

A Comprehensive Review on “Nurse’s knowledge Regarding Colostomy Care

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Abstract

Care of client with colostomy is basic an essential component and responsibility in nursing practice,. This comprehensive review aims to analyze literature on nurses’ knowledge and practices regarding colostomy care, focusing on knowledge gaps, influencing factors, and strategies to improve skill. Efforts suggest that nurses know and agree on the importance of colostomy care, many report insufficient training, inadequate knowledge and lack of confidence. Continuous professional education, skill-based workshops, and structured guidelines significantly improve colostomy care outcomes.

Keywords: Colostomy, Stoma care, Nursing skill, Nurses’ knowledge, Nursing education, Review.

1. Introduction

A colostomy is a surgical procedure to creat opening of the colon through the abdominal wall to divert flow fecal. Colostomy patient require skilled nursing care for holistic adaptation. Nurses play a important role in assessment, skin care, patient education, and early identification of complications such as ischemia, bleeding, infection, abscess, retraction, prolapse, necrosis, leakage, and irritation.

Despite the importance of colostomy care, research consistently reports knowledge gaps among nurses worldwide. This review critically evaluates the existing evidence to understand nurses' current level of knowledge, barriers to effective care, and best practices for improving competence.

2. Objectives of the Review

1. To review existing studies related to nurses’ knowledge and practices on colostomy care.
2. To determine common knowledge gaps and challenges faced by nurses.
3. To develop evidence-based strategies for improving colostomy care.

3. Methodology of the Review

Databases searched: PubMed, Google Scholar, CINHALL, Scopus, and ResearchGate.

Keywords used: colostomy, stoma care, nurses’ knowledge, nursing practice, ostomy complications, nursing education.

Inclusion criteria:

- Articles in English
- Published between 2010–2024
- Studies involving nurses or student nurses

Exclusion criteria:

- Articles not focusing on nursing
- Case studies of individual patients
- A total of 42 studies were reviewed; 21 were included for synthesis.

4. Review of Literature**4.1 Nurses' Knowledge Regarding Colostomy Care**

Most studies reveal moderate knowledge among nurses.

Adley et al. (2022) suggest that more than half of nurses had unsatisfactory level of total knowledge about colostomy care^[1].

Rama Harika (2016) reported staff nurses and 60% of nursing students having inadequate knowledge, 40% of staff nurses and 33.3% of nursing students are having moderately adequate knowledge, 13.3% of staff nurses and 6.7% of nursing students are having adequate knowledge^[2].

Hassan et al. (2021) noted that only one-third of nurses received formal stoma care training^[3].

Common deficient areas:

Peristomal skin care

Types of colostomy appliances

Management of complications

Dietary guidance

Psychological support to patients

4.2 Nurses' Practices Related to Colostomy Care

Studies indicate variation in practice quality.

Moya-Muñoz et al. (2022) found that Colorectal surgery nurses' knowledge and practice of HOS was low. The presence or absence of training is an important factor influencing nurses' knowledge, attitudes and practice, with most nurses having no training and stoma specialist nurses scoring relatively high on knowledge and practice^[4].

Saeed et al. (2019) reported inadequate documentation and lack of standardized protocols^[5].

Practice challenges include:

Lack of standard operating procedure.

Lack of specialised nurses

Lack of manpower

Time constraints in busy wards

Limited availability of appliances

4.3 Training and Educational Interventions

Training significantly improves knowledge and skills.

Randomized trials show simulation-based workshops improve nurses' competence by 60–80%.

In-service education programs improved post-test scores in multiple studies (Shetty, 2020)^[6].

Video-assisted learning was effective for student nurses (Gowda et al., 2021)^[7].

Effective training methods:

Hands-on demonstration

Simulation mannequins

Case-based learning

Guidelines from WOCN (Wound, Ostomy, Continence Nurses Society)

4.4 Barriers Faced by Nurses

From multiple studies, the most commonly reported barriers are:

- Lack of theoretical knowledge
- Insufficient training
- Fear of handling stoma complications
- Unpleasant odour
- Limited supplies or outdated appliances
- Inadequate institutional support
- Heavy workload

4.5 Impact of Poor Knowledge

- Poor knowledge and skills can result in:
- Peristomal skin irritation
- Fecal leakage
- Stoma necrosis
- Psychological trauma
- Increased hospital readmissions
- Delayed rehabilitation
- Reduced quality of life for the patient

5. Discussion

Across multiple studies, the overall trend is clear:

Nurses possess moderate but inadequate knowledge regarding colostomy care.

Most nurses learn from observation rather than formal training.

Experience alone does not guarantee competence; structured guidelines are essential.

Nursing students especially lack practical exposure.

Countries with certified enterostomal therapists show better outcomes.

The review strongly indicates the need for comprehensive training, standardized care protocols, and continuous professional development in stoma care

6. Implications for Nursing Practice

- Hospitals should implement stoma care competency training for all nurses.
- Create a stoma care checklist and standard guidelines.
- Ensure availability of variety of colostomy bags, barriers, and accessories.
- Assign stoma care champions or trained nurses per ward.
- Encourage patient-centered teaching before discharge.

7. Recommendations

1. Annual in-service training programs.
2. Collaboration with WOCN-certified professionals.
3. Include colostomy care as mandatory skill competency.
4. Develop educational videos and digital modules.
5. Establish stoma care clinics in hospitals.

8. Conclusion

The review concludes that nurses globally demonstrate moderate but insufficient knowledge and practice regarding colostomy care. Addressing training gaps through organized educational interventions significantly improves patient outcomes and reduces complications. To deliver holistic and competent care, nursing education must integrate hands-on stoma care training and adherence to evidence-based guidelines.

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