

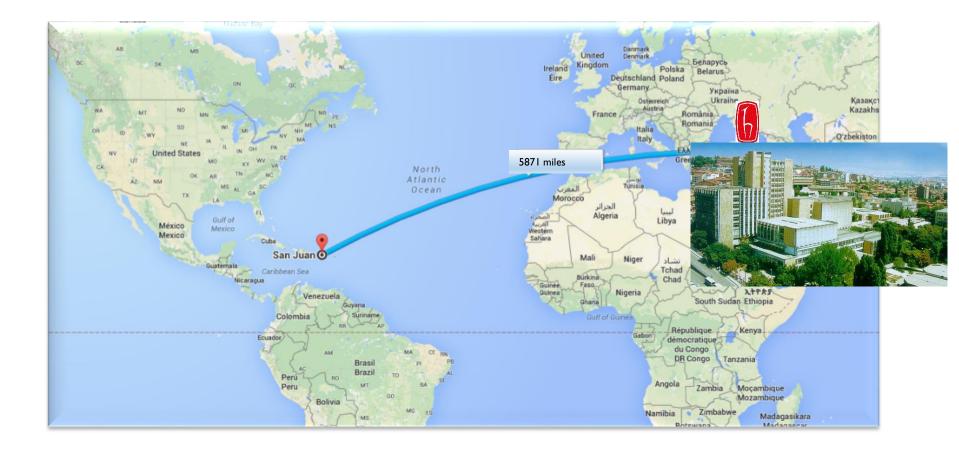
# Peristomal Skin Integrity of Patients with Tracheostomy

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#### Authors declared Any conflict of interest

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## OUTLINE

Importance of the Problem

Study Aim

#### Methods

Results

Conclusion



# **IMPORTANCE OF THE PROBLEM**

Peristomal skin complications usually mean resource utilization increased patient care needs and the struggle to attain an optimal functional status or comfortable state of well-being are expensive.

Overall rate of peristomal skin complications ranges from 18% to 55%.



# STUDY AIM

Study was carried out to determine effect of barrier cream on peristomal skin integrity.





#### METHODS

This quasi experimental study was conducted in a university hospital in Turkey between March-December 2013

Inclusion criteria for participation

Aging 18- 65 years

Admission to inpatient clinic without tracheostomy complications

Sample included 60 patients (30 patients per group)

Patients randomized to intervention and control group

#### **STUDY PROCEDURE**

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Microbiological sampling (First day of week)

Daily peristomal skin assesment (color, odor, turgor, lesion)

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Routine peristomal skin care with 0.9% NaCl solution (once a day for consecutive 7 days)

Peristomal skin assesment after skin care once a day (Ph, moisture, temperature)

Barrier cream application to  $4^*4$  cm area

Gauze dressing over cream

Microbiological sampling (Last day of week) C O N T R

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Microbiological sampling (First day of week)

Daily peristomal skin assesment (color, odor, turgor, lesion)

Routine peristomal skin care with 0.9% NaCl solution (three times a day for consecutive 7 days)

Peristomal skin assesment after skin care once a day (Ph, moisture, temperature)

Gauze dressing over peristomal skin

Microbiological sampling (Last day of week)



## METHODS

Data were collected with 'Patient Data Form' including demographic and tracheostomy questions and 'Periostomal Skin Assessment Form' first part includes Ph, moisture, temperature, color, odor, turgor assessment questions, second part includes lesion, infection, erosion, maseration, and leakage assessment questions. Peristomal skin also assessed for microbiology examination.



### METHODS

Study was approved by universities ethical committee

Written consent was obtained from patients

Data analyzed with analysis of variance for repeated

measures, mean and percentage calculations.

# RESULTS



Socio-Economic Characteristics	Intervention Group		Control Group	
	n	%	n	%
Age / <b>50-65 years</b>	18	60.0	17	56.6
Gender / Male	19	63.4	22	73.4
BMI / <b>23-24.9</b>	16	53.3	19	63.3
Diagnosis / <b>Upper respiratory system</b>	11	36.6	12	40.0
cancers				
Chronic diseases / <b>Yes</b>	15	50.0	14	46.6
Tobacco use / <b>Yes</b>	15	50.0	14	46.6
Type of cannula / Plastic cannula	27	90.0	20	66.6



#### RESULTS PERISTOMAL SKIN ASSESSMENT

Peristomal Skin Assessment	Day 1. x±sd	Day 2. x±sd	Day 3. x±sd	Day 4. x±sd	Day 5. x±sd	Day 6. x±sd	Day 7. x±sd	P value
Ph								
Intervention Group	5.51±0.07	5.47±0.06	5.45±0.06	5.41±0.06	5.43±0.05	5.45±0.10	5.46±0.06	p=0.048
Control Group	5.16±0.08	5.13±0.07	5.10 <u>±</u> 0.05	5.10±0.09	5.11±0.11	5.13±0.60	5.11±0.08	
Moisture								
Intervention Group	41.60±1.28	41.96±0.93	41.10±1.15	41.70±0.99	42.10±1.49	41.76±0.97	41.80±0.76	p=0.001
Control Group	47.40±1.40	47.20±1.27	47.03±1.85	46.96±2.52	46.90±1.73	46.83±2.07	46.00±1.11	
Temperature								
Intervention Group	31.96±0.81	31.53±0.57	31.20±0.99	31.73±1.05	31.60±1.33	31.73±0.94	32.03±1.10	p=0.158
Control Group	33.86±0.78	33.40±1.33	33.56±1.50	33.66±1.49	33.33±1.45	33.70±1.80	33.63±1.81	



#### RESULTS PERISTOMAL SKIN ASSESSMENT

Peristomal Skin	Intervention Group	Control Group	Р
Assessment	x±ss	<b>x±</b> ss	Value
РН	5.45±0.04	5.12±0.06	<0.001
Moisture	41.71±0.77	46.90±0.13	<0.001
Temperature	31.64±0.61	33.59±1.30	<0.001



# CONCLUSION

Both gauze dressing and barrier cream - gauze dressing changes over peristoma preserve the skin integrity.

However, results indicate that barrier cream - gauze dressing application is better for balancing the peristomal skin's pH, moisture and temperature level with in normal ranges.

#### THANK YOU....

Nursing, which provides job opportunities in various fields both in our country and in the world, is one of the seven occupational groups recognized to have the right to provide professional services by European Union countries. The Nursing Department, which offered education within the Faculty of Health Sciences since 2007, became a Faculty of Nursing in 2012.

Our undergraduate program aims at helping students to give nursing care in line with changing individual and social needs as well as providing students with the knowledge, skill and understanding necessary for nursing education, management and research fields, and ensuing that students can use the knowledge they have gained in order to protect, improve and preserve health effectively. Students start their education with a preparatory program of English and pursue it in our faculty where the medium of instruction is 30% English. They graduate from our faculty by assuming the title of "nurse" after fulfilling a semi-term internship program in their senior year.

Our Faculty offers undergraduate and graduate programs in eight departments. As well as having in-class theoretical courses, and doing skill and simulation laboratory practices, all of our students receive applied training at establishments that give protective and medical health service.

Our graduates can be employed as staff nurse, charge nurse, nurse consultants, clinical nurse specialists, and advisor at state and private healthcare organizations giving protective, medical and rehabilitative service at national and international level; or as an instructor and director at nursing schools,

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Photo: Sithiye Campus, Simulation Laboratory of Faculty of Nursing



#### Hacettepe University, Faculty of Nursing



Hacettepe, an international and a leading university