Practice Implications from the WCET® International Ostomy Guideline 2020

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GENERAL PURPOSE: To introduce the 15 recommendations of the International Ostomy Guideline (IOG) 2020, covering the four key arenas of education, holistic aspects, and pre- and postoperative care; and to summarize key concepts for clinicians to customize for translation into their practice.

TARGET AUDIENCE: This continuing education activity is intended for physicians, physician assistants, nurse practitioners, and nurses with an interest in skin and wound care.

LEARNING OBJECTIVES/OUTCOMES: After participating in this educational activity, the participant will:

1. Analyze supporting evidence for the education recommendations in the IOG 2020.
2. Identify a benefit of the International Charter of Ostomate Rights.
3. Distinguish concepts related to pre- and postoperative ostomy-related care.
4. Select a potential barrier to IOG 2020 guideline implementation.

ABSTRACT

The second edition of the WCET® International Ostomy Guideline (IOG) was launched in December 2020 as an update to the original guideline published in 2014. The purpose of this article is to introduce the 15 recommendations covering four key arenas (education, holistic aspects, and pre- and postoperative care) and summarize key concepts for clinicians to customize for translation into their practice. The article also includes information about the impact of the novel coronavirus 2019 on ostomy care.

KEYWORDS: culture, education, guideline, International Ostomy Guideline, IOG, ostomy, ostomy care, peristomal skin complication, religion, stoma, stoma site, teaching

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INTRODUCTION

Guidelines are living, dynamic documents that need review and updating, typically every 5 years to keep up with new evidence. Therefore, in December 2020, the World Council of Enterostomal Therapists® (WCET®) published the second edition of its International Ostomy Guideline (IOG).[1] The IOG 2020 builds on the initial IOG guideline published in 2014.[2] Hundreds of references provided the basis for the literature search of articles published from May 2013 to December 2019. The guideline uses several internationally recognized terms to indicate providers who have specialized knowledge in ostomy care, including ET/stoma/ostomy nurses and clinicians.[1] However, for the purposes of this article, the authors will use "ostomy clinicians" and "person with an ostomy" to be consistent.

GUIDELINE DEVELOPMENT

A detailed description of the IOG 2020 guideline methodology can be found elsewhere.[1] Briefly, the process included a search of the literature published in English from May 2013 to December 2019 by the authors of this article, who comprise the Guideline Development Panel. More than 340 articles were reviewed. For each article identified, a member of the panel wrote a summary, and all three then confirmed or revised the ranking of the article evidence. The evidence was categorized and defined and compiled into a table that is included in the guideline and can be accessed on the WCET® website. The strength of recommendations were rated using an alphabetical system (A+, A, A–, etc). Feedback was sought from the global ostomy community, and 146 individuals and 45 organizations were invited to comment on the findings. Of these, 104 individuals and 22 organizations returned comments, which were used to finalize the guideline.

GUIDELINE OVERVIEW

Because the WCET® is an international association with members in more than 65 countries, there is a strong emphasis on diversity of culture, religion, and resource levels so that the IOG 2020 can be applied in both resource-abundant and resource-challenged countries. The forward was written by Dr Larry Purnell, author of the Purnell Model for Cultural Competence (unconsciously incompetent, consciously incompetent, consciously competent, unconsciously competent).[3–5] As with the 2014 guideline, the WCET® members and International Delegates were invited to submit culture reports from their countries, and 22 were received and incorporated into the guideline development.

Because the IOG 2020 is intended to serve as a guide for clinicians in delivering care for persons with an ostomy, new to this edition is a section on guideline implementation. Also new is a recommendation for nursing education. A glossary of terms and helpful educational resources are also included in the various appendices. The 15 IOG 2020 recommendations are listed in the Table. The recommendations have been translated into Chinese (Supplemental Table 1, http://links.lww.com/NSW/A67), French (Supplemental Table 2, http://links.lww.com/NSW/A68), Portuguese (Supplemental Table 3, http://links.lww.com/NSW/A69), and Spanish (Supplemental Table 4, http://links.lww.com/NSW/A70) and are available on the WCET® website (www.wcetn.org).

