned about the decline in their personal medication knowledge.
- Reduced stock levels on the wards save time and resources but can pose inconveniences for nursing staff.
- Several areas for improvement of the workflow, training and communication between ward staff and pharmacy could be identified.

Conclusion:

Results show that the UDDS provides several significant benefits to nursing staff. In addition, patient safety is thought to have improved. Cooperation of all hospital stakeholders with ward nurses is of immense importance to further advance the UDDS. These results may be of interest to any hospital/pharmacy management planning to implement a UDDS.

Strengths

First study to focus on nurses' perspectives and experiences with the UDDS

Use of FISpH has a sound theoretical underpinning for the analysis

Coding and analysing done independently by two researchers

Achievement of data saturation by using a stopping criterion

Study reporting was done in consideration of the quality criteria of the COREQ and best practice guidelines for qualitative interview studies

Weaknesses

Single centre study

Possible participation bias since the recruiting pharmacy staff member was known to the nursing staff

Purposive sampling could not be fully applied since no equal number of nurses from each ward participated



Table 1 Implementation factors in the five domains of the Framework for Implementation of Services in Pharmacy

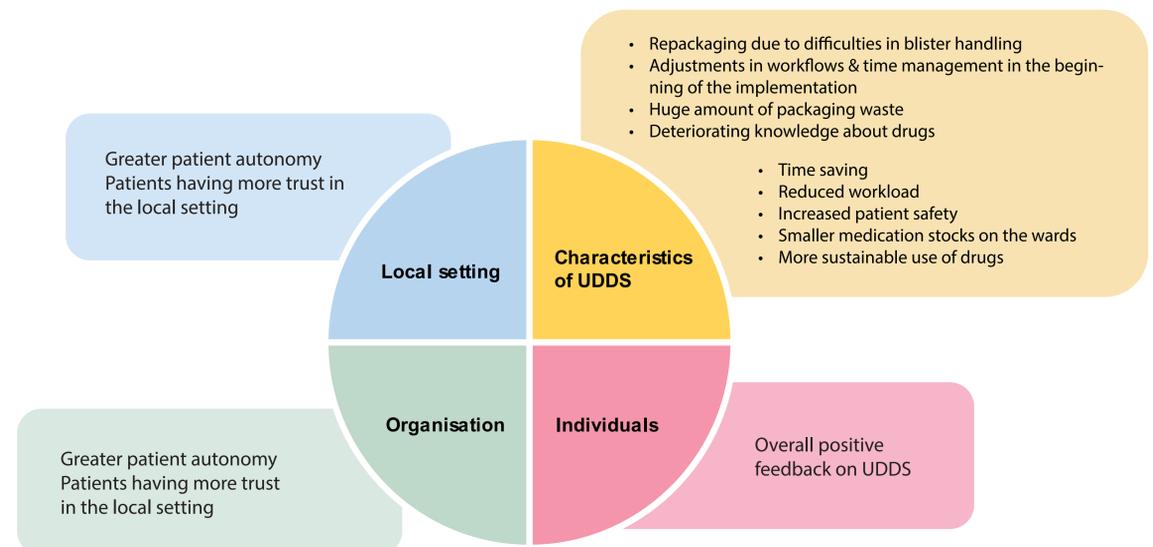
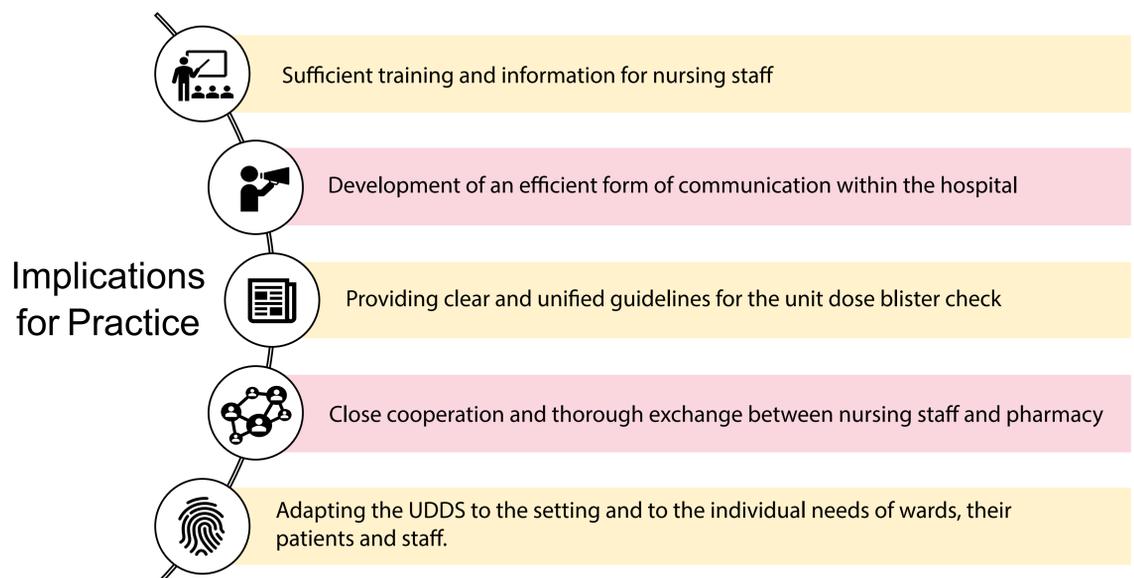


Table 2 Key findings of the UDDS implementation mapped to the domains of the FISpH



1. World Health Organization. 2021. Global patient action plan 2021-2030: Towards eliminating avoidable harm in health care.

2. Moullin, J.C., D. Sabater-Herández, and S.I. Benrimoj. 2016. Qualitative study on the implementation of professional pharmacy services in Australian community pharmacies using framework analysis. BMC Health Serv Res 16(1): 439. doi:10.1186/s12913-016-1689-7.

