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Revisiting the Mission

Dottie Roberts, EdD, MSN, MACI, RN, OCNS-C®,
CMSRN, CNE, FNAON, FAMSNI
Editor

An editors' listserv of which I am a member recently began discussion of the need for a uniform editorial response to the "uncertain" political climate our nation currently faces. Some of the points made were assuredly valid, but I would argue every political climate is uncertain to at least an identified portion of the population. The best response at any time is to continue to do what we do as nurses: follow the mission.

State nurses' association often have mission statements, identifying their intent to advocate for and protect the interest of the nurses in that state and in the profession as a whole. Many of the specialty organizations to which we belong have mission statements. How do the associated nurses and the individual organizations intend to address the healthcare needs of the relevant patient populations? I have even seen online postings from nurses who have identified their personal mission statements, often along the lines of valuing patient safety and advocating for patient needs. Each of these statements keeps the individual or the organization on track to work effectively to the best possible ends. A scattered mission statement – or worse, no mission at all – does not inspire confidence in observers or potential allies. Of supreme importance, does the mission statement reflect the larger goals that transcend any moment in time? An effective mission statement suggests consistency and dedication that are not time-limited.

For this journal, please allow me to highlight the mission:

MEDSURG Nursing is a scholarly, peer-reviewed journal dedicated to advancing evidence-based medical-surgical nursing practice, clinical research, and professional development. The journal's goal is to enhance the knowledge and skills of medical-surgical nurses to promote health, prevent and manage disease, alleviate suffering, and improve health outcomes across medical-surgical populations.

Our first responsibility is always to promote the best in medical-surgical nursing practice based on

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clear scientific evidence. This is facilitated by our peer review process, which holds authors accountable for the quality of their research and writing. One critical question for peer reviewers, and the first on the review form, is: "How does this manuscript advance medical-surgical nursing practice?" We want to help equip the journal's readers to be ever more effective in their medical-surgical nursing practice. If we publish material that is not advancing that nursing practice, we have not met the journal's mission. Every article may not be highly relevant for each nurse's practice niche, but the articles together are selected to advance medical-surgical nursing practice by sharing common clinical problems and solutions.

As we seek to empower individual nurses in their practice, we also are always mindful of the patients who receive their care. Through facilitating effective nursing practice, we want to "promote health, prevent and manage disease, alleviate suffering, and improve health outcomes." Could we find any higher calling for this journal? Our work not only must help readers be ever-better practitioners, but also must provide specific tools that will have direct impact on their patients and on society as a whole. We support and facilitate health in our fellow humans, no matter who they are.

I have been with this journal for more than 25 years, and worked as a nurse for almost 34 years through multiple differing political climates. My personal mission to provide the best possible care has never wavered. It in fact has only been expanded through my association with this journal and its goal of empowering medical-surgical nurses to serve all patients based on their need. Nurses must continue to be mission-driven. **MSN**

Nursing Pharmacology

Understanding Drug Interactions of Buprenorphine/Naloxone

Rhea Faye D. Felicilda Reynaldo
Maria Kenneally
Ergie P. Inocian

Buprenorphine/naloxone (Suboxone®) is the first drug approved by the U.S. Food and Drug Administration to treat opioid use disorder (Substance Abuse and Mental Health Services Administration [SAMHSA], 2024). In this combination, buprenorphine acts as a partial opioid agonist. It binds to opioid receptors but elicits a diminished physiological response compared to full agonists (e.g., heroin, methadone). At low-to-moderate doses, buprenorphine can induce mild euphoria and respiratory depression; however, these symptoms are significantly less pronounced than those associated with more potent opioids.

When administered as prescribed, buprenorphine mitigates withdrawal symptoms and opioid cravings, thereby reducing physical dependence on opioids. It also lowers the risk of fatal opioid overdose and minimizes the potential for drug misuse due to its ceiling effects and partial agonist properties (SAMHSA, 2024). Naloxone, an opioid antagonist, is added to deter medication misuse by injection. Because buprenorphine/naloxone is taken sublingually, naloxone has minimal effects due to poor oral bioavailability (Gregg et al., 2023). Buprenorphine/naloxone also can be prescribed in a doctor's office and

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Buprenorphine/naloxone therapy can result in safety concerns due to its potential drug-drug interactions with central nervous system depressants, serotonergic agents, and CYP3A4 modulators. Nurses play a crucial role in educating patients about the importance of avoiding these high-risk combinations and recognizing early signs of adverse effects.

Keywords: opioid, buprenorphine, naloxone, drug-drug interactions, patient education, interprofessional

Learning Outcome: After completing this education activity, the learner will be able to discuss drug-drug interactions associated with buprenorphine/naloxone and other substances and the resulting safety concerns.

taken home; therefore, it has become a preferred method of treatment for patients with opioid use disorder due to its accessibility (American Addiction Centers, 2023).

As with any pharmaceutical product, understanding its potential interactions with other substances is crucial for safe, effective treatment. Buprenorphine/nalox-

one can interact with a variety of medications, including CYP3A4 inducers and inhibitors, opioids, central nervous system (CNS) depressants, and antidepressants. This interaction may lead to serious adverse effects, such as respiratory depression, serotonin syndrome, or increased risk of overdose. Key drug-drug interactions associated with buprenorphine/

Rhea Faye D. Felicilda Reynaldo, EdD, RN, is Adjunct Faculty, American Sentinel College of Nursing & Health Sciences at Post University, Waterbury, CT.

Maria Kenneally, DNP, FNP-BC, is Assistant Clinical Professor, College of Nursing, Advanced Nursing Practice Division, The University of Arizona, Tucson, AZ.

Ergie P. Inocian, EdD, RN, CMSRN, CNOR, is Clinical Assistant Professor, School of Nursing, Duquesne University, Pittsburgh, PA.

naloxone will be described, highlighting the importance of careful management and monitoring to ensure patient safety during treatment.

Drug Interactions

CYP3A4 Inhibitors and Inducers

CYP3A4 is a crucial enzyme within the cytochrome P450 family, primarily responsible for metabolizing a broad spectrum of medications. It facilitates the breakdown of drugs into more water-soluble compounds, which then are excreted easily from the body. Predominantly found in the liver and intestines, CYP3A4 plays a key role in oxidative metabolism by converting drugs into metabolites that can be eliminated efficiently. This process is essential for maintaining therapeutic drug levels and preventing toxicity (Dreshaj et al., 2024; Zhang et al., 2024).

Buprenorphine undergoes metabolism primarily through two pathways: *N*-dealkylation and glucuronidation, facilitated by the CYP3A4 enzyme. This process yields major metabolites, including buprenorphine-3-glucuronide and norbuprenorphine-3-glucuronide (Pande et al., 2023). The end product of these metabolic pathways is norbuprenorphine, an active metabolite with weak intrinsic activity (Kumar et al., 2024). The concentration of buprenorphine can be influenced significantly by medications that induce or inhibit CYP3A4 metabolism. Substances that inhibit the CYP3A4 enzyme increase serum buprenorphine by reducing the enzyme's metabolic capacity, resulting in elevated plasma concentrations and potential adverse effects. Conversely, substances that induce the CYP3A4 enzyme enhance the enzyme's activity,

leading to decreased serum values. This can result in reduced therapeutic efficacy (Kumar et al., 2024). UpToDate (n.d.) provides an open-access table listing the different CYP3A, including CYP3A4, inhibitors and inducers.

Patients should avoid drinking grapefruit juice while receiving buprenorphine/naloxone therapy. Grapefruit juice is a potent CYP3A4 inhibitor, increasing serum buprenorphine (DrugBank, n.d.a). Grapefruit juice also may enhance the side effects of buprenorphine/naloxone, such as CNS depression (WellRx, n.d.).

Central Nervous System Depressants

Benzodiazepines

Benzodiazepines, a class of medications that act on the CNS, bind to gamma-aminobutyric acid receptors in the brain. This interaction decreases the patient's sensitivity to brain stimulation, producing a calming effect (George et al., 2023). Commonly used benzodiazepines include clonazepam (Klonopin®), alprazolam (Xanax®), diazepam (Valium®), and temazepam (Restoril®). When used in combination with buprenorphine, benzodiazepines can lead to potentially life-threatening drug interactions due to their sedative and respiratory depression properties (Pande et al., 2023). Benzodiazepines are not CYP3A4 inhibitors. However, some, such as diazepam and flunitrazepam (Rohypnol®), are metabolized by this enzyme, which may contribute to additive or synergistic interactions with buprenorphine (Pande et al., 2023).

Alcohol

Ethanol, the type of alcohol found in wine, beer, and spirits, is metabolized primarily in the liver by the enzymes aldehyde dehydrogenase and alcohol dehydrogenase (Lehner et al., 2024).

Ethanol acts as a depressant, despite inducing feelings of relaxation or euphoria. When combined with buprenorphine, ethanol produces a synergistic or additive effect. This significantly increases risk of respiratory depression, particularly in patients with comorbid, uncontrolled alcohol use disorder (Pande et al., 2023).

Opioid Agonist and Antagonists

Opioid agonists and antagonists bind to opioid receptors in the brain to treat pain and addiction (Li et al., 2023). However, research on pharmacokinetic interactions between buprenorphine/naloxone and these drugs is lacking, limiting the understanding of drug-drug interactions. For pain management, healthcare providers often prescribe semisynthetic opioids such as oxycodone (OxyContin®) and hydrocodone (Vicodin®) as well as natural opioids such as morphine (MS Contin®). Synthetic opioids such as fentanyl (Duragesic®) are used commonly to treat severe pain, particularly in cases of advanced cancer (Li et al., 2023).

When buprenorphine/naloxone is taken with an opioid agonist such as hydrocodone, the effects of hydrocodone are diminished due to buprenorphine/naloxone's interaction with the mu opioid receptors responsible for analgesia (Drugs.com, n.d.a). As a partial opioid agonist, buprenorphine can reduce pharmacologic effects of other opioid agonists. This results in reduced efficacy or withdrawal symptoms. Opioid agonists are also CNS depressants; their concomitant use with buprenorphine can lead to profound sedation, respiratory depression, coma, and even death (Drugs.com, n.d.a).

Naltrexone (Vivitrol®), a non-selective opioid antagonist, competitively binds to multiple opioid receptors (e.g., mu, kappa, and

delta), with highest affinity for the mu opioid receptor (DrugBank, n.d.b). Administered via deep intramuscular gluteal injection, naltrexone is used for treatment of alcohol use disorder as well as for prevention of relapse to opioid dependence (Drugs.com, 2024a). As naltrexone competitively binds to the same opioid receptors as buprenorphine, its concomitant use results in decreased therapeutic efficacy of buprenorphine (DrugBank, n.d.b). They should not be administered together.

Serotonergic Drugs

Recent published reports have shown serotonin syndrome may occur when buprenorphine is taken in combination with other serotonergic medications (Biedlingmaier et al., 2023; Orhun et al., 2024). Selective serotonin reuptake inhibitors (e.g., sertraline [Zoloft®], citalopram [Celexa®], fluoxetine [Prozac®]), serotonin and norepinephrine reuptake inhibitors (e.g., venlafaxine [Effexor®], duloxetine [Cymbalta®]), and tricyclic antidepressants (e.g., amitriptyline [Elavil®]) are antidepressants that promote serotonergic activity. St. John's wort (*Hypericum perforatum*) is a popular herbal treatment purported to have antidepressant properties (Drugs.com, 2024b). Comparable in effectiveness with standard antidepressants as supported by meta-analyses of clinical trials, St. John's wort also promotes serotonergic activity (Peterson & Nguyen, 2023) and may contribute to serotonin syndrome if combined with buprenorphine/naloxone. Furthermore, St. John's wort is a CYP3A4 inducer (Peterson & Nguyen, 2023), and will reduce efficacy of buprenorphine/naloxone by causing it to be metabolized faster. Although more research is needed to support the interaction of buprenorphine/naloxone and serotonergic drugs, healthcare providers should mon-

itor any adverse interactions when these medications are combined.

Antiretrovirals and Antifungals

Potential drug interactions between buprenorphine and antiretroviral therapy (ART) have been identified (Tarfa et al., 2024). Certain HIV medications such as protease inhibitors (e.g., indinavir [Crixivan®], lopinavir/ritonavir [Kaletra®], ritonavir [Norvir®]) can increase the effects of buprenorphine/naloxone (Drugs.com, n.d.c). These medications are potent CYP3A4 metabolizers, causing increased plasma concentration of buprenorphine, a CYP3A4 substrate. Side effects, such as drowsiness, dizziness, lightheadedness, difficulty concentrating, and cognitive impairment, also may be more pronounced (Drugs.com, n.d.c). Conversely, a pilot study examining buprenorphine pharmacokinetics in patients with and without HIV who were receiving ART (including efavirenz [Sustiva®] and nevirapine [Viramune®]) found reduced buprenorphine bioavailability in HIV-positive patients (Bart et al., 2022). This may lead to decreased effectiveness and withdrawal symptoms. These medications are CYP3A4 inducers, meaning they hasten the metabolism of buprenorphine, leading to decreased plasma concentrations and/or withdrawal symptoms (Drugs.com, n.d.b).

Antifungal medications (e.g., fluconazole [Diflucan®], itraconazole [Sporanox®], voriconazole [VFEND®], posaconazole [Noxafil®]) slow buprenorphine metabolism, leading to increased effects (DrugBank, n.d.a). Combination of buprenorphine/naloxone and voriconazole in particular increases QTc interval and the risk of potentially life-threatening irregular heart rhythms (Medscape

Drug Interaction Checker, n.d.). The mechanism behind these interactions likely involves inhibition of CYP3A4-mediated N-dealkylation of buprenorphine (Kumar et al., 2024).

Nursing Implications

Nurses play a vital role in ensuring safe and effective buprenorphine/naloxone therapy. Nurses should provide thorough assessment and monitoring, including screening patients for potential drug interactions before initiating buprenorphine/naloxone therapy. They also should monitor regularly for adverse effects if the patient needs to take buprenorphine/naloxone and a drug that interacts with it. Use of CYP3A4 inducers, such as efavirenz and St. John's wort, may result in withdrawal symptoms as they reduce buprenorphine effectiveness. Nurses can use the Clinical Opiate Withdrawal Scale to evaluate 11 common symptoms of opioid withdrawal to assess severity. The tool can help healthcare providers individualize withdrawal management in patients (Still Detox, 2024).

Nurses are also responsible for patient education. They must inform patients and support persons about potential drug interactions and their dangers. Education should include clear information about risks associated with drug interactions, instructions on recognizing adverse reactions requiring medical attention, and the importance of disclosing all medication and substance use to healthcare providers. Nurses should engage in interprofessional collaboration with prescribing healthcare providers to develop safe medication regimens that prevent harm due to drug-drug interactions with buprenorphine/naloxone (Kumar et al., 2024).

Conclusion

Buprenorphine/naloxone therapy can result in serious safety concerns due to its potential drug interactions with CNS depressants, serotonergic agents, and CYP3A4 modulators. Nurses play a crucial role in educating patients about the importance of avoiding these high-risk combinations and recognizing early signs of adverse effects. Vigilant monitoring, clear communication among healthcare team members, and timely intervention are essential to preventing dangerous outcomes. By collaborating with healthcare providers effectively and providing quality care, nurses can help ensure safe and successful treatment for patients on buprenorphine/naloxone. [MSN](#)

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Timely Patient Discharge on a Medical-Surgical Unit

Holly C. Puckett

An efficient inpatient discharge involves strategies to improve patient care, increase bed availability, and expedite the timeliness of patient discharge (Stansbury et al., 2021). In 2018, 30% of older adult patients in the United States were reported to encounter a delay in their hospital discharge (Mallipudi et al., 2019). When delays in patient discharge occur, patients are at increased risk for infection and emotional distress, experience increased hospital expenses, and face a delay in obtaining new medications from the pharmacy. In addition, the availability of inpatient beds for incoming patients is restricted (Mallipudi et al., 2019).

