

Prevalence and Impact of Skin Injuries in New Ostomy Patients: Results From a National Clinician Survey

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Introduction

It is estimated that between 750,000 and 1 million people in the United States are living with an ostomy.¹ Up to 80% of them will experience peristomal skin complications (PSC) or injuries.^{2,3} There are numerous types of PSCs including peristomal moisture-associated skin damage, pressure injuries, allergic contact dermatitis and peristomal medical-adhesive related skin injuries (PMARSI). Building on the work done by McNichol and colleagues, LeBlanc and colleagues defined PMARSI as “an alteration of the skin integrity with erythema and/or other skin alterations such as skin tears, erosion, bulla (blisters), or vesicle that is apparent after the removal of an adhesive ostomy pouching system”.⁴ PMARSI is prevalent, but under-reported, and often times preventable. In particular, the bulla or tension blisters, which are typically caused by “shearing forces due to distention of the skin beneath an adhesive product that does not stretch.”⁴ McNichol and colleagues noted that tension blisters are associated with peristomal swelling following surgery.⁵ Tension blisters that form underneath the skin barrier following surgery, according to numerous wound ostomy continence (WOC) nurses, are often unroofed when the barrier is removed making it difficult to identify them as blisters and are confused with skin tears.

The **purpose** of this poster is to better understand the prevalence of tension blisters and their impact on both the WOCN nurse and the patient. To do this Coloplast designed a study targeting clinicians who care for ostomy patients seeking their attitudes towards and practices with skin injuries and in particular tension blisters.

Methods

- Adaptive survey of health care professionals who care for ostomy patients using Qualtrics
- Distributed April 08, 2022- June 15, 2022 through WOCN®
- Data were analyzed using Qualtrics built in analysis capabilities and excel

Demographics

- 185 US-based clinicians
- 91% ostomy-certified nurses
- 89% have at least 10 years of nursing experience
- 67% have at least 10 years of ostomy practice with 34% having greater than 20 years of ostomy practice
- 70% practice in an acute, hospital, or inpatient facility
- 57% see at least 3 ostomy patients per week

Blisters



Figure 1. Examples of blisters underneath the ostomy barrier. Left side is an example of an intact blister. Right side is an example of an unroofed blister.

Prevalence

WOC nurses reported in the immediate post-operative period (days 0 – 8) that **24%** of their patient’s experience tension blisters or skin tears, which may be unroofed tension blisters.