EDUCATION

The evidence supports four IOG 2020 recommendations about education (Table). A person who has surgery resulting in the creation of an ostomy needs knowledge regarding their type of stoma, care strategies such as ostomy pouches, and the impact the ostomy will have on their lifestyle.[6] Accordingly, the needs of these patients go beyond what may be taught in initial nursing education programs. Zimnicki and Pieper[7] surveyed nursing students and found that just under half (47.8%) did not have experience in caring for a patient with an ostomy. Those who did felt most confident in pouch emptying.[7] Findings by Cross and colleagues[8] also support that staff nurses without specialized ostomy education felt more confident in emptying the ostomy pouch as opposed to other ostomy care skills. Duruk and Uçar[9] in Turkey and Li and colleagues[10] in China also reveal that staff nurses lack adequate knowledge about the care of patients with ostomies. Better ostomy care outcomes have been reported when patients are cared for by nurses who have had specialized ostomy education. This includes research in Spain by Coca and colleagues,[11] Japan by Chikubu and Oike,[12] and the UK by Jones.[13]

For over 40 years, the WCET® has promoted the importance of specialized ostomy education for nurses to better meet the needs of patients and their families.[6] Other societies such as the Wound Ostomy and Continence Nursing Society in the US; Nurses Specialized in Wound, Ostomy and Continence Canada; and the Association of Stoma Care Nurses UK have also advocated for specialized nursing education. The suggested modifications include competence-based curricula and checklists of skills and professional performance necessary for the specialized nurse to provide appropriate care to patients with ostomies and their families.[14–17] Evidence-based practice requires that healthcare professionals keep abreast of new techniques, skills, and knowledge; lifelong learning is necessary.

HOLISTIC ASPECTS OF CARE: CULTURE AND RELIGION

The literature supports three highly ranked recommendations related to holistic care within the IOG 2020 (Table)

Table. WCET® INTERNATIONAL OSTOMY GUIDELINE 2020 RECOMMENDATIONS

Topic	Recommendations
Education and scope of practice	1.1 Specialised training is required to effectively provide care to a person with an ostomy, including their families. SOE = A 1.2 Specialised training should include a competency-based curriculum composed of didactic and skills performance assessment that may be by simulation or situation learning. SOE = A– 1.3 Knowledge, skill, and competency are maintained through ongoing professional development inclusive of a variety of strategies/methods. SOE = A– 1.4 Practice parameters must be according to the legal framework of the ET/stoma/ostomy nurse's/clinician's country regulations. Evidence-based practice guideline(s) (regional, national, international) should be adopted or adapted. SOE = A
Holistic approach to care	2.1 A holistic assessment of the person/family is essential to guide co-participatory care. Planning and implementation should consider individual, societal, economical and health care system factors. SOE = A 2.2 The ET/stoma/ostomy nurse/clinician needs to consider the impact of an individual's cultural, religious beliefs and quality of life for the person undergoing ostomy surgery (creation, revision or closure) and his/her family. SOE = A 2.3 A person/family being considered for ostomy surgery should be co-participant in discussion on quality of life, body image and sexuality. SOE = A
Preoperative care needs	3.1 Stoma site marking should be done preoperatively for both elective and non-elective (when possible) surgery by a skilled ET/stoma/ostomy nurse/clinician. SOE = A– 3.2 Stoma site marking should be within abdominal rectus muscle away from abdominal scars, creases, skin folds or belt line. SOE = A– 3.3 Stoma site marking should consider the person's body characteristics, lifestyle, religion, and other cultural influences. SOE = B+ 3.4 Preoperative patient/family education should include explanations of the surgical procedure and postoperative self-care of the stoma/peristomal skin or usual expectation if the stoma is to be closed. SOE = A
Postoperative care needs	4. 1 Using a validated peristomal skin assessment tool may assist in standardising communication of peristomal skin status. SOE = A 4.2 Ostomy barriers and durable containment devices should be individually fitted with a secure seal to protect the skin and contain effluent. Barrier or pouch selection tools may be useful. SOE = A 4.3 Persons, families and ET/stoma/ostomy nurses/clinicians need to recognise and identify the aetiology of common stomal and peristomal complications. Tools exist to assist in identification and standardising terminology for stoma and peristomal skin conditions. SOE = A 4.4 Persons, families and ET/stoma/ostomy nurses/clinicians need to implement prevention and management plans of care to address potential or actual stomal and peristomal complications or post-stoma closure expectations or complications. SOE = A

Abbreviations: ET, enterostomal therapy; SOE, strength of evidence.

and confirms the necessity of taking them into account when caring for individuals with an ostomy.

