



Nursing Staff's Role in Detecting Urinary Tract Infection in Nursing Homes:



An Integrative Review


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Objectives:

Attendees will be able to:

1. identify two factors associated with increased rates of antibiotic use in nursing homes.
2. describe two ways in which nursing staff influence the diagnosis and treatment of urinary tract infections in nursing homes.



Background

- 65+ population projections: >87.9 million in U.S. in 2050
- 1.4 million U.S. Nursing homes (NHs) residents
- Inappropriate Antibiotic Use in NHs
- CMS' Final Rule Implementation

Significance

- Inappropriate antibiotic use
- Prescribers are often off-site; decision-making highly dependent on nursing staff observations
- U. S. NH frontline staff composition:
 - Less than 12% registered nurses (RNs)
 - 86% licensed practical/vocational nurses (LPN/LVNs) & certified nursing assistants (CNAs)



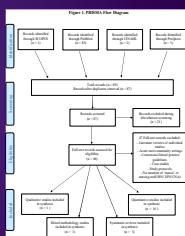
Purpose

To examine the state of the science related to NH nursing staffs' role in the detection of UTIs



Method

- PubMed, Scopus, CINAHL, and ProQuest; 2010-2020
- Analysis using Whittemore and Knaf (2005)
 - *a priori* process
 - Non-experimental and experimental data
- Quality Appraisal
 - Johns Hopkin's nursing and evidence-based practice guidelines (Dearholt & Dang, 2012)



Results

- **Elements of Antibiotic Stewardship in NHs**
 - Professional RN training did not affect infection control practices
- **Nursing’s Influence on Prescriptive Decision Making**
 - Prescriber = expert who identified UTIs; based decisions on information from nurse who received information from CNA
- **Nursing Staff’s Antibiotic Stewardship Responsibilities**
 - CNAs recognized signs & symptoms earlier



Discussion

- Without nursing support, prescribers limited on-site presence create barrier to effective prescribing
- LPNs are most common point of contact for prescribers, but rarely mentioned in the literature
- Literature failed to describe nursing staff’s decision-making and associated factors related to the detection of UTIs, giving the impression that their contributions are undervalued




Implications

Future research must:

- Clarify nursing staff’s role and decision-making r/t detection/identification of UTIs
- Identify factors that influence decision-making
- Examine when and how nursing staff utilize protocols
- Establish foundation for nursing-led interdisciplinary interventions and evidence-based tools




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Limitations

- Predetermined inclusion criteria: licensed practical/vocational nurse, nurse, nursing
- Use of constant comparative method: other researchers may review the same articles and have varying views on quality and analysis

References

- Dearholt, S. L., & Dang, D. (2012). *Johns Hopkins nursing evidence-based practice: Model and guidelines* (2nd ed.). Sigma Theta Tau International.
- Delgado, K. F., Roberson, D., Wei, H., & Haberstroh, A. (2022). Nursing staff's role in detecting urinary tract infection in nursing homes: An integrative review. *Journal of Gerontological Nursing, 48*(5), 43-50. <https://doi.org/10.3928/00989134-20220405-03>
- Whittemore, R., & Knaf, K. (2005). The integrative review: Updated methodology. *Journal of Advanced Nursing, 52*(5), 546-553. <https://doi.org/10.1111/j.1365-2648.2005.03621.x>
- Additional references furnished upon request

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