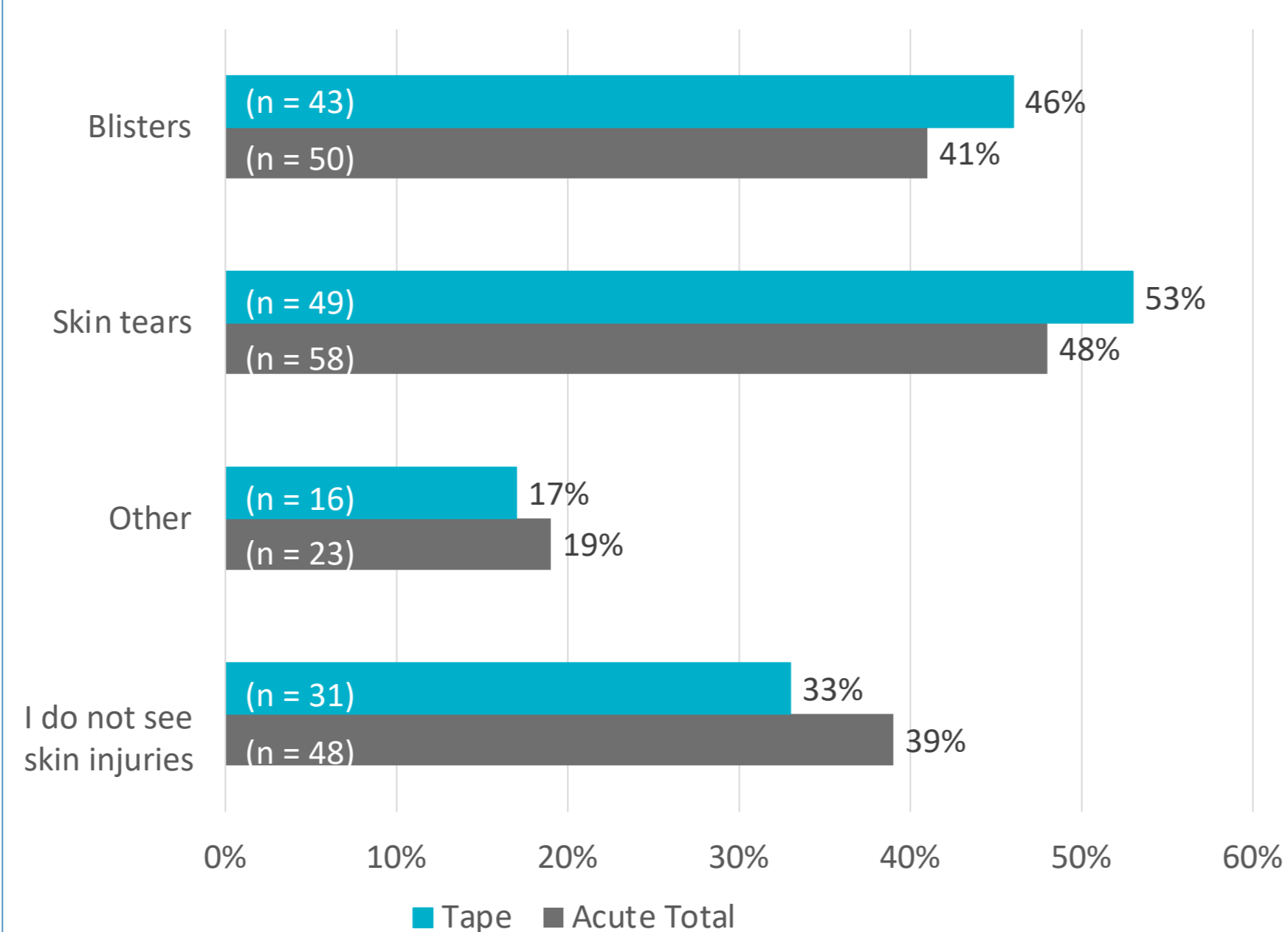
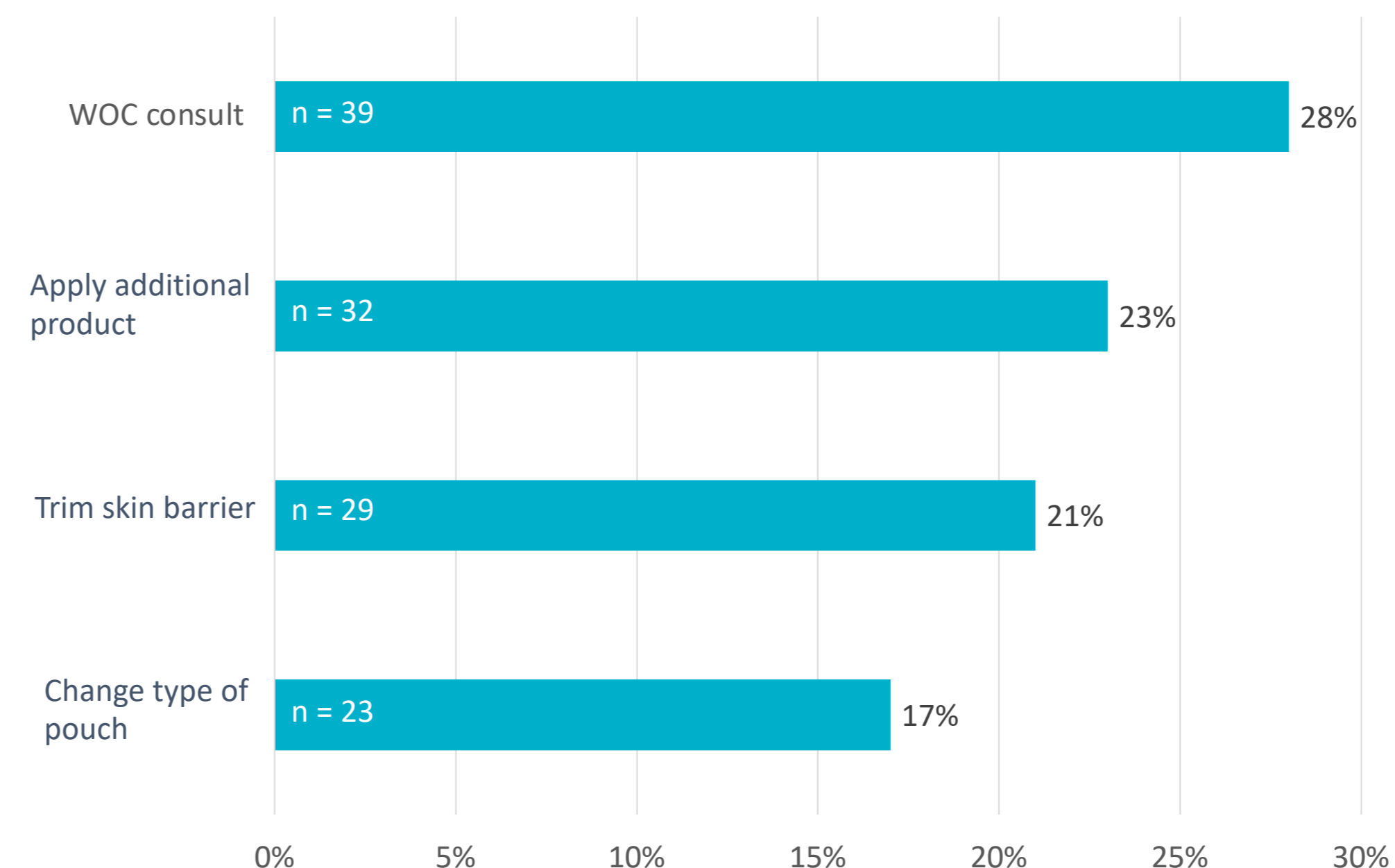