Project Site and Reason for Change

The current discharge process for the identified medical-surgical unit incorporated an interprofessional approach with collaboration of the case manager, physician, and assigned nurse. Each nurse completed required discharge paperwork, including medication reconciliation, discharge instructions, follow-up appointments, and patient education. Unit charge nurses often noted the nurse assigned to the discharging patient experienced delays in discharge timing.

In 2019, expected discharge time was 120 minutes or less for

Holly C. Puckett, DNP, RN, CNE, CMSRN, is Director of Nursing Research at a 519-bed acute care hospital in Central Virginia.

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A quality improvement project aimed to decrease patient discharge times on a medical-surgical unit in Central Virginia. A discharge nurse role and discharge pathway were explored. Through pre/post-questionnaires and pre/post-average weekly discharge patient times, an improvement occurred at project completion.

Keywords: discharge plan, discharge process, discharge nurse role, patient discharge times, interprofessional collaboration

Literature Summary

- Patra and co-authors (2020) demonstrated statistically significant impact in discharge timeframes, patient length of stay, and patient satisfaction when using a discharge pathway that incorporated a risk assessment and a discharge bundle.
- In a randomized controlled trial, Patel and colleagues (2019) implemented interprofessional discharge planning rounds and saw increased collaboration and communication, reduced length of stay, and earlier discharge times.
- Use of a pediatric discharge facilitator improved Press Ganey scores for patients' satisfaction with the discharge process, with scores increasing in "discharge satisfaction" from 73.8% to 81.3% (Mason et al., 2019).
- A systematic review (Hayajneh et al., 2020) found improved time management and use of liaison nurses focused specifically on the discharge process in acute care settings may contribute to successful patient discharge.

CQI Model

- Plan, Do, Study, Act (PDSA) Agency for Healthcare Research and Quality, 2020)

Quality Indicator with Operational Definitions & Data Collection Methods

- Project unit accrued higher average patient discharge times than most medical-surgical units of the healthcare system.
- A discharge care pathway, a structured formal checklist implemented at patient admission, and a discharge nurse role were implemented to improve the discharge planning process and reduce patient discharge times.

- Pre- and post-intervention reviews measured weekly average of patient discharge times for the project unit, and clinical nurses were questioned before and after implementation of the discharge pathway to measure their satisfaction related to the discharge process.

Clinical Setting/Patient Population/Average Daily Census

- 33-bed adult medical-surgical unit (average daily census 32) in a 519-bed acute care hospital in Central Virginia

Program Objectives

- Reduce average patient discharge time to less than 2 hours over 10 weeks.
- Generate satisfaction (4 on 5-point Likert scale) with discharge nurse role and discharge care pathway among registered nurses of the project unit after 10 weeks.

all medical-surgical units in this organization. However, on this medical-surgical unit, average patient discharge time of 210 minutes was well over the health-care organization's benchmark for similar units. Additionally, these results had been unchanged for approximately 3 years. A change in clinical practice thus was needed to reduce patient discharge times from the current weekly average of patient discharge times. An effective discharge planning process and timely patient discharge are needed for busy medical-surgical units such as the project unit.

Many medical-surgical units within this tertiary healthcare organization had great difficulty in decreasing the time-to-discharge and with the discharge process itself. To prevent further financial burden, this quality improvement project was designed to implement a small test of change to determine the impact on one medical-surgical unit that could impact all similar units for the organization.

Program

In the *Plan* stage of this project (Agency for Healthcare Research and Quality [AHRQ], 2020), the project manager sought nurse leader guidance and support to

develop the project. Nursing leaders, including the unit manager, shift manager, and project manager, collaborated to develop and refine the new discharge process outlined in the discharge pathway, and identified duties of the discharge nurse role. These interventions had not been trialed together, and a discharge nurse role had never been trialed in this organization. These interventions were selected together to impact quality and timeliness of the discharge process.

The project manager obtained Ethics Review by the Nursing Research Council, with the project determined to be exempt through the institutional review board of the healthcare organization. The project manager also received baseline data on weekly average patient discharge times on this medical-surgical unit for 10 weeks pre-intervention. Before implementation, the project manager presented multiple educational sessions for dayshift and night-shift clinical nurses on the expectations and scope of this project, and administered the pre-intervention questionnaire. After pre-intervention education, a 12-item Likert questionnaire (1=*highly disagree*; 5=*highly agree*) was distributed to 29 clinical nurse participants in paper format to address

satisfaction with the discharge process, a formal discharge pathway, and the discharge nurse role. For nurses who could not attend, education materials and handouts were stored at the main nurses' station. Flyers also were posted on the clinical unit with details and information about the project.

In the *Do* stage of the project (AHRQ, 2020), the intervention was implemented in November 2019 for the 10-week trial. During the immediate rollout, the discharge pathway was attached to each patient report sheet. Clinical nurses were to initiate tasks from the discharge pathway for patients expected to be discharged in the upcoming 1-2 days. These tasks included arranging transport for patient pickup (car ride, cab ride, or transport team), providing patient education on any new medication or new medical diagnosis treatment, and arranging resources required for post-discharge through the collaboration of the case manager. A sign-up sheet was kept at the main nurses' station to plan accordingly for clinical nurses who volunteered to serve in the discharge nurse role for each day shift. After the physician entered discharge orders into the electronic health record, remaining components of the discharge pathway were completed by the discharge nurse. The discharge nurse coordinated and collaborated with the charge nurse, case manager, and physician to ensure appropriate resources to account for a safe patient discharge. The discharge nurse was responsible for completing the following tasks on the discharge pathway:

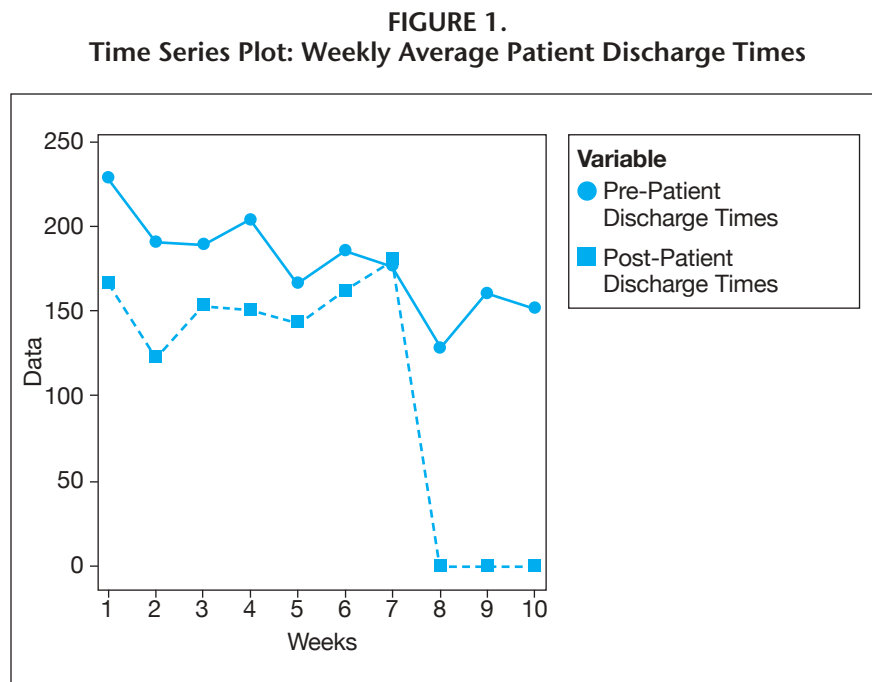
- Note time of discharge order.
- Arrange transportation for patient discharge (car or cab home, ambulance transport).
- Perform post-discharge medication reconciliation schedule in the electronic health record.

- Schedule follow-up appointments.
- Collaborate and confirm with case manager resources needed after discharge (e.g., physical therapy/occupational therapy, cardiac rehabilitation, medical supplies, home health).
- Review discharge plan and provide education (e.g., new medications, postoperative care, new diagnosis, wound care) with patient and/or family member, and ensure verbalized understanding and teach-back occurred.
- Review discharge medication administration schedule with patient and/or family member.
- Address patient and/or family member questions or concerns.
- Discontinue IV site.
- Note time of patient discharge.

The project manager made weekly rounds to collect completed discharge pathways that had been deposited in a locked box at the main nurses' station. The project manager also spoke with clinical nurses to gather feedback on project implementation. In addition, the project manager obtained weekly reports of patient discharge times from the Managing Director of acute care. Unfortunately, the quality improvement project ended earlier than expected after 7 weeks due to the inability to staff according to the staffing pattern and the inability to include a dedicated discharge nurse. The project manager then administered the post-questionnaire to clinical nurses to obtain final metrics for their satisfaction with the discharge pathway and the discharge nurse role.

Evaluation and Action Plan

As the project manager moved to the *Study* stage of the PDSA model (AHRQ, 2020), data for the pre- and post-intervention dis-



charge times were evaluated. In addition, pre- and post-intervention questionnaire data were compared. Discharge times improved overall at the completion of the project. Likewise, nurse participants expressed satisfaction in the discharge nurse role. A significant difference was found between pre- and post-intervention discharge times and pre- and post-intervention questionnaire data related to satisfaction of the discharge nurse role.

In the *Act* stage of the PDSA model (AHRQ, 2020), the project manager shared results with the Chief Nurse Executive and unit manager to propose next steps. They identified budgetary and staffing concerns with use of a discharge nurse role for this medical-surgical unit. Likewise, the COVID-19 pandemic occurred shortly after project completion in March 2020, with a pivot in nursing and clinical priorities for the organization occurring.

Results and Limitations

Descriptive statistics and a paired t-test were used for statisti-

cal measures. A time series plot (see Figure 1) was applied to demonstrate differences among the weekly average patient discharge times. A histogram (see Figure 2) illustrates differences in results on the pre- and post-questionnaire. Descriptive statistics were applied to pre- and post-discharge times and pre- and post-questionnaire of participants' satisfaction with the discharge process (see Tables 1 and 2). A p value of 0.05 was determined in comparing pre- and post-discharge times and a p value of 0.01 was demonstrated between the pre- and post-questionnaire results.

For the 10 weeks before project implementation, mean patient discharge was 178 minutes for a total of 388 patient discharges (range 129-229). Nurse questionnaire scores ranged from 3.41 to 4.0/5 (mean 3.76). These scores were expected before project launch because clinical nurses had no experience with the discharge nurse role.

Results included 260 patient discharges with a mean of 154.5 minutes (median 152 minutes, range 123-181 minutes) over the

FIGURE 2.
Histogram of Likert Scale Results (Pre- and Post-Questionnaire)

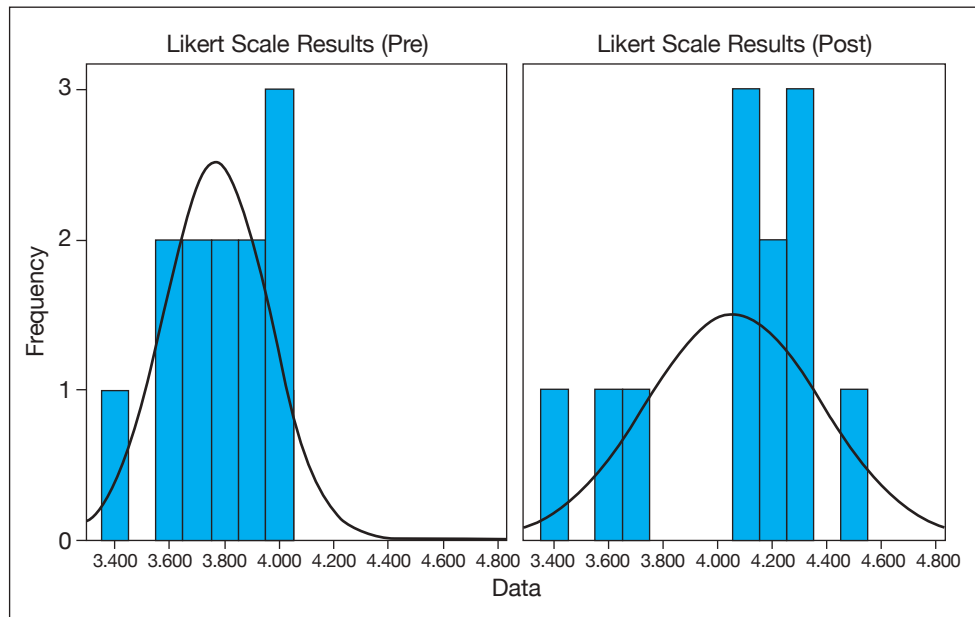


TABLE 1.
Patient Discharge Times

Sample	N	Mean	StDev	SE Mean
Pre	10	178.600	28.163	8.906
Post	7	154.571	18.393	6.952

N=total number of weeks, $p=0.05$

TABLE 2.
Questionnaire Results

Sample	N	Mean	StDev	SE Mean
Likert Scale Results (Pre)	29	3.76833	0.19035	0.05495
Likert Scale Results (Post)	19	4.06083	0.31845	0.09193

$p=0.01$

7-week project. The same 12-question questionnaire was completed by 19 nurses to determine their satisfaction with the current discharge process. Mean score was 4.06/5. A statistically significant difference was found for pre- and post-average patient discharge times and results from the pre- and post-nurse questionnaires.

One project goal was to reduce average patient discharge time to

less than 2 hours over 10 weeks. Although this goal was not reached, overall patient discharge times decreased. Another goal was that nurse participants would be satisfied (4.0-5/5) with implementation of the new discharge nurse role and discharge pathway. Pre-intervention mean score was 3.96/5. At project completion, mean score was 4.31/5. However, pre-intervention mean scores on

questions pertaining to the formal discharge pathway (3.96/5) further decreased to 3.42/5 post-intervention. It was found that during project implementation, the discharge pathway was not always enforced and utilized by clinical nurses. Education was provided by the project manager to clinical nurses at various weekly encounters to use the discharge pathway as it helped provide a checklist and improve efficiency in the overall discharge process. However, some clinical nurses voiced this checklist was an extra burden on their workload before a patient discharge.

Several limitations were noted for the project. For example, while 39 clinical nurses were employed on the project unit, only 29 (74%) completed the pre-intervention questionnaire and only 19 (49%) completed the post-intervention questionnaire. The questionnaire's paper format may have impacted the response; in addition, the project manager had only a few days to collect responses from clinical nurses at project

completion. When the project manager held the educational session pre-intervention, the majority of staff were present for pre-intervention education and thus would have received the pre-intervention questionnaire. Due to the inability to staff according to the staffing pattern and include a dedicated discharge nurse, the project ended 3 weeks before its planned conclusion.

The discharge pathway intended as a checklist and a guide in the discharge process was not always used. Charge nurses suggested it was helpful for the discharge nurse to use the pathway to ensure efficient, quality patient discharge. While it must be recognized that the discharge nurse role was used only for 4 of 7 days each week due to staffing deficiencies, substantial improvements still resulted in discharge times as well as the overall discharge process.