Ostomies can impact individuals in different domains such as day-to-day life, overall quality of life, social relationships, work, intimacy, and self-esteem. A holistic approach to care aims to acknowledge and address the patient's need at a physiological, psychological, sociological, spiritual, and cultural level,[18] especially when the patient's situation is complex.[19] Therefore, implementing a holistic approach to practice is crucial to address all of the potential issues.[20]

Many tools exist to assess patients' quality of life, self-care adjustment, social adaptation, and/or psychological status.[21,22] They provide important information to nurses in their clinical decisions making, although as always clinical judgment remains relevant. Because holistic care is multidimensional, using various methods will allow an integrative and global approach to caring for patients with ostomies.

The World Health Organization's definition of health[23] is still relevant today. An individual's origins, beliefs, religion, culture, gender, and age will influence his/her interpretation of illness and diseases.[24–26] For healthcare professionals, the need to understand these influences and their real impacts on the patient, family, and/or caregiver(s) is essential because it will provide key information to co-construct ostomy care.

Dr Larry Purnell's Model for Cultural Competence[3,4] can be readily applied to ostomy care.[5] It can help nurses to deliver culturally competent care to patients with ostomies. Integrating effective cultural competence will improve relationships among patients, families, and healthcare professionals,[27] especially if patients and/or families are finding it difficult to cope.[28]

Specialized and nonspecialized nurses have a key role in patient, family, and caregiver education.[29] They will, step by step, help support the development of specific skills and implementation of personalized adaptive

strategies. Nurses' advice and support can decrease ostomy-related complications,[13,30,31] and listening to and addressing patient emotions will improve individuals' self-care.[32]

Taking into account the International Charter of Ostomate Rights[33] during provision of ostomy care will increase patients' quality of life, because it supports patient empowerment and reinforces the partnerships among patients, families, caregivers, and healthcare professionals.

Section 6 of the IOG 2020 provides an international perspective on ostomy care. With contributions from 22 countries, this version is more inclusive than the previous one.[2] It is the authors' hope that it will help ostomy clinicians around the world when taking care of patients from another culture, background, or belief system and therefore give them better skills to address each individual's needs.

PREOPERATIVE CARE AND STOMA SITE MARKING

As seen in the Table, there are four recommendations that address preoperative care and stoma site marking. The literature emphasizes preoperative education for patients who are about to undergo ostomy surgery, which includes preoperative site marking. Fewer complications are seen in persons who have their stoma sites marked before surgery.[34,35]

Because specialized nurses may not be available 24/7, patients who undergo unplanned/emergency surgery may not benefit from preoperative education and stoma site marking. Accordingly, the literature supports the training of physicians and nonspecialty nurses to do stoma site marking.[34–37] Zimnicki[36] completed a quality improvement project to train nonspecialized nurses in stoma site marking. This project significantly increased the number of patients who had preoperative stoma site marking and education.[36]

Stoma site marking is an important art and skill that is beyond the scope of this article to describe in detail. Major principles include observation of the patient's abdomen while standing, sitting, bending over, and lying down (Figure 1).[37–41] There are at least two techniques for identifying the ideal abdominal location.[42–52] Those interested might consult the references[42–60] as well as the WCET® webinar or pocket guide on stoma site marking (www.wcetn.org).[52]

POSTOPERATIVE CARE

The IOG 2020 lists four recommendations for postoperative care to assist ostomy clinicians to detect, prevent, or manage and thereby minimize the effect of any peristomal complications (Table).

Successful postoperative recovery following ostomy surgery is dependent on multiple factors from the perspective of both the ostomy clinician and person with an ostomy. All members of the care team, including the patient, must have a heightened awareness of preventive or remedial strategies for common problems that may occur with the formation of a new stoma, refashioning of an existing stoma, or stoma closure. The ability to recognize and effectively manage potential or actual postoperative ostomy and peristomal skin complications (PSCs) has inherent short- and long-term ramifications for the health, well-being, and independence of the persons with an ostomy[61–63] and for health resource management.[64–66]

Postoperative ostomy complications may manifest as early or late presentations. Early complications such as mucocutaneous separation, retraction, stomal necrosis, parastomal abscess, or dermatitis may occur within 30 days of surgery. Later complications include parastomal hernias (PHs) and stomal prolapse, retraction, or stenosis.[63,67,68]

However, the most common postoperative complications are PSCs.[69] Frequently cited causes of PSCs are leakage,[70,71] no preoperative stoma siting,[35] poor surgical construction techniques,[72] ill-fitting appliances, and long wear time of appliances.[71,73]

Common PSCs include acute and chronic irritant contact dermatitis and allergic contact dermatitis, the former arising from prolonged contact with feces or urine on the

Figure 1. POSITIONS FOR STOMA SITE MARKING

Assess the abdomen in multiple positions during stoma siting.