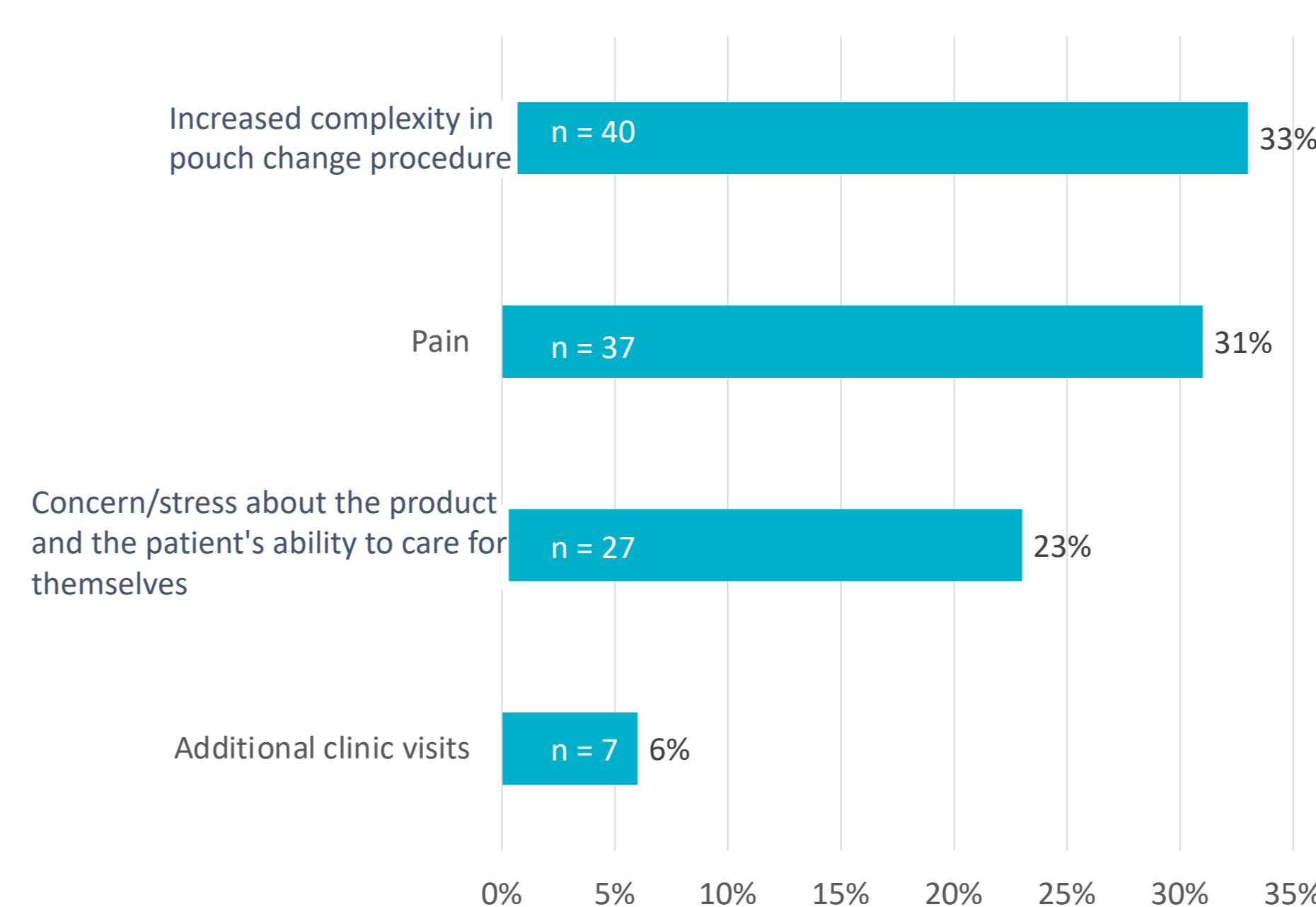
Figure 2. WOC nurses whose patients leave the OR in a flat tape barrier (Tape) observe more skin injuries. More blisters and skin tears, which are often unroofed blisters, were reported by the Tape group (n = 94; blue bar) than by all WOC nurses who care for new patients Acute Total group (n = 123; gray bar). The Tape group is a subset of the Acute Total group. The number of WOC nurses who reported that they do not see skin injuries was lower (33%) in the Tape group than in the Acute Total group (39%).