Lessons Learned/ Nursing Implications

Although this project was implemented on one medical-surgical unit for only 7 weeks due to staffing deficiencies, results were statistically significant. Addition of the discharge nurse improved discharge workflow and thus facilitated new patient admissions, although they were not a metric for this project.

For a quality improvement project to be successful, the project manager must communicate and collaborate with leaders throughout the project to ensure nurse adherence to the new process and change. Although feedback on the discharge pathway was provided to clinical nurses on the unit through weekly encounters, there was an opportunity to improve this aspect of the project with more regular, consistent communication and collaboration with the unit manager,

shift manager, and charge nurses throughout the duration of the project.

With the advent of the COVID pandemic in March 2020, staffing patterns and financial budget constraints prevented this pilot from demonstrating a sustainable change in practice for this unit and healthcare organization. However, recommendations for future projects include continuing to evaluate the evolution of the discharge nurse role among other medical-surgical units, preferably with a larger sample of participants on more than one clinical unit. Finally, patient satisfaction with the discharge nurse role could be evaluated to determine the impact of this intervention. A standard discharge pathway should be used by other busy medical-surgical units to initiate a robust, efficient discharge process.

Findings of this project sparked further conversations in 2022 after the pandemic. As a result, the Admission, Discharge, and Transfer Team was implemented for this healthcare system in 2023 to improve throughput and output, and decrease patient discharge times. This team is allocated for medical-surgical units in the organization to assist with admissions and patient transfers to other facilities, as well as to provide safe, efficient patient discharge. Many tasks from the quality improvement project discharge pathway and duties of the discharge nurse role evolved in the structure of this new team.

Conclusion

Use of a discharge nurse role for busy medical-surgical units has been addressed in other projects and research as beneficial in improving patient discharge times as well as the overall discharge process. Although the discharge pathway was not used con-

sistently, the role of discharge nurse was successful. Project results impacted the development of a new Admission, Discharge, and Transfer Team after the COVID pandemic. [MSN](#)

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Health Policy: Policy Overview and Nursing's Role

Zane Robinson Wolf

Nurses have a social contract to promote the health of the public. Their advocacy requires being knowledgeable about and participating in health policy creation and implementation (Fowler, 2015). Nurse leaders have argued nurses bring distinctive contributions to health policies (Fawcett, 2023). Nurses can shape and guide policy through political processes (Rasheed et al., 2020). Recognizing the need for nurse engagement in health policy activities, many nurse leaders have implemented strategies to increase nurses' knowledge and skills related to health policy. These strategies address the public's health-related problems that match the nursing social mandate (Fowler, 2015).

All nurses can participate in development of health policies. They can add nursing's unique voice to policy content and implementation. This article presents an overview of health policy and its developmental processes. It also offers strategies by which nurses can engage in policy creation and implementation.

Health Policy as Public Policy: Overview

Public policy includes governmental action as a response to societal problems or issues. Public policy "is a conscientiously cho-

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All nurses can participate in the development of health policies. Their expertise positions them to identify problems worthy of policymakers' notice and to call for legislative actions and policy solutions. Health policy processes, stakeholder activities, and nurse activism are reviewed.

Keywords: health policy, public policy, advocacy, processes, nurse activism, participation

Learning Outcome: After completing this education activity, the learner will be able to describe the process of health policy development and the impact nurses can have on the process.

sen course of action: a law, regulation, rule, procedure, administrative action, incentive, or voluntary practice of governments and other institutions" (Short, 2022, p. 4). Health policy addresses a wide array of societal problems, including those related to health care, healthcare systems, and public health.

In the field of public health, for example, health policies seek to address health threats, such as injury prevention for minority populations (Nishtala et al., 2023), infant and maternal health, and disease prevention. Public health policy goals also have included

gun violence reduction, family planning, teen pregnancy prevention, breastfeeding and human milk feeding programs, prevention of sexually transmitted infections, smoking cessation, and vaccine administration (Perrin, 2022). In the U.S. healthcare system, policy goals focus on providing high-quality, affordable health care to everyone. Healthcare spending comprises 17.6% of the nation's gross domestic product; supporting the financial health of the healthcare system is another essential policy goal (Centers for Medicare & Medicaid Services, 2024).

Zane Robinson Wolf, PhD, RN, CNE, ANEF, FAAN, is Dean Emerita, Professor, La Salle University, Philadelphia, PA.

Ideally, policies enacted by federal, state, and local governments match the beliefs and values of elected officials and their constituents. At each level of government, the legislative branch has the primary responsibility for major policy development and enactment through legislation (U.S. House of Representatives, n.d.a, n.d.b; U.S. Senate, n.d.). The executive branch of the government primarily implements policies through executive agencies (The Policy Circle, n.d.). Staff focus on health and human services, environmental protection, and veterans affairs, among other health-related policy areas. These agencies play crucial roles in implementing policy through development of specific regulations and guidelines, and distribution of money and resources. The judicial branch also participates in policymaking. It interprets and applies law, and resolves conflicts between legislation and other regulations when disputes arise (U.S. Courts, n.d.).

Policymakers develop public policies through a variety of policy *instruments*, identified as the beginning frameworks and methods through which policymakers target goals (see Table 1). Definitions and examples in Table 1 may illuminate the meaning of terms often heard but not always understood.

Nurses have many opportunities to influence the creation of a bill as one example of a policy instrument. They also can engage fellow constituents, consumers, professional nursing organizations, and legislators to initiate a bill and provide relevant research and clinical experience as important resources for a bill or proposed legislation. As experts on many healthcare topics and as voters, nurses are stakeholders who can focus attention on health problems and promote legislation and policy. As precipitators, nurses

can communicate a clinical practice problem requiring solution through policy and legislation (Yoder-Wise, 2020).

The most readily identifiable policy instruments include regulations (often in the form of statutes and administrative regulations). They stand as legal directives guiding public and private behavior (Short, 2022). In the context of health policy, various regulations guide Medicare and Medicaid billing and reimbursement and healthcare facility requirements, among others. Common policy instruments include taxing and spending. In health policy, for example, taxes are levied on tobacco products to discourage people from buying them; likewise, federal and state governments finance anti-smoking advertisements to discourage smoking (Cotti et al., 2022).

Government officials spread information in pursuit of policy goals through the policy instruments of information sharing and persuasion (Wilensky, 2020). For example, state and federal governments promote health insurance exchanges. Strategies include advertisements, letters, motivational messages, televised messages, trained assisters, support-based interventions, and personal enrollment assistance to encourage people to sign up for coverage under the Patient Protection and Affordable Care Act (Martin et al., 2024).

The policy process is complicated and nonlinear, but distinct stages in the process help illuminate how policies are created and changed. Policies develop gradually over time. Stakeholder input shapes and modifies them incrementally (Short, 2022). However, enacted legislation and corresponding health policy may not match original plans for the targeted problem at the final stages of legislative and policy work.

Policy Process

Problem Identification and Agenda Setting

Policymakers must evaluate if a health-related problem is a potentially solvable priority. Problem ideas can come from health-oriented professional organizations, constituents, hospital leaders, or legislators, or be triggered by a pressing and significant societal problem such as COVID-19. However, civic engagement can influence health policy development first by attracting federal, state, or local interest among policymakers (Habib et al., 2023). A communication plan to obtain legislators' commitment must convince them to create a bill with health policy implications.

A policy agenda is problem-focused so the problem reaches legislators' agenda. The health problem needs to engage legislators' interest. They must commit to a health-related problem so a bill and related policy result. For instance, human papillomavirus (HPV) is widespread and causes various adult cancers. However, the public may not know about development and availability of a vaccine that prevents cancers. Also, the approval of an HPV vaccine administered to specific groups to prevent adult cancers might lead ultimately to a policy on universal vaccine coverage (Fisher et al., 2024). Legislators need to be convinced to pursue the problem using evidence-based recommendations and other sources of information, such as nurses' reports of challenging clinical problems.

Policy Formation

Policy formation relies on assessment of a health problem so interventions are posed to prevent health threats. The problem statement and the overall policy goal are refined and presented. Specific

TABLE 1.
Health Policy Instruments

Instruments	Definitions	Examples	Responsibility Locus: Federal, State, or Other
Bills	Proposal to enact or repeal laws; based on chamber of origin, bills begin with designation of House of Representatives or Senate. Joint resolution is another form of legislative measure used to propose law (U.S. Senate, n.d.).	Assault Weapons Ban: The bill makes it a crime to knowingly import, sell, manufacture, transfer, or possess a semiautomatic assault weapon or large capacity ammunition. A bill to regulate assault weapons, to ensure the right to keep and bear arms is limited, and for other purposes (Assault Weapons Ban of 2023).	Federal: Legislative Branch Approved or vetoed by President; may be passed by Congress over veto.
Acts, Statutes, Enacted Legislation	Statutes at Large: permanent collection of all laws and resolutions enacted during each session of Congress. Every public and private law passed by Congress is published in the Statutes at Large in order of date of enactment into law. Laws are arranged by Public Law number and cited by volume and page number. Also included are concurrent resolutions, proclamations by the President, proposed and ratified amendments to the Constitution, and reorganization plans (Congress.gov, n.d.).	Patient Protection and Affordable Care Act (2010)	Federal: Legislative Branch, House of Representatives
Executive Order	Signed, written, published, numbered directive from the President of the United States that manages operations of the federal government (American Bar Association, 2021). Based on historical practice, executive interpretations, and court decisions; not defined in the Constitution. Power to issue orders comes from an act of Congress or the Constitution (Bomboy, 2025).	89 F.R. 59585 – White House Initiative on Advancing Educational Equity, Excellence, and Economic Opportunity Through Hispanic-Serving Institutions (2024)	Federal: Executive Branch
Presidential Directives (Form of Executive Order)	Written or oral policy instruction or declaration by the President of the United States consistent with a presidential order (Bomboy, 2025).	National Security Presidential Directive/-66. Homeland Security Presidential Directive/HSPD: Directive established policy of the United States with respect to the Arctic region and directed related implementation actions; directive superseded Presidential Decision Directive/NSC-26 (PDD-26; issued 1994) with respect to Arctic policy but not Antarctic policy; PDD-26 remains in effect for Antarctic policy only (The White House, George W. Bush, 2009).	Federal: Executive Branch
Presidential Memorandum	Written statement presented to Congress and not required by law to be printed in the Federal Register or to cite the President's legal authority (Library of Congress. n.d.).	National Security Memorandum to Counter Weapons of Mass Destruction Terrorism and Advance Nuclear and Radioactive Material Security (The White House, Joe Biden, 2023)	Federal: Executive Branch

continued on next page

TABLE 1. (CONTINUED)
Health Policy Instruments

Instruments	Definitions	Examples	Responsibility Locus: Federal, State, or Other
Rules and Regulations	Guidelines issued by agencies of the Executive Branch; agencies create regulations or rules under the authority of Congress to help the government enact public policy (U.S. Department of Health and Human Services, n.d.). Code of Federal Regulations (CFR): official legal print publication containing codification of general and permanent rules published in the Federal Register by departments and agencies of the Federal Government (Code of Federal Regulations, n.d.b).	Title 42 – Public Health. Chapter IV – Centers for Medicare & Medicaid Services, Department of Health and Human Services. Subchapter G – Standards and Certification. Part 483 – Requirements for States and Long Term Care Facilities & Subpart B – Requirements for Long Term Care Facilities (Code of Federal Regulations, n.d.c).	United States Code of Federal Regulations
Resolutions	Proposal of the House of Representatives or Senate introducing a legislative measure on operation of either; potentially acted upon by one congressional chamber and not presented to the President for action. Three types of resolutions include simple, joint, and concurrent (U.S. House of Representatives, n.d.a).	Supporting the goals and ideals of Fentanyl Prevention and Awareness Day on August 21, 2024.	Federal: Legislative Branch
U.S. Code of Federal Regulations (CFR)	Official codification of general and permanent federal statutes of the United States. Annual edition includes codification of general and permanent rules published in the Federal Register by departments and agencies of the Federal Government. The 53 subject matter titles contain one or more individual volumes and are updated once each calendar year on a staggered basis. Titles are divided into chapters usually with name of issuing agency. Each chapter is subdivided further to cover specific regulatory areas. Large parts may be subdivided into subparts. All parts are organized in sections; most citations to the CFR refer to material at section level.	U.S. Government Publishing Office (n.d.). CFR (n.d.a) provides conditions for and limitations on coverage for mammography services.	Federal: Legislative Branch, House of Representatives

outcomes are identified, and possible interventions are detailed, created, compared, and selected. Decisions are based on projected outcomes or deliverables. Changes can be made during a policy's developmental processes as conditions change and information becomes available (Short, 2022).

Many information sources can shape a policy. For example, large data sets provided by nurse scien-

tists on a specific health problem, information on healthcare costs from the Agency for Healthcare Research and Quality, consultation with expert clinicians, and anecdotes about constituent groups' health can influence bills and policies (Walton, 2022). Constituents and voters also engage legislators and legislative staff by communicating their concerns, such as the need to promote uni-

versal immunization for HPV with the public. Their causes may result in enactment of a statute including a policy's complex requirements. Advocacy for a cause also may be influenced by political party membership, even superseding gender differences on policy issues (Burton et al., 2024).

How a specific health threat, such as an infectious disease, fits national and political agendas,

and directs policy and program planning requires detailed description. Health impact assessments most often are performed prospectively before program implementation, but they may be done retrospectively following a serious public health threat. Prospective assessments systematically investigate how proposed policies will impact health outcomes of populations. They function as common tools in health policy formulation (Mueller et al., 2023).

The policy formation stage also requires consideration of operational concerns through guidelines. For example, policymakers must determine how policies might be implemented and measured at the most basic level. Policy implementation guidelines will impact achievement of program level objectives and outcomes directly (Short, 2022). For example, medical marijuana or cannabis use in children and adolescents with chronic conditions could benefit from a policy and associated guidelines (Young-Wolff et al., 2024).

A policy's design focuses on improvements or changes needed to mitigate a health problem. The design emerges during the policy formation process as goals, outcomes, and interventions are considered (Short, 2022). The following example applies a logic model to describe a program plan that structures policy implementation (Perrin, 2022, p. 38):

- *Goal statements:* overview and objectives
- *Inputs/resources:* human resources and stakeholders, fiscal resources, physical resources, educational resources, surveys, interviews, number of training sessions
- *Activities:* needs assessment, baseline data, recruitment, focus groups, number of persons trained

- *Outputs/process evaluation:* products, services provided, themes, profits, stakeholder satisfaction
- *Outcomes/impact and outcome evaluation*
 - Short-term impact: baseline data collection to include knowledge, attitudes, behaviors and beliefs, income generated, knowledge gained
 - Intermediate impact: participation, retention, and follow-up rates; implementation strategies for future events; strategies for institutional changes
 - Long-term impact: documentation of improved outcomes, decreased costs due to improved conditions, policy changes due to interventions

Policy Legitimization

Once a proposed policy is designed during the policy formation stage, promotion and formal adoption follow during the policy legitimization stage. During this stage, policymakers who advocate for the proposed policy must convince others they should adopt it. This process commonly plays out in the legislature, as legislators are typically the authoritative decision-makers on policy (Short, 2022). Much of this work is done by legislative staff, who are very knowledgeable about proposed bills and their policy implications at federal and state levels (Carignan et al., 2024). They seek stakeholders' positions on funding implications of specific policies. Staff also advise legislators on stakeholders' preferences, including those of constituents, voters, and lobbyists. Staff can share details with constituents as a policy progresses through the legislative process.