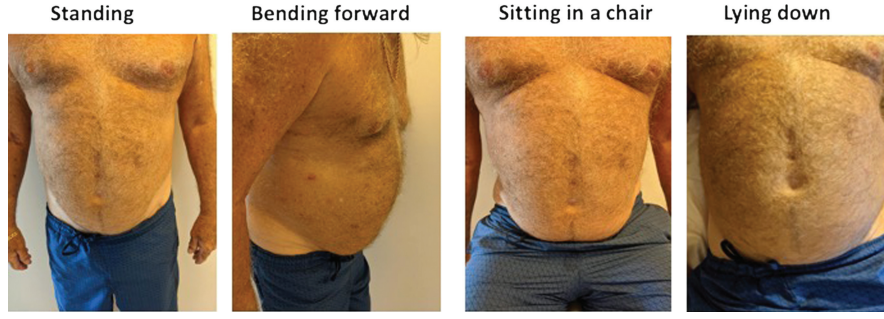


Figure 2. IRRITANT DERMATITIS

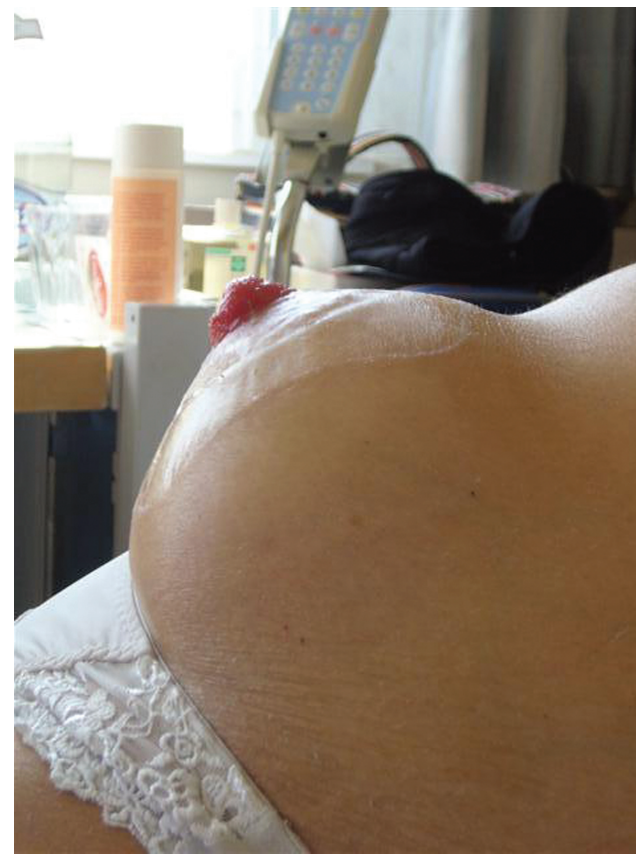
skin eventually causing erosion (Figure 2). Assessment of the abdomen, stoma, stoma appliance, and accessories in use as well as the patient's ability to care for the stoma and correctly reapply his/her appliance is essential to determine the cause of leaks. Skin care, depending on the severity of irritation or denudation, may involve the use of protective pectin-based powders or pastes, skin sealants (acrylate copolymer or cyanoacrylates wipes or sprays), and protective skin barriers. Adjustments to the type of appliance used and wear time may also be required to ameliorate acute and prevent chronic irritant contact dermatitis.[61,70,74]

Allergic contact dermatitis results from an adverse reaction to substances within products applied to the skin during cleansing or skin protection used prior to appliance application or removal or that are part of the appliance itself.[74,75] Compromised skin usually reflects the shape of the appliance if it is the allergen or the area where secondary skin care products have been used. Affected skin may have the appearance of a rash; be reddened, blistered, itchy, or painful; or exude hemoserous fluid (Figure 3). Patch testing small areas of skin well away from compromised skin and the stoma may be required to identify specific causative agents and/or assess the suitability of other skin barrier products used to gain a secure seal around the stoma.[70,75]

