

# Practical Nursing Skills: Administering Medications, Wound Care, and Monitoring Vital Signs

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## **Abstract**

### **Background**

It is founded on practical nursing skills, which provide services for patient safety and recovery. For instance, they have to administer medications, provide wound care, monitor vital signs while administering medications, provide wound care and monitor vital signs, and require precision, critical thinking, and adherence to best practices.

### **Objective**

This study examined the importance of core nursing skills in patient care, the challenges it faces in its implementation, and offers different strategies to resolve it.

### **Methods**

A mixed method approach, a systematic literature review, and a survey of a sample of 100 nurses were used to examine nurses' ability to administer medications, provide wound care, and monitor vital signs.

### **Results**

It was found that 95% of nurses were competent in vital sign monitoring, 88% in medication administration, and 82% in wound care. The challenges were time constraints (72%), lack of updated training (65%), and insufficient resources (58%). The solutions most often presented were regular training and access to the most current protocols.

### **Conclusion**

Practical nursing skills are of great importance for patient outcomes. Continuous education and system-level support can enhance the proficiency of healthcare skills, which in turn improves delivery of healthcare and patient safety.

### **Introduction**

Nursing is a vocation that consists of technical skills and compassionate care. One of the many skills needed to be a nurse is practical nursing skills such as giving medication, wound care, and recording vital signs; these skills are vital to safe nursing practice and the achievement of good patient outcomes. Such skills are performed daily in hospitals and clinics as well as in long-term care centers and demand a fusion of accuracy, clinical sagacity, and adherence to evidence-based guidelines (1,2).

The administration of medication is a keystone in the standard operating procedures of nursing; however, errors committed in administering medication can lead to severe consequences. A study by Patel et al. (3) found that medication errors are responsible for up to 7% of preventable hospital deaths annually, highlighting the importance of proper techniques and adherence to the "five rights" of medication administration: In the right patient, with the right drug, right dose, right route, and right time.

It is important to care for wounds, a major problem for patients with chronic diseases such as diabetes, which leads to the formation of wounds that do not heal quickly. Read more in our article on proper wound care (4), which protects against infection, aids in recovery, and reduces the risk of complications.

Measuring the blood pressure, heart rate, respiratory rate, and temperature of patients are examples of vital signs and provide important insights into patients' well-being and quickly help to recognize complications. According to previous research, 85% of adverse events in hospitalized patients may have been predicted if they had been accurately and promptly monitored (5).

Although nurses are important, they are confronted with challenges, such as time constraints, out-of-date training, and resource scarcity. This study aimed to assess the significance of these practical

nursing skills, determine the barriers to their successful implementation, and develop strategies for improving proficiency in nursing practice.

**Keywords:**

Nursing skills, medication administration, wound care, vital signs, practical nursing, patient care.

## Methodology

### Study Design

A mixed-methods approach was employed to assess nursing skills: a systematic literature review and survey of practicing nurses.

### Participants

The survey, which was carried out with 100 nurses from hospitals, primary care settings, and long-term care facilities, revealed that most of the respondents (58.0%) indicated that taking off their badges at work could affect their work performance, while 85.0% agreed that taking them off would hinder patient communication.

The inclusion criteria were as follows.

1. And at least two years of clinical experience
2. Administering medications, wound care, and/or vital signs monitoring on a regular basis.

### Data Collection

1. **Literature Review:** Candidate peer-reviewed articles published between 2015 and 2023 were found in PubMed, Scopus, and CINAHL.
2. **Survey:** Nurses' proficiency, challenges, and perspectives on improving their practical skills were assessed using a 20 item questionnaire.

### Data Analysis

Descriptive statistics from the quantitative survey data were analyzed using SPSS v26, while open-ended questions providing qualitative feedback were coded thematically.

### Ethical Considerations

We also obtained ethical approval and secure informed consent from all participants.

## Results

### Demographics

The study included 100 nurses, with 78% identifying themselves as female and 22% as male. Most participants had over five years of clinical experience (60%) and worked in acute care settings (65%).

**Table 1:** Participant demographics (n=100).

Characteristic	Value (%)
Female	78%
Male	22%
Experience (>5 years)	60%
Acute Care Settings	65%

### Skill Proficiency

**Table 2:** Competency levels in practical nursing skills.

Practical Nursing Skill	Competency Level (%)
Vital Signs Monitoring	95%
Medication Administration	88%
Wound Care	82%

### Challenges

1. **Time Constraints (72%):** Nurses reported difficulty in balancing documentation, patient education, and clinical care.
2. **Outdated Training (65%):** Many participants felt that their initial education did

not align with current best practices.

**3. Resource Limitations (58%):** Issues such as lack of advanced wound care materials or automatic vital sign monitors were common.

### Strategies for Improvement

**Table 3:** Strategies for enhancing practical nursing skills.

Proposed Solution	Effectiveness Rating (%)
Regular Skills Training	92%
Technology Integration	85%
Updated Protocols	78%

## Discussion

### Significance of Practical Nursing Skills

In summary, practical nursing skills, such as giving medications, wound care, and monitoring of vital signs, are key components of good quality patient care. Vital sign monitoring (95%) and medication administration (88%) ranked high in competency levels with this measure, as reported in the literature (6, 7). By detecting complications efficiently (such as sepsis, arrhythmias, or respiratory failure), which are key problems contributing to death inside the hospital without proper intervention (8), proper monitoring of life signs materializes early detection and, hence, proper treatment. Medication administration also needs to be carried out in accordance with the 'five rights' framework to prevent serious fatal errors. According to Patel et al. (9), minor deviations in medication protocols can result in adverse drug reactions, which annually account for 5–7% of hospital admissions.