The executive branch policy actors, such as the President, governors, and agency secretaries, contribute expertise critical to the policy legitimization stage (Short,

2022). Their work depends on the type of public policy. For example, if the legislature fails to act on addressing a pressing health policy problem, the President may draft and sign an executive order. Alternatively, executive agencies might propose and adopt new regulations after seeking public input. Although many proposed policies make it through this stage in the process, some do not. The proposed policy change might meet significant public resistance or lose favor with key policymakers who can stall its adoption in a variety of ways (Figueroa & Verma, 2023).

Policy Implementation

During the policy implementation stage, an adopted policy is put into action by government and private actors. Policies can be implemented by various departments of government to achieve the intent of statutes and other instruments. Executive agencies, such as the Department of Defense, Department of Veterans Affairs, or the Office of Civil Rights, commonly are charged with interpreting statutes and determining their policy implications (Short, 2022). However, legislative language is formal, difficult to decipher, and sometimes vague (Maley, 2017, as cited in Walton, 2022). Interpretations of policy actions may be challenged in the courts or reviewed by judges (Latham, 2022). The amount of time, money, and other resources devoted to policy implementation might demonstrate a lack of focus and support during the implementation stage. These factors can impact a policy's ability to meet its goals. For example, enrollment in the Patient Protection and Affordable Care Act health insurance exchanges waned during the first Trump administration as fewer resources were devoted to promoting enrollment (Courtemanche et al., 2021).

Policy Evaluation

Program evaluation designs are set at the beginning of a policy's implementation. Policy evaluation assesses short- and long-term goals and objectives to determine if interventions affected outcomes. Evaluators weigh the effectiveness of a health policy's program in achieving its goals by focusing on a program's performance measurements, accountability, efficiency (cost-benefit), and impact. Environmental and health impact assessments evaluate achievement of policy goals at specific times following implementation (Gulis et al., 2022).

Program directors, implementers, and staff assess each section of a program. Experts may be engaged to evaluate outcomes identified during planning and grant application processes for funded programs. All assessors base their evaluation of outcomes on quantitative and qualitative data. Along with measured and descriptive results, they review feedback from stakeholders and consider the prospective sustainability of programs (Fox et al., 2024) to determine program effectiveness at the end of policy funding.

Reports on results of a program's evaluation describe measured and narrative results. Outcomes are interpreted and justified in relation to utility, feasibility, and accuracy (Short, 2022). Reports describe the sustainability of the program, often a requirement of a funded program. They are disseminated to stakeholders, including members of the executive branch, legislators, communities, the media, and academic publications. Recommendations address future program improvement goals (Short, 2022) and the responsibility for disseminating program outcomes.

Policy Stakeholders and Personnel

Public officials, private individuals, and constituent groups can be stakeholders in the process of policy creation, implementation, and evaluation (Aguilera et al., 2024). An implemented policy may affect them directly or indirectly. Public actors, such as legislators and their staff, the President, executive agencies, executive branch staff, and judges, contribute to policy formation, development, implementation, and evaluation. In particular, members of the U.S. Senate and House of Representatives are essential to policy development. They have legitimate power to support legislation and policies that create and implement guidelines (Congress.gov, n.d.).

Many individuals and groups influence policy development as private action, including the media, trade unions, non-governmental agencies, and political parties (Short, 2022). Other contributors include special interest groups, policy think tanks, expert policymakers, and leaders of healthcare organizations who are activists in policy creation. Their expertise can add to the identification of health problems and policy design.

Public health experts and scientists also provide findings relevant to legislation and policies (Taylor et al., 2022). Healthcare providers, such as nurses, physicians, and pharmacists, bring concerns forward from the front lines of healthcare systems. Also, healthcare providers who implement and evaluate programs based on policies, whether funded or in-kind, provide practical recommendations during evaluation of programs that can influence future program modifications and policy outcomes (Stewart et al., 2023).

Nurse Activities Shaping Policy Development

Nurse Educators and Clinical Nurses

Nurses have a responsibility to support bills, statutes, and policies that decrease health disparities and improve quality of life for all people (Fawcett, 2022). Nurses' expertise should be valued. Without nurses' contributions, policies may be developed that lack attention to issues important to healthcare delivery (Olugbade et al., 2024). Nurse educators continue to expand their knowledge, skills, and abilities in relation to health policy (Hajizadeh et al., 2021). Their students benefit from health policy content and develop competencies through undergraduate and graduate nursing courses consistent with educational standards published by the American Association of Colleges of Nursing (2021) and National League for Nursing (2024). However, activism requires action-oriented competencies.

Being knowledgeable about policy does not always increase nurses' confidence when engaging with legislators and other policymakers at local, regional, or national levels. Although nursing faculty have taken students to meet state legislators and members of the U.S. Congress, engagement in political action and policy creation may not follow. Nurse educators and expert clinical nurses might add to their knowledge of health policy concepts through educational interventions, expand their knowledge on social determinants of health (Kuehnert et al., 2022; Noone, 2022), and contribute their expertise to policy formation.

Nurses' clinical expertise contributes greatly to policy problem identification and implementation. For example, the World

Federation of Critical Care Nurses Survey asked participants about global critical care nursing policy, practice, and research priorities to determine trends and priority issues of interest to critical care nurse leaders and representatives of critical care nursing organizations (Williams et al., 2023). Invited respondents came from 140 countries. Working conditions, teamwork, staffing levels, and access to quality educational programs were the top four priority nursing issues ($N=99$, 70.7% response rate). The top four national policies or guidelines included recruitment and retention in critical care, work environment safety and comfort in critical care, staffing guidelines and ratios for critical care units, and criteria/credentials for advanced practice nurses. The highest research priority areas included stress levels (burnout, emotional exhaustion, compassion fatigue), critical care nursing shortage, skill mix and workforce planning and recruitment, retention, turnover, working conditions, and critical care nursing education and patient outcomes. Practice standards and professional representation were also important. Survey results identified potential problems ultimately solvable by legislators and policy implementation.

Professional Nursing Organizations

Nurses demonstrate adherence to nursing's social contract by advocating for legislation and health policies through professional nursing organizations, consistent with organizational missions (Castanos & Bowden, 2024). Members use their collective influence by sponsoring legislation matching organizational policy agendas and monitoring the progress of legislation. Organizational leaders and lobbyists of nursing organizations advocate

for policies benefitting patients, communities, and the profession. Nurses alert legislators and policymakers to problems and issues of concern as seen in policies and statutes at federal or state levels.

Members of professional nursing organizations and other interest groups frequently target health-care issues, such as the Oncology Nursing Society's (2024) health policy priorities: patient access to quality cancer care and oncology nurse education on palliative care and hospice care. Members often visit legislative offices in Washington, DC, and meet with staff to request legislators' support of bills and their inherent policies. Their commitment to a cause may be shaped by various priorities or politics that influence their activism (Short, 2022).

Some nursing organizations publish newsletters and journal columns apprising members of policy progress. They also solicit member support via email and alert members to organizational priorities for policy development. Legislators in Congress or state assemblies support bills sponsored by nurses. Bills may become statutes after being signed by the President in a presidential statement enforcing a statute's passage (Library of Congress, n.d.) or by a state's governor who signs a bill into law (Pennsylvania General Assembly, n.d.).

One example of a policy at the state level is the quest for full scope of authority by certified registered nurse anesthetists, who are often the only anesthesia providers in rural areas and specialty surgery centers. Some state organizations have obtained full scope of practice with the outcome of opting out of physician supervision. They have implemented many activities to achieve full scope of practice, such as the initiatives of the Ohio State Association of Nurse Anesthetists (Newell et al., 2022).

Nursing organizations often publish policy agendas and may have lobbyists to represent them at federal and state levels. Leaders send letters of endorsement for bills introduced and laws passed, and express appreciation for congressional efforts. Organizations also present position statements on priorities, such as supporting funding of nursing workforce initiatives, biomedical research, and safety of healthcare (Castanos & Bowden, 2024; Chiu et al., 2023). Multiple professional nursing organizations participate in policy development and endorsement. Their members add nursing's voice in support of policies, bills, and laws. See Table 2 for types, definitions, and examples of advocacy documents that illustrate nursing's active support of policy and legislative protocols.

The American Academy of Nursing (AAN) demonstrates consistent public efforts to add nursing's voice in support of policies and their designs. The organization publishes yearly policy priorities to advance health equity (AAN, n.d.b). Additional policy advocacy strategies include the ongoing Policy Dialogue Series on health topics (AAN, n.d.a). Similar to other nursing organizations, AAN (2023) supports health and workforce policies proposed by federal and organizational groups and publishes documents showing endorsements, advocacy, and recommendations on the organization's website.

When nurses commit to shaping a healthcare policy, they use their skills to influence its components and activities. However, many assume a passive role in relation to policy development (Rasheed et al., 2020). Their engagement in policy actions predominates as policy implementers. See Table 3 for proposed strategies to increase medical-surgical nurses' activism and early

TABLE 2.
Definitions of Policy-Associated Support and Examples of Nursing Organizations' Participation

Definitions	Examples
Amicus briefs (Latin for <i>friend of the court</i> and shorthand for amicus curiae brief): filed in appellate courts by amicus curiae and submitted in a specific case under review; show the court its final decision will impact people other than individuals or groups not party to a case; offer relevant information or arguments the court may want to consider before making their ruling (Sears, 2024)	American Academy of Nursing (AAN, 2024) joined an amicus brief with American Academy of Pediatrics and other healthcare organizations related to an appeal of August 2022 amicus brief that challenges Texas's efforts to investigate gender-affirming care as child abuse.
Comments: published notes that add an organization's perspectives to a policy issue	AAN (2023) submitted comments to the Centers for Medicare & Medicaid Services regarding the proposed rule on Medicare and Medicaid Programs: Minimum Staffing Standards for Long-Term Care Facilities and Medicaid Institutional Payment Transparency Reporting. Comments highlighted considerations for improving the registered nurse on-site requirement, establishing nurse staffing standards, transparency of Medicaid nursing home information, and provisions on strengthening facility assessment requirements. AAN's Aging Expert Panel contributed to development of this comment letter.
Consensus paper or document: documents other than guidelines, such as Consensus Guidance and White Papers; based primarily on consensus of an interprofessional panel of experts specializing in the topic, with evidence evaluated when available, and concentrated on areas where science is evolving (American Society of Radiology Oncology, n.d.)	The consensus paper "Mobilizing Nurses to Address the Opioid Misuse Epidemic" reviews measures to prevent and treat opioid use disorder and overdose while examining the background and current practice of primary care registered nurses and nurse practitioners in prevention, recognition, and treatment, with attention given to regional, legislative, and reimbursement issues that enable or act as a barrier to practice from AAN's Psychiatric, Mental Health, and Substance Use Expert Panels (Renda et al., 2023).
Consensus or policy statement: written declaration developed by panel of experts, usually interprofessional, to review related research literature; key health topics can be presented (American Public Health Association [APHA], n.d.)	The American Association of Critical-Care Nurses (AACN, 2022) Tele-critical Care Nursing Consensus Statement, an expert consensus statement, supports acute, progressive, and critical care and hospital leaders and nurses with recommendations, clinical vignettes, and a framework. It explores many practice changes and expanding applications in this area of telemedicine, supports the terminology shift to tele-critical care, identifies essential tele-critical care elements, reflects current evidence, and delivers a fresh perspective to a fast-growing area of healthcare.
Position paper: document representing an organized strategy on a policy issue by a single organization or joint organizations; document describes an issue, takes a position based on literature, and argues a position (Adams et al., 2024)	The American Academy of Ambulatory Care Nursing position paper on the role of the registered nurse in ambulatory care recommends nurse graduates are prepared and compensated for the complex role (Mobley et al., 2023).
Position statement: document represents and shapes an organization's position on a health topic by incorporating depth and diversity of interests and expertise among organization's members (APHA, n.d., para 1). Organizational staff reference the organization's policy statement to evaluate if the organization will support or oppose laws, regulations, or other actions based on research and the organization's general position and recommendations included in policy statements (APHA, n.d., para 2). Content experts are solicited to draft comments.	The American Nurses Associations (n.d.) develops position papers on issues related to nursing practice, health policy, and social concerns impacting health of patients and families. Topics include the electronic health record, ethics and human rights, nursing practice, patient safety, privacy and confidentiality, and workplace advocacy.

continued on next page

TABLE 2. (CONTINUED)
Definitions of Policy-Associated Support and Examples of Nursing Organizations' Participation

Definitions	Example
Press release: official statements, media notes, notices to the press, and fact sheets; may be posted to websites (U.S. Department of State, n.d.)	AAN (2024) released gender affirming care policy dialog meeting proceedings.
Sign on letter: persuasive, supportive document sent by an organization singly or in agreement with other organizations to legislators to influence their decisions on policy initiatives (Committee on Children, n.d.)	AACN (2024a) collaborated with American College of Emergency Physicians by signing a letter to Congress in support of the Dr. Lorna Breen Health Care Provider Protection Reauthorization Act, which provided healthcare workers with better access to education and training on preventing stress and burnout.
Testimony: evidence presented orally by witnesses during congressional hearings and in other venues; precedes a written document (Offices of United States Attorneys, n.d.).	Testimony to House and Senate Appropriations Subcommittees: 58 members of the Nursing Community Coalition, including AACN (2024b), signed written testimony submitted to House and Senate Appropriations Subcommittees on Labor, Health and Human Services, and Education with funding requests of at least \$530 million for the Title VIII Nursing Workforce Development Programs and at least \$210 million for the National Institute of Nursing Research for Fiscal Year 2025.

TABLE 3.
Strategies to Engage Medical-Surgical Nurses in Policy and Legislative Processes

Strategy	Source
Developing a policy culture in nursing organizations	Short, 2022
Mentoring of novice nurses on policymaking by advanced policymaker members of nursing organizations	Rasheed et al., 2020
Educating nurses on their contributions to early policy development processes at nursing conferences	Rasheed et al., 2020
Publishing a nursing organization policy statement on medical-surgical nurses asserting their policy development role in their workplaces, especially for policies to be implemented by them	Rasheed et al., 2020
Attending yearly meetings with political leaders, including state legislators and members of Congress, to provide medical-surgical nurses' expertise on pertinent healthcare issues that match their clinical knowledge and competencies	Rasheed et al., 2020
Developing ongoing relationships with legislators to promote their commitment to policies that solve clinical problems noted by medical-surgical nurses and based on shared agendas	Short, 2022
Conducting a survey of nursing organization members on policy and legislative priorities framed by their clinical experiences	Williams et al., 2023
Attending or submitting public commentary on proposed rules and regulations to provide examples from nurses' experiences in healthcare	Short, 2022
Being visible at candidates' election support meetings as party constituents, including district, senate, and federal levels	Short, 2022
Developing persuasive, consistent arguments based on personal nursing experience, to legislators such as members of the United States House Nursing Caucus and Senate Nursing Caucus	Short, 2022
Engaging nursing organization members to increase civic participation by working on priorities of the organization	Habib et al., 2023
Creating long-term relationships between nurse scientists and decision-makers knowledgeable about funded research on healthcare problems addressed by policies	Nystrom et al., 2018
Inviting article submissions to professional publications or writing op-eds on problems of medical-surgical patients with health policy implications	Short, 2022
Collaborating with nurse scientists to conduct studies on nursing interventions addressing critical problems of adult patients cared for by medical-surgical nurses	Nystrom et al., 2018

participation in policy and legislative development.