Results



Impact on WOC nurse

Figure 3. Tension blisters impact WOC nurses. When asked how blisters are managed at their facility, the most common response from respondents was WOC nurse consult (28%; n = 39). The top 4 responses are presented in Figure 2.



Impact on the patient

Figure 4. Tension blisters have a negative impact on a patient’s adaptation to living with an ostomy. When asked how blisters impact their patients, the most common responses were increased complexity (n = 40), pain (n = 37), and stress (n = 27).

Discussion

- Respondents reported that on average 24% of their new ostomy patients experience tension blisters and skin tears, which are often unroofed tension blisters that are not recognized as blisters
- 67% of respondents whose ostomy patients leave surgery with a flat ostomy barrier with tape indicated that they see skin injuries in the immediate postoperative period
- A greater percentage of respondents observed blisters in the Tape group, it is reasonable that the risk of blisters can be reduced if tape is not used
- Blisters, which often can be avoided, impact a WOC nurse’s time, and increases demand and responsibility to their workload
- Blisters result in increased complexity in pouching changes, increased pain, and increased stress for a patient making an already difficult transition more turbulent.

Conclusion

These results indicate that tension blisters are frequently observed in the immediate postoperative period and suggest that tape products may increase the likelihood of blisters. Further research is needed to determine the role of tape in causing tension blisters and the prevalence of skin injuries between elastic and inelastic barriers.

References:

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