

# The relationship between body image, peristomal skin condition, and quality of life

Thom Nichols, MS, MBA, Michael Riemer, MS

Hollister Incorporated, Libertyville, Illinois, USA

## Introduction:

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How ostomates view their bodies is a complex, multidimensional process. It is the complexity of the issue that limits the context and range of published body image discussions in health-related quality of life studies. It is generally well-accepted that changes to the body leads to a changed body image. Altered body appearance, such as from ostomy surgery, may alter perceptions or amplify negative perceptions that one has of their body image. In an ostomy, the altered or amplified negative perception resulting from the surgery may be confounded in a non-normal (non-intact) peristomal skin condition.

## Methods:

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The data is derived from the Ostomy Comprehensive Health and Life Assessment<sup>1</sup>; a validated and reliable survey distributed in North America, the United Kingdom (UK), and Italy. The instrument is a self-reported multi-item survey querying major facets of the lives of persons having undergone ostomy surgery (n=4,097).

In a previous study<sup>2</sup> the authors defined 1,086 of 2,974 (36.5%) ostomates as having a negative body image, and 1,130 (38.0%) as having a positive body image (other = 758, 25.5%). It was demonstrated that a negative

body image exists in those with normal skin, but that a negative body image occurs more frequently when the ostomate has non-normal appearing peristomal skin suggesting that peristomal skin condition does influence body image. In this study we further define the non-normal peristomal skin group, limiting it to those indicating non-normal peristomal skin at the time of the survey, and also indicating that the condition of the skin around the stoma is always reddened or irritated by stomal discharge or adhesives, or always blistered or damaged (n = 385, 13.1% of 2,945). The normal skin condition group is defined and limited to those that report normal skin condition at the time of the survey and also report that their peristomal skin condition is usually normal appearing without any irritation or skin problems (n = 932, 31.6% of 2,945). Cross-tabulating positive and negative body image with normal or non-normal skin condition results in 960 ostomates available for analysis. It is hypothesized that if quality of life issues are impacted by body image and peristomal skin condition, then it will be more readily observed in this limited and disparate sample.

## Results and Discussion:

A major problem in attempting to provide a metric for the determination of the impact that peristomal skin condition has on the quality of life of those that have undergone ostomy surgery is that non-normal peristomal skin condition can be intermittent, and the effect of the condition is confounded with body image. When attempting to determine the affect peristomal skin has on quality of life, the effect of the presence of the stoma and its relationship to body image must be accounted for.

The study finds that there is an association between peristomal skin condition and body image. See Table 1 which makes the following observations:

	Negative Body Image	Positive Body Image	
Normal skin	239	443	
Non-normal skin	193	85	
<b>Total</b>	<b>432</b>	<b>528</b>	<b>960</b>

**a)** Respondents are more likely to have a negative body image than a positive body image if they have non-normal skin (odds=2.27). However non-normal skin does not preclude a positive body image.

**b)** Respondents are less likely to have a negative body image than a positive body image if they have normal skin. Normal skin does not preclude a negative body image (odds=0.54).

Additionally, the study investigated the extent to which a non-normal peristomal skin condition influences quality of life issues. The study investigated the life issues of sexual satisfaction, social satisfaction, satisfaction with leisure time, and overall contentment for each of the four conditions described in Table 1 (shown below).

**a) Sexual Life:** those indicating dissatisfaction (dissatisfied, very dissatisfied):

	N	% of condition	% of sample
<b>Positive Body Image</b>			
Normal Skin Condition	31 of 249	12.45%	31 of 552 = 5.62%
<b>Positive Body Image</b>			
Non-Normal Skin Condition	9 of 50	18.00%	9 of 552 = 1.63%
<b>Negative Body Image</b>			
Normal Skin Condition	59 of 135	43.70%	59 of 552 = 10.69%
<b>Negative Body Image</b>			
Non-Normal Skin Condition	61 of 118	51.70%	61 of 552 = 11.05%

**Interpretation: a)** a negative body image increased the likelihood that the ostomate will express dissatisfaction with their sexual life; **b)** whether a person exhibits a positive or negative body image, the presence of non-normal peristomal skin influences dissatisfaction.