Nursing Research

Nurses' expertise has an effect on policy development processes through findings of nursing research. A classic example of how nursing research has influenced health policy is the Maternal, Infant, and Early Childhood Home Visiting Program based on the research of Kitzman and colleagues (1997). The Jackie Walorski Maternal and Child Home Visiting Reauthorization Act of 2022 became law. It funds cost-effective visitation programs across the United States showing cost savings and long-term effects (Nurse Family Partnership, 2024, para. 2). Research after the classic study has continued to provide evidence and build on the original work in support of the visitation program (Kitzman et al., 2019).

Sarna and co-authors (2013) also emphasized nursing scholarship has influenced tobacco control, as have studies on reducing tobacco use and tobacco-related diseases and deaths. They highlighted theory-based nursing science on tobacco use, prevention, and cessation. They also referred to O'Connell's (2009) review of 137 studies published by nurses 1989-2008 on smoking cessation and related topics, and identified five nursing theories used in nursing's smoking cessation studies. These classic examples highlight nursing's persistence on smoking cessation policy. Nursing's scientific contributions to smoking cessation interventions and prevention of smoking likely have informed healthcare policy.

Nurse scientists are underrepresented in important scientific and policy advisory groups (Guilamo-Ramos et al., 2024). However, collaborative relationships between nurse researchers and expert clinicians, such as members of a nurs-

ing organization, could inform research on complex clinical problems and health policy. Although distinctions between experts differ by role, cultural differences, and organizational contexts, these partnerships can affect healthcare outcomes (Nystrom et al., 2018). Boundary-spanning work can bridge differences. Supportive relationships between researchers and organizational decision-makers could foster knowledge exchange and a way to integrate science into practice, from bedside to statute to policy.

Conclusion

Nurses participate in opportunities to develop and implement health policies. Their experiences as expert clinicians, administrators, educators, and scientists position them to identify problems worthy of policymakers' notice and to call for legislative actions and policy solutions. Ongoing education and participation in the formulation and revision of policies must continue so nurses' expertise develops further, and their priorities are heard. [MSN](#)

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Nurse-Led Constipation Management for Hospitalized Older Adults with COVID-19: A Mixed Methods Pilot Study

Golnaz Azami
Nasrin Moghadam

Sanaz Aazami
Mohammadreza Kaffashian

Heresh Moridi
Boshra Ebrahimi

Constipation represents a substantial but often overlooked health challenge among hospitalized older adults, particularly in the context of COVID-19. While the respiratory manifestations of COVID have been studied extensively, gastrointestinal implications (e.g., constipation) remain relatively under-investigated (Holshue et al., 2020). Emerging evidence suggests a correlation between COVID and constipation, with potential consequences for patient morbidity and mortality (McClave, 2022). Age-related physiological changes, compounded by the effects of immobilization and medication associated with COVID treatment, significantly increase the risk of constipation in this vulnerable population (World Health Organization, 2023). Moreover, the psychological distress associated with hospitalization for COVID may exacerbate constipation through altered bowel habits (Chan & Grover, 2022).

Addressing constipation in hospitalized older adults is crucial for enhancing patient comfort, preventing complications, and optimizing overall care. A comprehensive understanding of the multifaceted factors contributing to constipation in older adults with COVID is essential to inform development of effective interventions. Table 1 summarizes components needed for normal

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Addressing constipation in hospitalized older adults is crucial for enhancing patient comfort, preventing complications, and optimizing overall care. A mixed methods approach was used to investigate the multifaceted aspects of constipation management among older adults with COVID-19 and inform intervention development. The nurse-led intervention showed promise in reducing constipation severity, highlighting the critical role of nurses and warranting further validation through additional research.

Keywords: constipation, bowel management, COVID-19, older adults, patient care planning, nurse-led intervention, validation

Golnaz Azami, PhD, is Faculty Member, Department of Emergency Medical Sciences, Faculty of Paramedical Sciences, Kurdistan University of Medical Sciences, Sanandaj, Iran.

Nasrin Moghadam, RN, is Registered Nurse, Clinical Research Development Unit, Shahid Mostafa Khomeini Hospital, Ilam University of Medical Sciences, Ilam, Iran.

Sanaz Aazami, PhD, is Faculty Member, Department of Nursing, Faculty of Nursing and Midwifery, Ilam University of Medical Science, Ilam, Iran.

Mohammadreza Kaffashian, PhD, is Faculty Member, Department of Physiology, Faculty of Medicine, Ilam University of Medical Sciences, Ilam, Iran.

Heresh Moridi, PhD, is Faculty Member, Department of Medical Laboratory Sciences, Faculty of Paramedical Sciences, Kurdistan University of Medical Sciences, Sanandaj, Ilam, Iran.

Boshra Ebrahimi, is Faculty Member, Department of Emergency Medical Sciences, Faculty of Paramedical Sciences, Kurdistan University of Medical Sciences, Sanandaj, Iran.

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Note: This project was prepared in accordance with the guidance for reporting intervention development studies in health research (GUIDED) (Duncan et al., 2020). The Template for Intervention Description and Replication (TIDieR) checklist (Hoffmann et al., 2014) was used to structure the description of the study intervention.

Background

Constipation is a highly prevalent and debilitating condition among older adults, and it is exacerbated particularly in hospitalized older adults with COVID-19. A dearth of evidence-based resources tailored to the Farsi-speaking population further compounds the issue.

Aim

Develop, implement, and evaluate a nurse-led intervention to manage constipation in older adults hospitalized with COVID.

Methods

A mixed methods approach was used to investigate the multifaceted aspects of constipation management and inform intervention development. Qualitative methods (Delphi, nurse interviews) guided intervention design, while quantitative methods (pretest-posttest) assessed feasibility and effectiveness. The integration of qualitative and quantitative data occurred through sequential explanatory design and thematic-quantitative triangulation. The intervention aligned with Virginia Henderson's Needs Theory (Henderson, 1997). Using a pretest/posttest design, this pilot study evaluated intervention impact on constipation severity.

Data Analysis

Quantitative data were analyzed using descriptive statistics and paired t-tests. Qualitative data were analyzed thematically.

Results

The intervention demonstrated feasibility and significantly reduced constipation severity. Qualitative findings informed intervention refinement and revealed key themes, such as perceived barriers to bowel care, the importance of structured education, and patient preferences for self-monitoring tools. Expert consensus validated intervention components, highlighting strong content validity (CVI=89%).

Limitations and Implications

The small sample is a limitation. Larger studies are required to confirm findings. The intervention holds promise for improving constipation management in hospitalized older adults, but further research is needed.

Conclusion

This study successfully piloted a nurse-led intervention to address constipation in older adults with COVID.

The synergistic combination of qualitative and quantitative methods produces a robust and reliable intervention that effectively addresses patients' complex needs. By integrating these complementary perspectives, this study aimed to generate a deeper understanding of the patient experience, facilitate the iterative refinement of the intervention, and contribute to the development of evidence-based care for older adults with COVID who experience constipation.

Theoretical Framework

Henderson's Needs Theory posits that nurses should assist individuals in performing activities contributing to health or to recovery, which they would perform unaided if they had the necessary strength, will, and knowledge (Henderson, 1997). Among the 14 fundamental needs identified, elimination of body wastes is a universal human requirement. Given the theory's emphasis on patient autonomy and fulfillment of basic human needs, it served as a robust framework for developing and implementing a nurse-led intervention to address constipation in hospitalized older adults with COVID. By focusing on these components, nurses can set goals and address patients' basic needs, which can improve their overall well-being and care outcomes significantly.

Review of the Literature

A comprehensive literature search was conducted to identify existing knowledge on constipation management in older adults with COVID. PubMed, Web of Science, ScienceDirect, EBSCO, Ovid Medline, and Google Scholar were searched for January 2020–December 2023 using the keywords *constipation*, *elderly*,

bowel elimination and conditions that impede it (Bowen et al., 2024).

A mixed methods approach facilitates comprehensive under-

standing of the multifaceted nature of constipation in older adults, and informs subsequent development and validation of a patient-centered intervention.

TABLE 1.
Maintaining Normal Bowel Elimination

Strategies	Barriers
Daily diet of fiber (15-25g)	Lack of access to fresh foods Insufficient knowledge* Financial constraints
8-10 glasses of water daily	Mobility problems Fear of incontinence Impaired thought process* Low motivation
Daily exercise	Minimal activity level Pain, fatigue Fear of failing
Cognitive appraisal	Impaired thought process Faulty appraisal
Toileting routine	Low motivation Change in routine Stress
Response to rectal cues	Mobility problems Decreased awareness Environmental constraints Self-care deficits

*These barriers can hinder effective implementation of all listed components, thereby impacting bowel elimination outcomes.

Source: Bowen et al., 2024

intervention, and *COVID-19*. Additional inclusion criteria were used to ensure selection of relevant, high-quality sources. Studies were included if they focused on adults age 60 or older with COVID experiencing constipation or related gastrointestinal complications. Only original research articles, systematic reviews, and meta-analyses published in peer-reviewed journals were considered, while commentaries and opinion pieces were excluded unless they provided substantial evidence-based insights. The search prioritized studies evaluating nonpharmacological and nurse-led interventions for constipation management in older adults, particularly in hospital settings. To ensure accessibility and accuracy in data interpretation, only publications in English and

Farsi were included. Additionally, full-text access was required to comprehensively assess methodological rigor and findings. The search yielded nine relevant studies, including original research and systematic reviews.

Emerging evidence highlights the increased risk of constipation among hospitalized older adults with COVID attributed to factors such as decreased mobility, medication side effects, and psychological distress (Carmona-Gonzalez et al., 2022; Hayashi, 2022; Kayaoglu & Sert, 2022; Remes-Troche et al., 2021). However, there is a lack of research specifically exploring effective interventions for these patients. While nonpharmacological approaches, including dietary modifications, exercise, and biofeedback, have shown promise in general older

adult groups (Dobarrio-Sanz et al., 2020; Farg et al., 2020; Soheilipour et al., 2022), their efficacy in the context of COVID remains largely unknown. Pharmacological interventions commonly employed in long-term care settings require further investigation due to associated risks and potential interactions with COVID medications (Kang et al., 2021).

The literature underscores a critical gap in knowledge regarding the management of constipation in older adults with COVID. This study contributes to this emerging field of knowledge by exploring the feasibility and effectiveness of a nurse-led intervention.

Purpose

The study's purpose was to develop and evaluate a nurse-led intervention designed to alleviate constipation in hospitalized older adults with COVID. The study aimed to answer the following questions:

Qualitative: How can a patient-centered intervention be developed to address the complex needs of hospitalized elderly patients with constipation?

Quantitative: Is the developed intervention feasible and acceptable to implement in a clinical setting? What is the preliminary impact of the intervention on constipation severity and patient-reported outcomes?

Qualitative findings contributed to development and refinement of the intervention and provided contextual insights that helped interpret the quantitative results. Quantitative data assessed the intervention's effectiveness and informed future research. The integration of both datasets facilitated a comprehensive understanding of the intervention's impact on constipation management in study participants.

Methods

This study centered on patient needs and development and refinement of a nurse-led intervention for constipation management in hospitalized older adults with COVID. The intervention was designed to empower patients by providing education, self-care strategies, and opportunities for self-monitoring, thereby promoting independence in bowel management.

A sequential explanatory mixed methods design was employed across two phases. Both phases were given equal emphasis to ensure a balanced understanding of the intervention's development, implementation, and outcomes. By combining qualitative and quantitative methodologies, this study aimed to generate a comprehensive understanding of the intervention's effectiveness and inform the development of future research and practice.

The study was conducted in two phases. Phase 1 used qualitative methods, including a Delphi consensus process and nurse interviews, to develop the nurse-led constipation management intervention. A formative evaluation then was performed using rating scales and open-ended questions to refine and validate the intervention. Phase 2 employed a single-group pilot pre-test-posttest design to assess feasibility and preliminary efficacy of the intervention. The intervention was developed iteratively and tested across both phases, following the GUIDED and TIDieR guidelines for intervention development and reporting (Duncan et al., 2020; Hoffmann et al., 2014). Ethical approval was obtained from the Ilam University of Medical Sciences Ethics Committee (IR.MEDILAM.REC.1399.001), and all participants provided informed consent after receiving informa-

tion on the study's purpose, procedures, confidentiality, and anonymity.

Data Collection

Data collection occurred June 23, 2020-January 30, 2022, in an urban primary and secondary academic hospital in Ilam, Iran. Since March 2020, this hospital has been designated as a dedicated care center for treating patients with COVID. Ethical approval for this study was obtained from the Ilam University of Medical Sciences Ethics Committee (IR.MEDILAM.REC.1399.001). Patients were provided with information on study purpose and procedure, anonymity, and confidentiality. They provided informed consent before their involvement in the study.

Phase 1: Intervention Development and Formative Evaluation

Authors conducted a needs assessment to identify the prevalence of constipation among study participants. Findings revealed a high prevalence, prompting development of a patient-centered intervention based on Henderson's Needs Theory.

A panel of experts played a pivotal role in the design, development, and validation of the intervention. The panel consisted of a gastroenterologist, infectious disease specialist, nutritionist, three registered nurses, a physical therapist, and a pharmacist, each with over 5 years of experience in their respective fields and a strong background in research methodology. A three-round Delphi consensus process was conducted with the expert panel to establish the core elements of the intervention. Through this process, experts identified three fundamental components: educational programs, behavioral change sup-

port, and telephone follow-up. These elements were selected based on their potential to enhance patient knowledge, promote self-care behaviors, and ensure sustained adherence to constipation management strategies.

Once key components were established, the expert panel determined the most effective methods for delivering educational content. Through voting, six primary delivery methods were selected: booklets, video clips, individualized education sessions, bowel habit diaries, SMS text message reminders, and telephone follow-up. The final educational program integrated all these components, incorporating motivational interviewing (MI) techniques into the telephone follow-up to enhance patient engagement and behavior modification.

MI is a patient-centered counseling approach designed to enhance motivation for behavior change by engaging participants in reflective discussions and goal setting (Bischof et al., 2021). In this study, the telephone follow-up was structured based on MI principles, involving open-ended questions, active listening, affirmations, and collaborative goal-setting strategies to encourage patients to take an active role in managing their constipation. Each follow-up session lasted 20-50 minutes and provided individualized support, addressing participants' concerns, reinforcing self-management strategies, and promoting adherence to the intervention.

Due to the lack of comprehensive Persian-language resources on constipation management for hospitalized older adults with COVID, the research team adapted an existing constipation nursing care plan from reputable sources (Martin, 2024; RNpedia,

2020; Wayne, 2024). Additionally, publicly available educational videos were selected based on their relevance to key educational themes and their scientific credibility. These materials were translated and culturally adapted into Farsi to ensure appropriateness for the study population.

To ensure the validity of the developed intervention, the Content Validity Index (CVI) (Kassam-Adams et al., 2015) and Content Validity Ratio (CVR) (Ramli et al., 2018) were used. The expert panel evaluated three key dimensions:

- **Relevance:** whether the intervention addressed the intended issue
- **Likely effectiveness:** whether the intervention was expected to achieve its goals based on evidence and expert judgment
- **Appropriateness for the target population:** whether the intervention activities were suitable for the intended audience

The CVI is the proportion (0 to 1) of expert reviewers who rate an item on a 4-point scale. The panel of experts was asked to make 13 sets of ratings, with each set representing an intervention activity. The content validity survey tool was used to assess the validity of the study intervention. An intervention is considered to have excellent content validity if all CVI scores are at least 0.78 (Kassam-Adams et al., 2015). The intervention demonstrated excellent validity for relevance (CVI=89%), likely effectiveness (CVI=92%), and appropriateness for the target population (CVI=91%). Expert suggestions and corrections were incorporated into revisions of patient-centered intervention.

