Factors influencing the incidents of peristomal skin complications

Erosion of the skin around the stoma – also known as peristomal skin complications (PSC) – is one of the most common complications that people with a stoma experience. Studies have found that as many as 60% of this group of patients experience PSCs.[1] To reduce the burden of this condition, we need to know more about the factors that influence the occurrence of PSC. This is exactly what our recently published Ostomy Life Survey set out to explore.

Mapping the risks

Maintaining healthy skin around the stoma is essential to ensuring that the stoma appliance sits firmly and comfortably on the skin. If the baseplate does not adhere properly, the risk of further leakage and further skin damage increases – and we have the onset of a vicious circle. One that is very frustrating and painful for patients to live with and costly for the healthcare system to treat.

While numerous studies have examined why PSCs occur, less is known about what drives the risk of a PSC developing. To address this gap in our knowledge, Coloplast supported and contributed to the largest, multi-national survey to date, covering 13 countries across four continents and involving 4,235 adults with a stoma.[2]

The purpose of the survey was to investigate the underlying demographic factors contributing to PSCs and find out how the affected people deal with them. By looking at a wide range of demographic factors in people living with a stoma, we aimed to gain a more holistic picture of the factors contributing to PSCs and increase our understanding of the socio-economic impact.

Main findings from the survey

Of the 4,235 respondents, 73% reported having a PSC in the last 6 months. Itching (67%) and bleeding from the skin (45%) were the most common PSC-related issues respondents experienced.

When skin issues occurred, 31% of the respondents sought help from a stoma care nurse and/or other healthcare professional. Half of the respondents used a skin barrier product in response to a PSC, and 37% changed the adhesive more frequently. On average, respondents used 3.3 stoma care accessories. Those who reported skin issues used one more accessory (3.6 products) than those who did not (2.6 products).

1. Nybaek and Jemic, 2010
2. Factors influencing the incidence of peristomal skin complications: evidence from a multinational survey on living with a stoma, European Wound, Ostomy and Continence Supplement, May 2020.

When analyzing the survey results, we found that:

- Output under the baseplate was the most important factor associated with a significantly increased risk for experiencing PSC;

- The more frequently respondents observed output under the baseplate, the more often they reported a PSC;

- The older the respondent, the lower the rate of reported PSCs;

- Respondents with an ileostomy had the highest risk of reporting a PSC;

- The risk of contracting PSC was approx. 1.5 times higher within the first two years of stoma surgery; and more women reported a PSC than men.
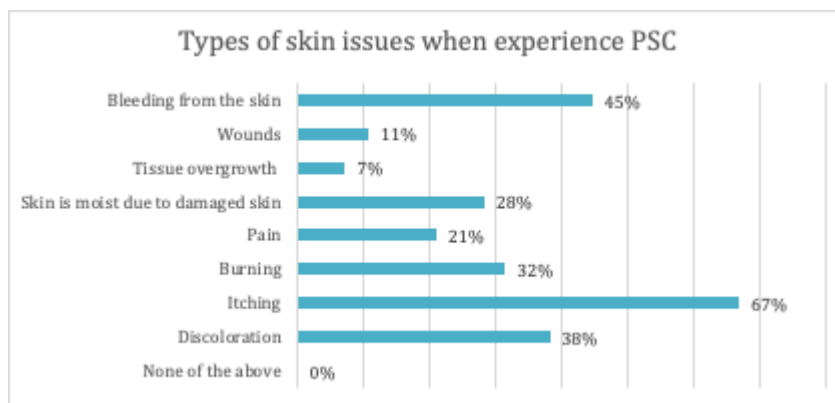
Types of skin issues when experience PSC

Type	Percentage
Bleeding from the skin	45%
Wounds	11%
Tissue overgrowth	7%
Skin is moist due to damaged skin	28%
Pain	21%
Burning	32%
Itching	67%
Discoloration	38%
None of the above	0%

Figure text: Participants can experience more than one type of skin issue.

