**Improving patient waiting time and statisfaction: a quantitative study at outpatient drug dispensing in Thanh Nhan hospital, Vietnam**

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**Background and aims.** In hospital settings, ensuring effective outpatient drug dispensing with health insurance is always prioritized to enhance patient satisfaction. In Vietnam, improving the quality of pharmaceutical services in hospital and ensuring patient satisfaction has gained increasing attention in recent years [1]. According to the Ministry of Health, patient waiting time and satisfaction are key indicators in hospital quality assessments [2]. This study aimed to compare the effectiveness of outpatient drug dispensing with health insurance processes before and after the improvements at Thanh Nhan Hospital in 2023.

**Methods.** A cross-sectional descriptive study was conducted in two phases: before (September 2023) and after (November 2023) the process improvements, with 112 patients observed per phase. Using structured observational checklists and patient interviews, we evaluated the workflow before and after three key improvements: (1) real-time prescription approval and pre-packing of medications via electronic prescription; (2) optimization of outpatient dispensing section layout based on frequency of medication use, supported by rack labelling and coded trays;(3) automated prescription identification using barcode scanners. Data were analyzed using SPSS version 20.0, applying Mann-Whitney U tests to compare time metrics and patient satisfaction.

**Results.** After the improvements, the average total dispensing time significantly decreased from 636.29 seconds (10.60 minutes) to 419.21 seconds (6.98 minutes) per patient (p < 0.001). The most substantial reduction occurred in the medication preparation stage due to pre-packing (from 103.44 to 0 seconds, p < 0.001). Mean patient satisfaction scores improved significantly from 9.72 to 9.86 (on a 10-point scale; p = 0.017). The layout change and barcode implementation also contributed to reduced errors and workflow efficiency.

**Conclusion/Discussion.** The restructured outpatient drug dispensing process at Thanh Nhan Hospital significantly shortened dispensing time and enhanced patient satisfaction. This study demonstrates that technology-assisted interventions and workflow optimization can be effective strategies in hospital dispensing medicines settings. These findings align with a study by Slowiak et al., which observed that reduced wait times were directly associated with increased satisfaction scores [3]. This study presents a scalable, evidence-based model for outpatient drug dispensing process improvement in other hospitals.

**References:**

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