Figure 3. ALLERGIC CONTACT DERMATITIS

Parastomal hernias are a latent complication that also contribute to PSCs. Causes include surgical technique, the size and type of stoma, abdominal girth, and age and medical conditions such as prior hernias and diverticulitis fluid. Education of surgeons and prophylactic insertion of polypropylene mesh during surgery as well as postoperative patient education may decrease PH incidence (Figure 4).[68,76,77] Further, providers must assess and measure the patient's abdomen at the level of the stoma to choose the most appropriate support garment required to manage the degree of PH protrusion, prevent further exacerbation, and allow the stoma to continue to

Figure 4. PARASTOMAL HERNIA



function normally.[78] The ostomy appliance/pouch in use will also need to be frequently reassessed to address any changes in the size of the stoma.

The IOG 2020 cites numerous tools that ostomy clinicians can use to effectively identify and classify PSCs[79,80,81] and select appropriate skin barriers and appliances to manage them.[62,82]

Finally, of increasing importance to improve the postoperative quality of life of individuals with an ostomy, reduce ostomy complications and associated readmissions, and enhance interprofessional practice are the use of early or enhanced recovery programs after surgery,[83,84] ongoing education and discharge monitoring programs,[68,85] and telehealth modalities for counseling and remote consultation.[86,87]

GUIDELINE IMPLEMENTATION

For clinical guidelines to result in positive outcomes for the intended patient populations, the proposed recommendations need to be adopted into daily practice. Multiple strategies are required to facilitate adoption,[88,89] and guidelines should be reviewed and adapted for specific clinical contexts.[90] Prior thought, therefore, is required regarding how guidelines will be disseminated and implemented. Potential barriers to guideline implementation may include a lack of resources, competing health agendas, or a perceived lack of interest in ostomy care as a medical/nursing subspecialty with no "champion" to advocate for and facilitate implementation. Last, guidelines may be seen as too prescriptive. The section on guideline implementation within the IOG 2020 provides advice, and readers are directed to the full guideline for more information.

IMPACT OF COVID-19 ON OSTOMY CARE

The review of the evidence for the IOG 2020 preceded the advent of COVID-19. During the pandemic, there have been anecdotal reports of ostomy clinicians being reassigned to care for other patients. The extent and impact of this have yet to be researched. In the meantime, virtual visits may provide a safe alternative to in-person care for patients and providers.[91] A study by White and colleagues[92] reported on the feasibility of virtual visits for persons with new ostomies; 90% of patients felt that these visits were helpful in managing their ostomy.[92] However, another study found that only 32% of the respondents knew that telehealth was an option.[93] Further, 71% "did not think [their issue] was serious enough to seek assistance from a healthcare professional,"[93] although 57% reported some peristomal skin occurrence during the pandemic.[93] In descending order, the types of skin issues reported were redness or rash (79%), itching (38%), open skin (21%), bleeding (19%), and other concerns (7%).[93]

CONCLUSIONS

The IOG 2020 aims to provide clinicians with an evidence framework upon which to base their practice. The 15 IOG 2020 recommendations are applicable in countries where resources are abundant (nurses and healthcare professionals trained in ostomy care with manufactured appliances/pouches), as well as in countries with limited resources (nonspecialized nurses, healthcare professionals, and laypersons who create ostomy equipment from available local resources to contain the ostomy effluent). Specialized knowledge is needed to assist persons with an ostomy in learning how to apply, empty, and change their appliance/pouch, but living with an ostomy is more than that. All aspects of the patient need to be considered.

Holistic patient care should be individualized and address diet, activities of daily living, sexual life, prayer, work, medications, body image, and other patient-centered concerns. Preoperative stoma siting has been linked to better postoperative outcomes. Early identification and intervention for PSCs requires adequate teaching, as well as awareness of when to seek professional help. Nurses who have specialized knowledge in ostomy care can improve quality of life for persons with an ostomy, including those who experience PSCs.[94] It is the authors' hope that the IOG 2020 will enhance care outcomes and rehabilitation for this population.

PRACTICE PEARLS

- Patients who are cared for by healthcare professionals with specialized ostomy knowledge experience better care outcomes.
- There are clinical tools to assist with peristomal skin assessment and appliance requirements.
- Pre- and postoperative patient and family education needs to be holistic and individualized.
- Patients who undergo presurgical stoma siting experience fewer complications.
- The most common PSC is leakage leading to irritant dermatitis.
- Telehealth and remote consultation might be advantageous in providing adjunct guidance to people with ostomies.

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