Unfolding the survey results

The survey results provided us with interesting insights into the state of PSC treatment; the impact of certain demographic factors on PSC occurrence; and the economic impact of PSCs. They led us to conclude that:

- **little progress has been made in PSC treatment over the past 20 years:** Our survey data is in line with previous reports regarding the frequency of PSC occurrence that have been published over the past two decades. This indicates that, despite the many new products, initiatives and practice guidelines that have been developed during this period, there has been little progress in significantly reducing the fundamental PSC-related problems facing people with a stoma.

- **stomal output is a major contributing factor:** The survey also supported previous findings that the most frequent cause of PSCs (67%) is irritant contact dermatitis caused by stomal output coming in contact with the skin. People with an ileostomy are most likely to observe output under the baseplate, and they are also most likely to develop a PSC.

- **PSCs lead to higher product consumption:** The data suggests that PSCs lead to increased accessory use and, consequently, higher healthcare costs. This conclusion is also in line with previous studies.
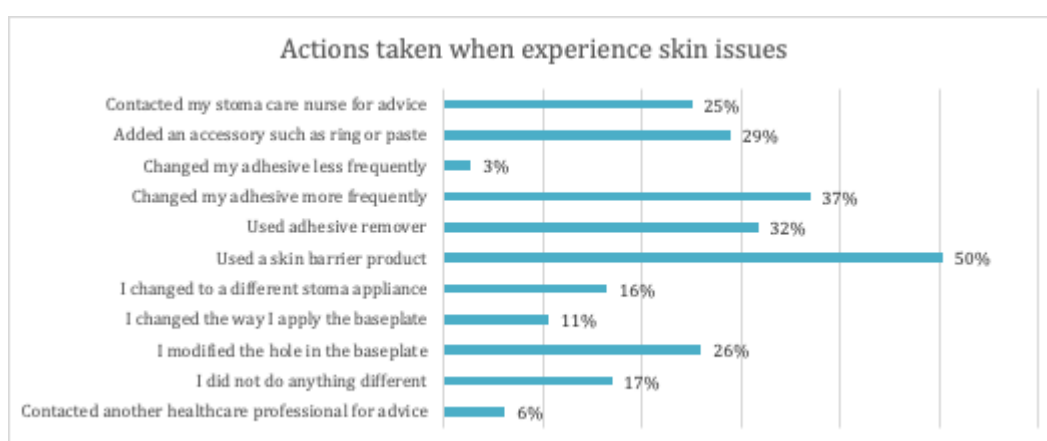
Actions taken when experience skin issues

Action	Percentage
Contacted my stoma care nurse for advice	25%
Added an accessory such as ring or paste	29%
Changed my adhesive less frequently	3%
Changed my adhesive more frequently	37%
Used adhesive remover	32%
Used a skin barrier product	50%
I changed to a different stoma appliance	16%
I changed the way I apply the baseplate	11%
I modified the hole in the baseplate	26%
I did not do anything different	17%
Contacted another healthcare professional for advice	6%

Figure text: Participants can take multiple actions when experiencing skin issues.

Sharing the survey conclusions

The survey results allow us to draw conclusions that reinforce some of the important messages we have been sharing with the healthcare community and industry partners. The survey supports findings from other recent studies that the primary cause of PSC is leakage of stomal output onto the peristomal skin. Therefore, helping people with a stoma to avoid leakage underneath their baseplate is key to reducing the burden of PSC. Consequently, increased awareness among clinicians in stoma care of the factors that contribute to PSC is essential for early identifications of patients at risk. Stratifying stoma management accordingly and educate patients in adopting a PSC preventive approach, will likely bring down the occurrence of PSC, ultimately reducing healthcare costs and improving quality of life for this particular group of patients.

Moreover, given the persistent nature of this complication, it may also be time for stoma care professionals and industry partners to rethink our approach to appliances and develop new products that are better able to prevent PSCs. One possible focus area could be developing tools that would help people with a stoma and their carers to better identify PSC-related risks so they address these proactively.

If you would like to read the complete article with the survey findings and results discussion, please go to Factors influencing the incidence of peristomal skin complications: evidence from a multinational survey on living with a stoma | Gastrointestinal Nursing (magonlinelibrary.com)

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