Of the three skills assessed, wound care proficiency (82%) was the lowest, in view of the increasing prevalence of chronic wounds in patients with diabetes or venous insufficiency. According to studies by Singh et al. (10), utilizing evidence-based wound care practices such as advanced dressings or negative pressure wound therapy can improve healing rates and decrease hospital stay. However, this study furthers the finding that access to resources and training remains limited in many settings.

### Challenges and Barriers

This study identified three challenges present in nursing professionals globally: time constraints (72%), outdated training (65%), and resource limitations (58%), further confirming systematic problems. The time constraints that nurses are forced to work under limit some nurses from delivering the best care to their patients. In high-stress settings, Green et al. (11) found that nurses spent up to 60% of their time on documentation at the expense of direct patient care. The shown feedback one of the nurse that, 'Between fulfilling the administrative requirements and providing the patient needs, managing them both comes across as the most challenging thing related to my duty as a nurse.'

In addition, the training was outdated, with 65 percent of nurses indicating that they needed to be trained on new wound care techniques and new methods of medication delivery. Typically, technology (electronic health records or automated medication dispensing systems) is not part of the traditional nursing curricula. Continuous education programs can help nurses identify the early warning signs of patient deterioration. Miller et al. (12) confirmed that nurses administered continuous education programs identify the early warning signs of patient deterioration twice as much.

Care delivery is further complicated by resource limitations such as the absence of advanced wound care materials or automated monitoring of vital signs. Under-resourced settings have been linked to a 30% increase in adverse patient events (13), calling for urgent reforms in the policy to minimize patient disparities.

## Proposed Solutions

### 1. *Regular Training Programs*

The participants rated continuous professional development as the most effective approach (92%). Method (14) simulation-based training, which mimics real-life clinical scenarios, has improved confidence and decreased the error rates of nurses. For example, simulation sessions on advanced wound care techniques such as hydrocolloid dressing or negative pressure therapy can be conducted to satisfy these needs (15).

### 2. *Integration of Technology*

The use of technologies such as automated medication dispensing systems and wearable vital sign monitors can make workflows smoother and more accurate. According to a study conducted by Singh and Allen (16), bringing digital tools into play lowered medication errors to 28% and increased documentation efficiency by 35%. The results revealed that 85 percent of the participants felt that their daily practice needed to incorporate technology.

### 3. *Organizational Support*

Time and resource constraints were addressed by providing sufficient staffing and resources. Auxiliary staff perform routine tasks and free up nurses for skill-intensive procedures in flexible staffing models. Higher nurse-to-patient ratios were shown to correlate with better compliance with evidence-based practice care guidelines and better outcomes for patients (17). Furthermore, evidence-based protocols and managerial programs are provided to help nurses tackle complex clinical scenarios.

## Comparison with Existing Literature

This study finds the same that has been mentioned in previous research focusing on increasingly more practice-oriented nursing knowledge, which is important in patient care. Vital sign monitoring and medication administration were reported to possess competency levels similar to the findings of Green et al. (18), who found that these nursing skills are often well-emphasized in pre- and service training. However, the relatively lower proficiency in wound care is a gap that requires more targeted interventions. Similarly, Singh et al. (19) also revealed that only 70 % perceived the management of chronic wounds as confident due to limited experience during training.

The identified barriers also corresponded to global studies. In high-acuity environments, for example, high patient loads and time constraints are often blamed for nurses wrestling with multiple tasks simultaneously (20). Similarly, other requirements, such as continuous education, are supported by the findings of Harris et al. (21), which suggest that continuous training is required for nurses to remain competent in their positions due to regular changes in clinical guidelines.

## Implications for Practice

**Patient-Centered Care:** By increasing training and resources for practical nursing skills, we enhance patient outcomes by decreasing error rates and improving the timeliness of intervention.

**Workforce well-being:** Systemic challenges such as understaffing and administrative burdens lead to burnout, and organizations can reduce burnout by addressing these systemic challenges to improve nurses' job satisfaction and retention.

**Policy Reforms:** To prioritize the ability of nurses to provide effective care delivery, hospitals and healthcare organizations must make technology and training available to them.

## Conclusion

For practical high-quality patient care, practical nursing skills, such as administering medications, providing wound care, and monitoring vital signs, are essential. As shown by this study, nurses are highly competent in these areas on a core basis with respect to monitoring vital signs (95%) and administering medicines (88%). However, time constraints,

out-of-date training, and resource limitations continue to be obstacles that could ultimately adversely affect the quality of care.

Through skills training, incorporation of the most recent technologies, and administrative backing, these obstructions can be diminished, resulting in a significant increase in practice. For nurses to deliver safe, effective, and patient-centered care, they must be continuously exposed to education programs tailored to evidence-based advancements and policies that promote better staffing ratios and adequate resources.

Future research should investigate the long-term performance of interventions designed to enhance practical nursing skills in different health care settings. Consequently, by improving these core competencies, healthcare systems can produce improved results for patients while developing a cooperative, productive work atmosphere for nursing professionals.

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