Next, educational materials were assessed using a 5-point Likert scale (1=*strongly disagree*, 5=*strongly agree*). The assessment form consisted of three sections:

content/style (nine items), layout (six items), and visuals (eight items). Items rated below 70% agreement were revised based on expert feedback.

In the second round, experts' ratings fell into three categories: *neither agree nor disagree* (four experts), *agree* (five experts), and *strongly agree* (14 experts). No experts disagreed with any item. A more detailed analysis showed 72% of experts strongly agreed with the content/style, 63% strongly agreed with the layout, and 62% strongly agreed with the visuals. The educational program was refined further based on expert feedback.

The CVR also was used to assess expert agreement regarding the importance of specific intervention items (Ramli et al., 2018). Panelists rated each item as *essential*, *useful but not necessary*, or *not necessary*, with the option to provide additional comments on content improvement and potential implementation challenges. Based on expert feedback, all 13 intervention items were rated as *essential* (CVR=0.89), confirming their importance in the intervention.

In the final validation round, revised intervention materials were recirculated to the experts for further review and confirmation. The panel's evaluation of the revised intervention confirmed consistently high validity scores: relevance (CVI=93%), likely effectiveness (CVI=94%), and appropriateness for the target population (CVI=92%). Similarly, the revised educational program received strong endorsement, with ratings distributed as *agree* (seven experts) and *strongly agree* (16 experts). A more detailed item analysis demonstrated strong agreement on content/style (72%), layout (71%), and visuals (76%). These findings confirm the intervention exhibits strong face and content validity.

A pilot study was conducted to assess intervention feasibility. Educational materials, including the booklet and video clips, were evaluated using a 1-10 scale (1=*very difficult to understand*, 10=*very easy to understand*) for language use, font size, pictures, and content information. Table 2 summarizes general comments and suggestions for improvement of the educational materials and individual sessions. Participants rated them positively for language use, visuals, content clarity, and relevance. Individual education sessions also were evaluated, with most participants finding them effective in managing their condition.

Based on results of expert validation and pilot testing, the study intervention demonstrated strong face validity and content validity, confirming its suitability for addressing constipation in hospitalized older adults with COVID.

Description of the Novel Intervention

The intervention consisted of a 7-day structured education program, followed by 12 weeks of support and monitoring. The program aimed to enhance participants' knowledge of constipation, facilitate behavior change, and improve self-management skills. See Table 3 for educational content.

The intervention was individualized, with participants receiving personalized guidance and support throughout the program. The intervention adopted a flexible approach to accommodate varying needs of the target population. Initial education was delivered in the first week, ensuring all participants received a foundation in constipation management. Because length of hospitalization can differ, however, the intervention extended support

TABLE 2.
General Comments Regarding Intervention Content

Intervention Content	Participants Comments and Suggestions
Booklet general comments	<p>"The booklet content is memorable and engaging."</p> <p>"The booklet is a practical tool to learn better about my condition."</p>
Booklet improvement	<p>"Provide a table of contents."</p> <p>"Color printing is a better choice."</p> <p>"Add more pictures."</p> <p>"Consider adding page numbers in the header or footer."</p> <p>"Make the font size larger."</p> <p>"Print on both sides of the paper when you are making a copy of the booklet, so that the thickness of the booklet does not increase."</p>
Movie clips general comments	<p>"Using videos allowed me to create a personalized learning experience and helped me to learn at my own pace."</p> <p>"The video animations are so simple and interesting."</p>
Movie clips improvement	<p>"Provide movie description."</p> <p>"Visual images and animations are a powerful learning tool. Make them accessible on an online platform."</p>
Individualized education improvement	<p>"List the objectives on the unit lecture so I know that what is expected of me."</p> <p>"To reinforce the learning, the healthcare provider can develop a word list or a flashcard."</p> <p>"After each session, the healthcare provider should give us feedback, repeat the task, and help to explain the missing part."</p>

TABLE 3.
Overview of the Novel Nurse-Led Intervention for Constipation Management

Phase	Components	Description
Week 1: Foundation Building	Individualized education sessions	One-on-one educational sessions were conducted daily to address participants' specific questions, provide tailored guidance, and reinforce key messages. The information provided in the booklet was used during these sessions.
	Booklet	A comprehensive booklet covering COVID-19 symptoms, diagnosis, complications, and its association with constipation in older adults included details on constipation symptoms, diagnosis, management strategies, and medications used for both conditions, along with their potential side effects. The booklet emphasized preventive measures such as diet, hydration, physical activity, and bowel habit regulation.
	Video clips	Educational videos were incorporated to complement written materials covering topics such as the digestive system, constipation, and COVID-19.
	Bowel habit diaries	Participants maintained a daily bowel diary to track bowel movement frequency, consistency, stool volume, laxative use, and fluid intake. This facilitated identification of triggers and exacerbating factors influencing constipation.
Weeks 2-12: Support and Monitoring	SMS text message reminders	Participants received daily text messages reinforcing key messages, promoting medication adherence, encouraging bowel diary completion, and reminding them of appointments.
	Telephone follow-ups	Weekly phone calls provided ongoing support, addressed concerns, monitored progress, and reinforced self-management strategies. Motivational interviewing techniques were employed to enhance patient engagement and facilitate behavior change.

Note; The intervention was tailored to individual needs, ensuring personalized guidance and support. While core education was delivered within the first week, follow-up support extended through week 12, accommodating variations in hospitalization duration and post-discharge needs.

through weeks 2-12. This accommodated patients who remained hospitalized and those who required additional guidance after discharge.

Phase 2: Pilot Study to Evaluate Intervention Effectiveness

A pilot single-group pretest/posttest study was conducted June 23, 2020-January 30, 2022, to explore both the practical implementation of the intervention and its preliminary effect on constipation severity. A convenience sample of 20 hospitalized adults age 65 and older with confirmed COVID and constipation was recruited from an urban primary and secondary academic hospital. This sample size is consistent with typical pilot study designs (Hertzog, 2008). Exclusion criteria were colorectal cancer, chronic renal failure, acute ostomy, depression, dementia, acute confusion, and inability to provide informed consent. All participants were fluent in Persian and had access to telephone services.

Baseline data were collected 1 day before intervention initiation. Trained registered nurses obtained informed consent, enrolled participants, and collected baseline and follow-up data. Participants provided demographic information and completed the validated Persian version of the Constipation Assessment Scale (McMillan & Williams, 1989). This eight-item instrument measured various aspects of constipation severity, including stool frequency, abdominal distention, and pain during defecation. Scores were calculated on a 4-point Likert scale (0=no problem, 4=severe problem), with total scores categorized as mild, moderate, severe, or very severe. The instrument's Persian translation demonstrated acceptable content validity (Waltz & Bass method,

score 96.3) and internal consistency (Cronbach's alpha 0.76) (Asgarynejad et al., 2024).

The pilot study spanned 1 month. The intervention was delivered primarily within the hospital setting. Participants discharged before study completion received follow-up support via weekly outpatient clinic visits for monitoring and continued education.

Data Analysis

Qualitative data from the Delphi process and nurse interviews underwent thematic analysis to identify key themes related to constipation management and intervention development. Trustworthiness was ensured through reflexivity, triangulation, member checking, and detailed documentation of the analysis process (Ahmed, 2024).

Participants completed the Constipation Assessment Scale at baseline and 1 month post-intervention. Descriptive statistics were used to characterize participant demographics and baseline constipation severity. Paired t-tests were used to compare pre- and post-intervention constipation scores. The internal consistency of the Constipation Assessment Scale was determined using Cronbach's alpha coefficient.

Findings

A paired-samples t-test revealed significant reduction in constipation scores from pre-intervention ($M=14.4$, $SD=2.3$) to post-intervention ($M=3.6$, $SD=2.6$), $t(19)=20.2$, $p<0.001$, indicating the intervention's effectiveness. Quantitative findings demonstrate the efficacy of the nurse-led intervention in reducing constipation severity among study participants. Qualitative analysis further supported the intervention's

impact, revealing three key themes: (1) Increased Awareness and Self-Management, (2) Acceptability and Feasibility, and (3) Areas for Refinement.

Participants reported improved awareness of constipation management strategies, including the importance of hydration, dietary modifications, and physical activity. One participant stated, "I never realized how much my diet and daily habits contributed to my constipation. Now, I actively monitor my fluid intake and fiber consumption." The acceptability and feasibility of the intervention also were highlighted by participants, with many expressing appreciation for the individualized education sessions and follow-up support. A participant noted, "The nurse's guidance was really helpful. The booklet and videos made it easier to understand, and the weekly phone calls kept me motivated." Despite the intervention's success, participants suggested areas for refinement, particularly regarding the length and frequency of follow-up sessions. Some participants suggested additional support beyond the 12-week period would be beneficial, with one stating, "I wish the follow-up calls continued for a few more weeks after discharge to ensure I was still on track."

These findings underscore the importance of a patient-centered approach to constipation management among older adults with COVID. Alignment of the intervention with patient needs, as evidenced by the needs assessment and expert consensus, contributed to its effectiveness.

Discussion

The high prevalence of constipation observed in participants is consistent with findings from previous research (Carmona-Gon-

zalez et al., 2022; Hayashi, 2022; Remes-Troche et al., 2021), which highlights the vulnerability of hospitalized older adults to constipation. Factors, such as reduced mobility, medication side effects (e.g., opioids), and inadequate fluid intake, contribute significantly to this increased risk. Moreover, the unique challenges posed by COVID, including potential gastrointestinal disturbances and psychological distress, exacerbate the problem.

The current study builds on existing knowledge by exploring the potential of a nurse-led intervention to address constipation in this sample. Similar to previous research, the intervention in this study focused on nonpharmacological approaches, such as education, self-monitoring, and behavioral strategies (Dobarrio-Sanz et al., 2020; Farg et al., 2020; Soheilipour et al., 2022). However, unlike previous research, the study specifically addressed needs of older adults with COVID. The significant reduction in constipation severity suggests this targeted approach may be promising.

Findings of this study underscore the critical need for targeted interventions to address constipation in the target population. As integral members of the healthcare team, nurses are well-positioned to implement and evaluate such interventions. By incorporating assessment tools and strategies developed in this study into routine clinical practice, healthcare providers can improve early detection and management of constipation in this vulnerable population. To ensure widespread adoption and fidelity to the intervention, healthcare providers involved in constipation management for older adults with COVID should receive comprehensive training. This training should enhance the knowledge and skills of nurses, physicians, and nutri-

tionists, fostering an interprofessional approach to care.

Limitations

While the intervention is grounded in established principles of constipation management for older adults, the specific influence of COVID on constipation in this population remains underinvestigated. The scarcity of published research and the consequent inability to benchmark findings highlight the challenges encountered.

While the mixed methods approach provided a comprehensive understanding of the intervention, inherent limitations of each method should be acknowledged. The qualitative phase, though rich in descriptive data, is subject to researcher bias and interpretation. The quantitative phase, while providing statistical rigor, may overlook nuances of the patient experience.

The pilot nature and relatively small sample of this project limit generalizability of results. Future research with larger cohorts is needed to confirm initial findings. Additionally, this study did not evaluate potentially confounding factors, such as pre-existing medical conditions or medication use. Authors also did not distinguish among various etiologies of constipation, such as drug-induced constipation, constipation secondary to an underlying disease, or immobility-related constipation.

Recommendations for Future Research

Given the significant knowledge gap in this area, continued research efforts focusing on evaluating and refining interventions are crucial for improving health outcomes in older adults with COVID who experience constipa-

tion. To advance understanding in this area, future research should delve deeper into mechanisms underlying constipation in the target population. While this pilot explored potential factors, such as reduced mobility, medication side effects, and psychological distress, further mixed methods studies are needed to elucidate these and other contributing factors. Methodologies, such as gut microbiome analysis, colonic transit studies, and psychological evaluations, can provide valuable insights.

A definitive randomized controlled trial with a larger sample is warranted to assess the effectiveness of the nurse-led intervention. Additionally, future studies should explore cost-effectiveness of the intervention alongside its clinical outcomes. To optimize the intervention's impact, research should explore potential adaptations for different patient subgroups within the population of older adults with COVID. Tailoring educational materials to cognitive limitations and incorporating telehealth elements for patients with restricted mobility are areas for further investigation.

While pharmacological interventions are used commonly in long-term care settings, their role in managing constipation among hospitalized older adults with COVID requires further investigation due to potential interactions with COVID medications (Kang et al., 2021). This study contributes to the discussion by demonstrating the potential of a nonpharmacological approach.

Finally, this study focused on the acute management of constipation. Future research should investigate the intervention's long-term effectiveness in preventing constipation recurrence and improving overall patient well-being in this vulnerable population. By addressing these prior-

ities, future research can advance constipation management for older adults with COVID and improve patient outcomes.

Nursing Implications

Findings of this study underscore the importance of assessing bowel function on hospital admission for older adults with COVID. Success of the nurse-led intervention highlights the pivotal role nurses play in managing constipation. Nurses possess essential expertise in patient assessment, education, and care coordination to implement similar interventions effectively. By proactively addressing constipation, nurses can implement preventive measures and develop tailored treatment plans, thereby reducing patient discomfort and improving overall well-being.

Tailoring care to address specific cultural needs and preferences of patients is essential. Findings of this study, conducted with Farsi-speaking patients, emphasize the importance of culturally appropriate care. By enhancing communication, improving patient engagement, and optimizing treatment outcomes, nurses can provide more holistic and effective care. To maximize the impact of research on clinical practice, knowledge translation also is imperative. Nurses are instrumental in bridging the gap between research and bedside care. By disseminating evidence-based strategies for constipation management to colleagues, nurses can foster a culture of continuous improvement and enhance patient care.

Ongoing education is essential for nurses caring for older adults with COVID. Regular training empowers nurses with necessary knowledge and skills to deliver high-quality constipation management interventions. By staying

updated on best practices, nurses can optimize patient outcomes and contribute to improved patient experiences. By integrating these considerations into nursing practice, healthcare providers can enhance the quality of care delivered to older adults with COVID who experience constipation. This holistic approach translates to reduced patient discomfort, improved adherence to treatment plans, and better patient experiences and outcomes.

Conclusion

This mixed methods pilot study highlights the high prevalence of constipation among older adults with COVID and the need for culturally sensitive, evidence-based nursing interventions. The nurse-led intervention showed promise in reducing constipation severity, warranting further validation through large-scale randomized controlled trials. Future research should explore its generalizability across diverse healthcare settings and patient populations. Implementing such interventions in routine clinical practice may improve patient outcomes and experiences significantly. [MSN](#)

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Preparing New Graduate Nurses for the Workforce: Infusing Mindfulness Training in Prelicensure Nursing Education

Hannah Mottel, Emily Nobles, Sonya Edwards, and Briana Aaron

As a challenging profession, nursing stresses its practitioners physically and emotionally because of work role demands and workplace conditions. While nurses focus on the well-being of their patients, they often neglect their own well-being. The mental health of nurses is a growing concern since the COVID-19 pandemic, leading many healthcare facilities to adopt interventions aimed at improving mental well-being (Brouwer et al., 2024). One such approach is mindfulness meditation, which helps nurses manage stress and frustration, reducing the risk of burnout. This practice emphasizes self-awareness, promoting a shift in perspective and fostering a more positive outlook and stress reduction (Green & Kinchen, 2021). Implementation of meditation practices among prelicensure nursing students will be discussed, including how these practices can be integrated into professional nursing.