**b) Social Life:** those indicating dissatisfaction (dissatisfied, very dissatisfied):

	<b>N</b>	<b>% of condition</b>	<b>% of sample</b>
Positive Body Image			
Normal Skin Condition	4 of 409	0.98%	4 of 886=0.45%
Positive Body Image			
Non-Normal Skin Condition	4 of 82	4.88%	4 of 886=0.45%
Negative Body Image			
Normal Skin Condition	21 of 219	9.59%	21 of 886=2.37%
Negative Body Image			
Non-Normal Skin Condition	56 of 176	31.82%	56 of 886=6.32%

**Interpretation: a)** a negative body image increased the likelihood that the ostomate will express dissatisfaction with their social life; **b)** whether a person exhibits a positive or negative body image, the presence of non-normal peristomal skin influences dissatisfaction.

**c) Leisure time:** those indicating dissatisfaction (dissatisfied, very dissatisfied):

	<b>N</b>	<b>% of condition</b>	<b>% of sample</b>
Positive Body Image			
Normal Skin Condition	5 of 437	1.14%	5 of 942=0.53%
Positive Body Image			
Non-Normal Skin Condition	6 of 83	7.23%	6 of 942=0.64%
Negative Body Image			
Normal Skin Condition	29 of 232	12.50%	29 of 942=3.08%
Negative Body Image			
Non-Normal Skin Condition	53 of 190	27.89%	53 of 942=5.63%

**Interpretation: a)** a negative body image increased the likelihood that the ostomate will express dissatisfaction with their leisure time; **b)** whether a person exhibits a positive or negative body image, the presence of non-normal peristomal skin influences dissatisfaction.

**d) Overall contentment:** those indicating discontentment (discontent, very discontent):

	<b>N</b>	<b>% of condition</b>	<b>% of sample</b>
Positive Body Image			
Normal Skin Condition	5 of 433	1.15%	5 of 942=0.53%
Positive Body Image			
Non-Normal Skin Condition	3 of 85	3.53%	3 of 942=0.32%
Negative Body Image			
Normal Skin Condition	33 of 235	14.04%	33 of 942=3.50%
Negative Body Image			
Non-Normal Skin Condition	65 of 189	34.39%	65 of 942=6.90%

**Interpretation: a)** a negative body image increased the likelihood that the ostomate will express discontentment with their life; **b)** whether a person exhibits a positive or negative body image, the presence of non-normal peristomal skin influences discontentment.

The data indicates that whether or not the study sample has normal or non-normal peristomal skin, a negative body image will generally increase the likelihood that the study sample will express dissatisfaction with aspects of their

life, as measured here. However, a negative body image, in the presence of non-normal skin is shown to increase the frequency of reported dissatisfaction. But it is important to note that the existence of negative body image and

non-normal peristomal skin condition in the sample ranges between 1 in 20, and 1 in 10, of the ostomates represented. The presence of the stoma is not always equated with a negative body image, and people with non-normal peristomal skin will not always express dissatisfaction with aspects of their lives.

## Conclusions:

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The published literature contains numerous articles on peristomal skin condition and body image perception in an ostomy population. However this may be the first time that a large scale study has investigated the influence on quality of life. The study indicates that the influence of peristomal skin condition on quality of life, in the presence of negative body image, while existing, may be minimal. While non-normal peristomal skin condition is shown to have an effect on quality of life issues, it appears that the impact is minimal. Efforts to reduce non-normal peristomal skin problems are always a health necessity, but should not be considered a panacea for increasing quality of life.

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## References

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1. Hollister Ostomy Comprehensive Health and Life Assessment, Hollister Incorporated, Libertyville, Illinois
2. Thom R. Nichols, Michael Riemer. Body Image Perception, the Stoma, and Peristomal Skin Condition. Journal of Gastrointestinal Nursing. Feb 2011. 9(1): 22 - 27.

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Hollister Incorporated has executed this study.



**Hollister Incorporated**  
2000 Hollister Drive  
Libertyville, Illinois, 60048 USA  
**1.888.740.8999**

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