Mindfulness Meditation in Prelicensure Education

Faculty in baccalaureate nursing programs are challenged with supporting the personal and professional development of future nurses. Nursing education stakeholders support the shift to concept-based education that reinforces the cognitive domains of learning; however, a gap is evident in addressing the personal development of nursing students. To address this gap, program leaders must prioritize

Hannah Mottel, DNP, RN, CNE, CHSE, is Assistant Professor, University of South Carolina, Aiken, SC.

Emily Nobles, DNP, RN, CCRN, CNE, is Assistant Professor, University of South Carolina, Aiken, SC.

Sonya Edwards, DNP, RN, is Assistant Professor, Department of School of Nursing, University of South Carolina, Aiken, SC.

Briana Aaron, MSN, RN, is Instructor, University of South Carolina, Aiken, SC.

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The nature of the nursing profession places nurses at risk for physical and mental stress. Introducing self-care strategies such as mindfulness in prelicensure nursing education can equip future nurses with methods to manage stress throughout their professional careers.

Keywords: mindfulness, meditation, mental health, self-care, new graduates, nurses

introduction of self-care resources to equip students with necessary skills for resilience in academic and professional settings (Okafar et al., 2023). Domain 10 (Personal, Professional, and Leadership Development) of *The Essentials: Core Competencies for Professional Nursing Education* (American Association of Colleges of Nursing, 2021) recognizes the importance of integrating strategies that foster self-reflection, self-awareness, and adaptability. Mindfulness meditation is a feasible strategy to promote positive physiological and psychological outcomes to ensure future sustainability of nursing practice (Burner & Spadaro, 2023; Johnson et al., 2023). Research focused on understanding the relationship between mindfulness meditation and well-being among nursing students and professionals identified the importance of intentionally integrating self-care strategies in nursing programs (Johnson et al., 2023; Leslie et al., 2020).

In addition, self-management strategies address the negative impact of the rigorous baccalaureate nursing curriculum on mental health and academic performance. According to Onieva-Zafra and co-

authors (2020), 47.92% of nursing students at one Spanish university experienced a moderate level of perceived stress and 25% perceived a high degree of stress. Factors impacting stress management included social considerations, culture, mental health disorders, and inadequate coping strategies. Identified factors are relevant for individuals at undergraduate and professional levels, with the potential to impact retention, burnout, and care delivery (Okafar et al., 2023). Mitigating modifiable stress risk factors in prelicensure education has the potential to improve retention among medical-surgical nursing professionals and supports advancement of the discipline at the individual level by providing students with a repertoire of self-management and resiliency techniques (Burner & Spadaro, 2023).

In describing Watson's Theory of Human Caring, Sitzman (2002) noted mindfulness techniques can aid nursing educators in actualizing caring and holism to address core values of the profession. Caring as defined by Watson (2008) is the action of being fully present with another individual and must be integrated into everyday experiences to facilitate meaningful relationships. Mindfulness techniques, such as deep breathing, reflection, and grounding, are useful in transforming perceptions to foster awareness and spiritual growth, which are necessary for the caring paradigm (Sitzman, 2002).

In their study, Prescott and co-authors (2024) incorporated mindfulness training in the curriculum and in practice in classroom and laboratory settings. Key findings suggested mindfulness integration promoted stress management, connection with the inner self, and a deeper sense of purpose. Additionally, breath work strategies such as four-square breathing can equip students with tools to enhance resilience and well-being while encountering stress-induced situations (Shaw-Metz, 2023). This strategy encompassed inhaling 4 seconds, holding the breath for 4 seconds, exhaling for 4 seconds, and holding the exhalation for 4 seconds. This technique can be integrated in classroom and laboratory settings before testing or skill demonstration to engage the parasympathetic nervous system in reduction of cortisol levels. This physiological action can support students in challenging situations to promote clarity and attention.

Mindfulness Practice for the Registered Nurse

Learning and practicing mindfulness can be a stress management tool for baccalaureate nursing students but also useful in professional practice after graduation. Implementing mindfulness strategies in

undergraduate curricula is not time- or resource-intensive. Meditation techniques and breath work videos are widely available online free of charge. The quiet, independent nature of meditation videos means they may be completed almost anywhere (Argyriadis et al., 2023). Short meditation videos offer another benefit as they may be integrated in academic and clinical settings. Consistent mindfulness practices have been shown to decrease blood pressure and resting heart rate while also increasing quality of sleep. Over time, consistent exposure to and integration of mindfulness strategies can translate into a habit (Miles et al., 2023). Nurses must be well rested and attentive to care successfully for patients and fulfill job duties safely (Allen, 2020). Mindfulness practices also can be applied to other healthcare disciplines as a technique of stress management (Miles et al., 2023; Shaw-Metz, 2023).

Mindfulness strategies support development of emotional intelligence, well-being, and critical thinking. Breathing meditation techniques have been shown to increase attention level in nurses. In a study exploring the effect of breathing meditation on overall job satisfaction, consistent participation in the meditation strategy increased attention span, decreased feelings of work fatigue and stress, and improved overall job satisfaction (Xiuxian et al., 2021).

Moral Distress and Self-Care

Although more focus has been placed on stress management in academic and clinical settings, practicing nurses are still vulnerable to moral distress and burnout. Nurses pride themselves on being advocates for others but often neglect self-advocacy and self-care, a fundamental oversight that contributes to caregiver burnout (Ross et al., 2019). The COVID-19 pandemic resulted in severe moral distress and emotional burden for nurses due to an increase in frequency of patient deaths, isolation, fear of the unknown, and concern over becoming infected or infecting their families (Hossain & Clatty, 2021). Since the pandemic, research regarding nurse self-care has become more abundant (Sovold et al., 2021).

Hossain and Clatty (2021) defined moral injury or moral distress as "a long-lasting emotional, psychological, social, and spiritual effect from actions taken that run contrary to one's moral values" (p. 27). Nurses are vulnerable to moral injury in the healthcare setting, especially after experiencing a crisis. However, they often are not equipped to manage moral distress, leading to burnout, fatigue, workplace stress, anxiety, depression, and apathy. To combat this, nurses must be empowered with education and

coping tools to build moral resilience and improve their ability to manage the profession's physical, emotional, and social demands.

To address moral distress and provide self-care, nurses can engage in self-stewardship. This practice involves focusing on personal well-being to promote the well-being of others (Hossain & Clatty, 2021) and can include aspects of physical well-being, emotional/mental well-being, and spiritual well-being. Physical well-being activities focus on general health and wellness, such as outdoor exercise, a balanced diet, and adequate sleep. A focus on emotional and mental well-being specifically is vital, as many nurses may not seek support in this area due to social stigma associated with mental health challenges (Sovold et al., 2021).

As with nursing students, mindfulness activities also have applications for practicing nurses. Mindfulness practice can engage nurses in developing or enhancing their moral resilience through stress reduction (Melnyk et al., 2020). This is achieved partially through activation of the parasympathetic nervous system with practiced breathing exercises, as well as the mental exercise of visualization, gratitude, acknowledgement, and letting go (Hossain & Clatty, 2021; Melnyk et al., 2020). Mindfulness practice also promotes overall mental functioning and well-being in persons not currently experiencing distress (Butler et al., 2019).

Organizational Support

Healthcare leaders have a duty to support nurses' well-being to improve care, decrease burnout, and improve staffing retention. They can educate staff about employee assistance programs or offer free or reduced cost for mental health telephone applications that provide stress mitigation strategies. A systematic review by Duhoux and colleagues (2017) evaluated multiple interventions aimed at supporting and improving mental health in nurses. Interventions, such as telephone-based mindfulness education, social support programs, and in-person mindfulness training, all had positive effects on decreasing burnout and stress among clinical nurses. Social coping also can be facilitated through activities such as support groups or reflective practice groups that allow nurses to share and reflect on experiences with their peers and reduce the risk of burnout (Sovold et al., 2021).

While leader support could facilitate large-scale intervention programs for nurses' mental health, a positive change can be made with advocacy by a single staff member. Anyone could use available free resources to conduct a 5-minute mindfulness medi-

tation session in small groups at shift huddle or lunchtime for staff who are interested in participating. Modeling these behaviors can support and empower peers to implement mindfulness in the workplace and their everyday lives.

Conclusion

The nature of the nursing profession places nurses at risk for physical and mental stress. Introducing self-care strategies such as mindfulness in prelicensure nursing education can equip future nurses with methods to manage stress throughout their professional careers. In addition to supporting development of personal mindfulness habits, healthcare leaders have a responsibility to provide resources for nurses experiencing difficulty engaging in self-care to facilitate a culture that promotes work-life balance as well as mental and physical well-being. **MSN**

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Colonoscopy: Empowering Nurses with Knowledge

Patricia J. Bartzak

Colonoscopy is both a preventive and diagnostic procedure for which nurses provide care to patients in inpatient and outpatient settings. A patient may be admitted to the hospital with a low hemoglobin and hematocrit, and part of the nursing care includes prepping the patient for a colonoscopy to determine if there is blood loss from the lower gastrointestinal tract. In the outpatient clinic, patients have colonoscopies periodically to screen for pre-cancers or cancers of the bowel. The first modern colonoscopy was performed in 1969 at Beth Israel Hospital in New York City. About 15 million people annually now have colonoscopies, resulting in a 52% relative risk reduction in colorectal cancers (Gangwani et al., 2023).

Any medical procedure has associated risks. While the benefit of early detection of colorectal cancer is undisputed, nurses should not become complacent during the care of involved patients as a variety of complications can occur. Nurses care for patients at different stages of the procedure, including the bowel clean-out phase, colonoscopy and immediate recovery phase, and post-procedure as an inpatient or via triage. Patients may report a range of symptoms, including gastrointestinal and neurological symptoms (e.g., vomiting, abdominal pain and fullness), dizziness, dry mouth, palpitations, tinnitus, headache, tachypnea, acute confusion, and left shoulder pain (Kehr's sign) (Davis et al., 2024; Li et al., 2019; Waddingham et al., 2023). Nurses must listen carefully to the patient's complaints and empower themselves with knowledge about possible disabling or life-threatening outcomes related to colonoscopy.

Intra-Abdominal Pressure and Intracranial Pressure

Nurses must understand the key relationship between the abdomen and the brain. A colonoscopy increases intra-abdominal pressure (IAP) due to the insufflation of the large bowel with gas. A physiological relationship exists between IAP and intracranial pressure (ICP), which suggests nurses must be alert to

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Nurses care for patients undergoing colonoscopies in inpatient and outpatient settings and should be aware of potential post-colonoscopy complications. Critical considerations include the quality of the bowel clean-out, patient history, procedure positioning, and the relationship between intra-abdominal pressure and intracranial pressure, which could contribute to abdominal and neurologic symptomatology.

Keywords: colonoscopy, bowel, patient positioning, intra-abdominal pressure, intracranial pressure

abdominal and gastrointestinal symptoms, and also must broaden their nursing assessments to consider potential neurological sequelae after colonoscopy. The pathophysiology of the IAP-ICP relationship involves an increase in intrathoracic pressure during bowel insufflation, which reduces venous return and thereby increases jugular venous pressure. Decreased venous return from the brain leads to ICP (Bonatto et al., 2020; Depauw et al., 2019; Kent et al., 2020).

Colonoscopy Preparation

Inpatient nurses administer the colonoscopy preparation from one of multiple suppliers (e.g., GoLYTELY®, MiraLAX®, MoviPrep®). The bowel clean-out phase is essential for the colonoscopist to have full view of the entire colon. Nurses assist patients to the commode or bathroom and notify the provider if clear liquid has not been passed per rectum. The quality of the bowel preparation can be graded by the colonoscopist using the Boston Bowel Preparation Scale, which assigns a number 0-3 for cleanliness of the right, left, and transverse colon. A perfect score is 9; adequate bowel cleaning is rated as 6 or greater. Approximately 25% of patients are prepared inadequately for colonoscopy. Inadequate bowel clean-out can lead to prolonged procedure time and increased bowel lumen manipulation (Li et al., 2019).

Patricia J. Bartzak, DNP, RN, CMSRN, TCRN, CNRN, NPD-BC, is Staff Nurse, Infectious Disease, Lahey Hospital & Medical Center, Burlington, MA, and an Expert Nurse Witness.

During Colonoscopy

Colonoscopy often is performed using conscious sedation with intravenous propofol. Patients usually are not intubated during colonoscopy. Hypoxemia has been reported with use of non-intubated propofol in about one-third of cases (van Schaik et al., 2021). Oxygen desaturation and hypotension have been reported; if persistent, these can lead to cardiac arrhythmia, neurological deficits, and respiratory arrest. Risk factors for hypoxemia during conscious sedation with propofol include advancing age, obesity, sleep apnea, severe diverticular disease, bowel adhesions, irritable bowel disease, procedure time, and amount of propofol administered (Qi et al., 2022; Waddingham et al., 2023). Interventions during colonoscopy to address hypoxemia can include a jaw thrust maneuver, initiating oxygen, and increasing patient's oxygen flow (Qi et al., 2022).

Patient Positioning

Medical-surgical nurses receive patients from the procedure or operating room. When patients describe neurological-type symptoms following colonoscopy, nurses must understand potential contributing antecedents, including patient positioning during colonoscopy and any history of spinal or neck problems.

Recently, I cared for a female patient in her 60s with a known history of obesity, sleep apnea, and prior neck fusion surgery. She underwent colonoscopy for a decrease in her hemoglobin and hematocrit. Almost immediately on return to the unit, she complained of severe, new-onset, left-sided headache and unilateral tinnitus. I reported these findings to the provider. In consultation, the care team determined the patient had *cervicogenic somatic tinnitus* that occurred during positioning in colonoscopy. This condition results from a miscommunication between cervical spine somatosensory inputs and the central auditory pathway. Cervical spine abnormalities may affect blood flow to the auditory system. This type of tinnitus differs from primary tinnitus that stems directly from the auditory system.

Contributing risk factors for cervicogenic tinnitus include degenerative cervical disc disease, cervical spondylosis, whiplash injury, and neck spasms (Wadhwa et al., 2024). Patients are in the left lateral recumbent position during colonoscopy, with head and neck also turned to the left side. When patients maintain head and neck rotation to one side for a period of time, vertebral artery compression can occur at C1-C2 and C4-C5. Vertebral artery dysfunction in the setting of neck pathology has been described as bow hunter's syndrome, referring to

archers who keep their necks rotated in one direction for a period of time. The vertebral artery can become compressed, kinked, or stretched. Nurses must monitor for further developments, such as transient ischemic attack or even stroke in their patients who present with these symptoms after colonoscopy (Davis et al., 2024). Li and colleagues (2022) suggested acupuncture has some success treating cervicogenic tinnitus.

Additional Nursing Assessments

Nurses also must be alert to patient complaints of left-sided shoulder pain after colonoscopy (Kehr's sign). This symptom can indicate a splenic injury, which can occur when the colonoscopist is advancing the scope through the transverse colon because the spleen is on the other side of the transverse colon. These patients often are monitored with periodic hemoglobin and hematocrit evaluation to determine hemodynamic stability versus potential splenectomy (Moriwake et al., 2023). Nurses also must be acutely aware of cyanosis, tachypnea, and acute confusion as possible indicators of air embolus that could have occurred during colonoscopy. Air embolus occurs when air inadvertently enters the venous system via a mucosal or other tear and travels through the cerebral circulation (Farouji et al., 2021; Waddingham et al., 2023). Nurses must take immediate action to support patients and notify the provider promptly.

Conclusion

Early identification of colorectal cancer via colonoscopy is efficacious and has proven to save lives (Mannucci et al., 2019). While most colonoscopies are uneventful, there is no room for complacency. Medical-surgical nurses must be alert to post-colonoscopy complications that can lead to patient disability or death. Their critical thinking must begin with the quality of the bowel clean-out, awareness of the patient's history such as prior neck pathology and procedure positioning, and a keen understanding of the relationship between IAP and ICP. Knowledge of this pathophysiological relationship opens the nurse's assessment skills to include abdominal and neurologic symptomatology that requires provider notification and further assessment. [MSN](#)

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Exploring the Spiritual Needs of Military, Veterans, and Their Families

Brenda Elliott
Kristen Slabaugh

Nurses comprise the most significant percentage of the healthcare workforce (American Association of Colleges of Nursing, 2024). They provide nursing care to the most vulnerable populations in some of the worst conditions, yet they do so willingly and with a heart to serve. Caring is fundamental to nursing practice. Caring is grounded in the sense of uniqueness and worth. Caring attributes include being with, listening to, and meaningfully connecting with (touching) patients spiritually, emotionally, or physically (O'Brien, 2018). By using caring behaviors, demonstrating competence, and listening, nurses establish trust in the nurse-patient relationship. Whether promoting health and well-being or supporting end of life, nurses show a commitment to engage with all aspects of nursing care through their actions.

Spirituality in Nursing

Serving others can create feelings of honor or gratitude, a sacred and divine gift (O'Brien, 2018). Nurses serve those in need. Being servants affords them the sacred privilege of caring for others in moments of profound need, including spiritual or religious (SoR) need. O'Brien suggested spirituality often aligns with an individual's attitudes and beliefs about transcendence (God) or other forces of life and nature. This differs from religiosity or religious practices, generally viewed as an individual's attitudes and beliefs associated with a specific religious tradition or denomination.

According to O'Brien (2018), a holistic approach to nursing includes an equal focus on cognitive, physiological, and spiritual needs. Nurses have a duty and moral obligation to meet their patients' SoR needs. In doing so, they provide compassionate care that attends to the whole person: body, mind, and spirit.

Brenda Elliott, PhD, RN, CNE, ANEF, is Assistant Professor and Director, Graduate Program in Nursing, Messiah University, Mechanicsburg, PA.

Kristen Slabaugh, DNP, CRNP, FNP-C, CNE, is Professor and Assistant Dean of Nursing, Messiah University, Mechanicsburg, PA.

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A holistic approach to nursing includes an equal focus on cognitive, physiological, and spiritual needs. By assessing and managing the unique spiritual needs of military personnel, veterans, and their families, nurses can provide compassionate, whole-person care.

Keywords: military, veterans, spirituality, spiritual needs, whole-person care

Nursing literature suggests the spiritual care needs of patients are predominantly unmet, which can impact health and quality of life negatively (Mathew & Kunnath, 2024; McMenemy, 2024; Slabaugh & Elliott, 2022). These unmet needs result primarily from incomplete spiritual assessments (lack of time for nurses to complete or perceived as of lower priority) or nurses' insufficient preparation, education, or skill to provide this type of care to patients. Recognizing and responding to patients' SoR needs is fundamental to delivering whole-person, patient-centered care.

Nursing Care of Veterans

Military, veterans, and their families have differing healthcare needs compared to the general population, with some needs directly resulting from military service. Numerous factors influence their view of military service, including but not limited to the era in which they served, deployment status, military role, and if the military member was directly in danger (Elliott, 2017). Gender, age while serving, military occupation, occupational exposure, physical or emotional injury occurring during service, reintegration challenges, treatment upon returning home from war or conflict, and whether service was voluntary or drafted are other factors influencing persons' view of their service.

Each war era has associated health issues, which may include post-traumatic stress disorder, traumatic brain injury, depression, military sexual trauma, homelessness, or chronic pain (Elliott, 2017). Nurses should understand the military culture as it can impact healthcare decision making. Nurses with an ability to recognize attributes of military culture when interacting with veterans may have a greater likelihood of developing a strong rapport with individuals and families, potentiating positive outcomes as trust can take longer to gain (Elliott, 2017). Establishing rapport to build trusting relationships with patients is critical. A lack of cultural competency can hinder nurses' ability to demonstrate their commitment to prioritizing patients' best interests.

Nurses occasionally are entrusted with the profound responsibility of caring for patients during challenging and emotionally complex circumstances. A commitment to care is required when faced with situations in which a person may disclose a traumatic experience or an ethical situation that may go against nurses' beliefs. In caring for military, veterans, or their families, these scenarios can be rooted in a lack of knowledge, awareness, or exposure (Elliott et al., 2021). Identifying those who served helps ensure culturally appropriate care and, ultimately, optimal health outcomes. While nurses cannot always relate personally to each person's situation, understanding the needs of the military/veteran population necessitates a commitment to learning and growth. According to O'Brien (2018), this commitment brings dignity and compassion to their interactions.

Participating in or witnessing violent actions, such as those that occur during times of war, conflict, or disaster, is one of the more notable scenarios military personnel face. These actions can violate a person's beliefs of goodness and ethics (Elliott, 2018). SoR beliefs often are challenged in violent situations, which can lead either to stronger connections or abandonment of faith, and can influence profoundly how individuals perceive and recover from moral injury. Likewise, spiritual resilience can provide a sense of inner strength to promote comfort, positive coping, and healing or recovery from moral injury. However, spiritual distress can sometimes occur among veterans when they remember acting against their moral code, causing moral injury. Spiritual alienation, crisis of faith, or loss of faith can result from moral injury if veterans believe their experiences or actions ruined their spiritual beliefs or are deemed unforgivable.

Addressing the Spiritual Needs of Veterans

Nurses can have positive impact on veterans affected by actions taken while serving in the military, supporting a holistic approach to nursing care (Elliott, 2022). First, however, nurses must be able to identify moral injury or distress. Establishing trust and commitment to vulnerability enhances service to vulnerable patients and families. Nurses can demonstrate caring by applying evidence-based strategies to assess spiritual care needs (Slabaugh & Elliott, 2022) and promoting post-traumatic growth (Elliott, 2022). Providing evidence-based care fosters opportunities for patients to discover meaning, achieve self-forgiveness, and enhance their overall well-being (Elliott, 2018, 2022; O'Brien, 2018).

Nurses can draw on their own SoR beliefs to guide ethical decision-making, support spiritual interventions, and demonstrate a high level of empathy when interacting with military personnel, veterans, and their families. However, nurses are not required to hold their own SoR beliefs to provide adequate care. To accomplish culturally sensitive care, nurses first can observe and listen to cues indicating emotional or SoR needs may exist. Instead of approaching these needs in a silo or as a task, nurses should incorporate questions into conversations, being present when veterans need to express emotional pain emerging in the presence of physiological pain. Thoughtful listening can help nurses overcome judgmental perspectives or other personal barriers to addressing the SoR needs of patients (Elliott, 2022; Slabaugh & Elliott, 2022). Being present and listening allows nurses to offer themselves as vulnerable and safe, where boundaries of culture or faith do not exist (O'Brien, 2018; Slabaugh & Elliott, 2022). Through these practices, nurses can transcend physical care, connecting with patients on a deeper level to honor their core values and what holds the most tremendous significance in their lives.

Conclusion

Though not using typical nursing technical skills, assessing and managing the SoR needs of military personnel, veterans, and their families requires intentionality and commitment to caring. Nurses willing to listen without judgment, sit in uncomfortable spaces, and provide culturally sensitive care will foster trust and empathy. Military, veterans, and families will be empowered to feel seen, valued, and supported in their journey toward healing and well-being. [MSN](#)

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Patient Education: It's More Than a Handout

Sonya Blevins

How many times have healthcare providers given a patient a handout with limited verbal instruction and marked patient education completed? Often, this approach happens with patient education. Patients are given standardized handouts and verbal instructions for their diagnosed diseases, medications, procedures, and other healthcare concerns without consideration of their health literacy or learning style; there may be no attempt to determine if patients truly understand the information. It should come as no surprise this approach leads to decreased patient adherence to treatment plans and poor patient outcomes (Wang et al., 2024). According to Jacot (2023), 40%-80% of education is forgotten by patients. In most situations, about one-half the information is recalled. Recall of health information is impacted by several factors, which include low education, high anxiety, increased age, low health literacy, and presentation of large amounts of information at one time.

What can nurses do to ensure patients understand the information that greatly impacts their health and safety? It is all about nurses' approach to patient education. The first principle of patient education is not every patient learns the same. Each one is different and unique. Just because a nurse learns in a specific way does not mean the patient learns in that way, too. In providing education, nurses must step outside their comfort zone, and adapt to the patient and identified learning needs. When developing patient education, nurses should assess potential education barriers, health literacy, and learning styles while integrating use of the teach-back method to evaluate understanding.

As a second principle, education should never start at discharge. It should be an ongoing, daily process starting at admission. Rather than providing a large amount of information at one time, offering patient education over time and in bite-sized pieces allows absorption of information and reinforcement. An important consideration is to focus on what patients need to know versus what is nice to know. Nurses should prioritize needed information to present three to five main points. Interestingly, patients recall spe-

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Nurses have a responsibility to ensure patient education is individualized and addresses patient needs and goals. When developing patient education, nurses should assess potential education barriers, health literacy, and learning styles while integrating use of the teach-back method to evaluate understanding.

Keywords: patient education, health information, teach-back method

cific education better than generalized information (Jacot, 2023). The focus should align with the needed information to help patients make well-informed healthcare decisions. Education should be kept simple, with basic information used as building blocks to create a strong foundation of understanding (Morris, 2022). An added benefit is the opportunity for patients and their caregivers to ask questions as they have time to think about the information being presented.

Components of Patient Education

The goal of patient education is to provide information that enables positive changes to a person's knowledge, skills, and attitudes for health management and improvement (Wang et al., 2024). To provide well-rounded patient education, nurses should incorporate the teach-back method to assess learner understanding of presented information while addressing potential education barriers, health literacy, and learning styles.

Potential Education Barriers

Before providing education, nurses should assess a patient's potential barriers related to learning. These barriers include reading level, primary language, visual and hearing impairments, and the need for involvement of caregivers in the education (Blevins, 2020). A patient's reading level greatly impacts the ability to use certain teaching formats. In the United

Sonya Blevins, DNP, RN, CMSRN, CNE, is Director, Nursing Licensure and Compliance, Southern New Hampshire University, Manchester, NH.

States, the average patient reads at an 8th grade level; however, 20% of patients read at a 5th grade level or below (Jacot, 2023).

While recognizing a patient's reading level, nurses also should determine a patient's language preference. Language barriers may be one of the biggest challenges in presenting patient education as the patient's preferred language may differ from nurses' primary language. Once the patient's preferred language is identified, nurses should use facility resources to ensure information is presented accurately and timely (Aspen RxHealth, 2024). Each facility has language-specific approved resources to provide patient education. Nurses should know what materials are available and how to use them. Appropriate materials should be used consistently over time while providing education.

Visual and hearing impairments also create a challenge for patient education. However, these impairments can be overcome with advanced planning on how to present the information. For example, a patient with a visual impairment would need detailed verbal communication and increased use of touch to explain how to complete procedures, such as a dressing change. For patients with hearing impairments, nurses should ensure appropriate hearing aids, assistive listening devices, and other supportive technologies are used when providing education. Visual aids should be considered, with nurses demonstrating a self-care skill while speaking clearly and minimizing background noise (Morris, 2022). Finally, nurses should involve relevant caregivers in the education. Having additional caregiver support will assist the patient with self-care after returning home.

Health Literacy

Health literacy refers to a person's ability to acquire, understand, and apply information to making health-related decisions. In the United States, only about 12% of the population demonstrates health literacy. Unfortunately, health literacy is correlated directly to a person's level of health. People with low health literacy have decreased adherence to medication and treatment plans and a lower level of participation in their plan of care (Jacot, 2023). To address health literacy, nurses must understand a patient's current understanding of the topic. For example, nurses who state, "Please tell me what you know about COPD," get baseline understanding of what the patient does and does not know. This offers a starting point to build information. When assessing health literacy, nurses should identify the patient's current understanding and build the knowledge base from there (Aspen RxHealth, 2024).

Learning Styles

As a premise of learning, Knowles Learning Theory suggests adult education should be learner-centered with the patient actively involved in the process. Because the patient is an active participant in learning, identifying the individual learning style is necessary (Muijsenberg et al., 2023). Individuals may have one or more learning styles (Ghorbani et al., 2022). These learning styles include visual, auditory, reading, and kinesthetic.

Visual learners appreciate charts, diagrams, and videos as teaching strategies. When considering strategies for a visual learner, nurses should understand the patient's comfort level with technology. Some patients have limited comfort and experience increased anxiety when using technology. With auditory learning, listening is the format learners prefer. Speaking clearly and in a non-rushed manner is important in using this strategy. Using the written word is what is preferred by learners who use the reading approach as their learning style. Kinesthetic learners use hands-on learning, such as skill demonstration, to facilitate learning. How individuals learn best is how the education should be presented (Blevins, 2020).

Teach-Back Method

A patient who is educated about a topic still may not understand the information (Muijsenberg et al., 2023). The teach-back method is a recommended technique healthcare providers use to improve health literacy. Known as the *show-me* method, it has proven positive impacts on outcomes for patients with multiple health conditions (Jagodage et al., 2023; Liu et al., 2024; Zare-Kaseb et al., 2024; Zhang et al., 2024). Teach-back has been shown to improve patient understanding, satisfaction, and outcomes while decreasing callbacks (Sleiman et al., 2023). Using the teach-back method allows nurses to verify a patient's understanding of presented information. It also provides experiences where patients and their caregivers apply the information to their condition (Zhang et al., 2024).

When using teach-back, nurses provide education based on the patient's preferred learning style. The patient then is asked to explain or demonstrate what has been taught (Jagodage et al., 2023). While using this method, nurses should avoid questions that require a *yes* or *no* response from the patient. Instead, they should use open-ended questions that allow the patient to summarize and apply information (Jacot, 2023). For example, if a patient is learning insulin self-injection for newly diagnosed diabetes, an appropriate starting point with teach-back could include the following:

"We covered a lot of information today about insulin injections. Can you show me how you will administer your daily injection?"

"There is a lot of information to remember about diabetes. Can you tell me three steps you will take to prevent complications caused by diabetes?"

With use of teach-back in patient education, nurses are able to determine where gaps exist in a patient's understanding (Liu et al., 2024). By identifying gaps, nurses can conduct targeted teaching to address further educational needs. Identifying and addressing gaps provide a better foundation for the patient's self-management of a health condition (Hosseinfar et al., 2024).

Conclusion

Providing patient education is a learned skill that takes practice and patience. Nurses have a responsibility to ensure education is patient-specific and addresses patient needs and goals. When providing education, using the teach-back method after identifying educational barriers, health literacy, and learning styles is an effective approach (Blevins, 2020). Using these strategies empowers the patient to be involved actively in self-management through a stronger foundation of knowledge about the health condition. **MSN**

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