# ASSOCIATION BETWEEN THE HEALTH STATUS AND ACADEMIC PERFORMANCE OF MEDICAL STUDENTS IN THE CITY OF DASMARINAS, CAVITE, PHILIPPINES

Genevee Banta, MD Co-author: Cristina Salibay, PhD A healthy mind is a product of a healthy body.

 Good thinking, learning and memory skills are observed in a person with healthy mind and body (Johnson et al. 2004; Shareef et al. 2015).

#### **ACADEMIC PERFORMANCE AND HEALTH**

- Study habits
- Lifestyle behavior
- Academic performance
- Diseases during hospital exposure

#### **OBJECTIVE**

 to determine the association between the overall health status and academic performance of first year medical students

#### **METHOD**

- Research design: Cross-sectional
- Total Population: 304 first year medical students

#### **Data**

- ✓ Overall health status
- ✓ Academic performance

#### **OVERALL HEALTH STATUS**



**Health factors** 

#### Clinical profile

- Body mass index
- Past Medical History
- Family Medical History

#### Laboratory test results

- Complete blood count
- Anti-Hbs
- Chest-xray

### RISK FACTOR

INTERPRETATION OF THE RISK FACTOR	BASIS OF INTERPRETATION
NOT at risk of having other health conditions	<ul> <li>normal BMI</li> <li>No identified diseases in past medical and family history</li> </ul>
AT RISK of having other health conditions	<ul> <li>Presence of at least 1 of the following:</li> <li>BMI: underweight, overweight, obesity</li> <li>Has Identified disease in the past medical or family history</li> </ul>

#### **HEALTH FACTOR**

• **HEALTHY**: Laboratory test results are within NORMAL limits

• UNHEALTHY: >/=1 abnormal laboratory test result

#### OVERALL HEALTH STATUS

Healthy and not at risk of having other health conditions

Healthy but at risk of having other health conditions

Unhealthy but not at risk of having other health conditions

Unhealthy and at risk of having other health conditions

#### **ACADEMIC PERFORMANCE**

**GPA** 

**Verbal Interpretation** 

93.6 to 100.0

Excellent

87.1 to 93.5

Good

80.6 to 87.0

Average

75.0 to 80.5

Fair

74.9 and below

Poor

#### Frequency and percentage

✓ Overall health status

#### **Chi-square test**

✓ Association of health status and academic performance

## RESULTS AND DISCUSSION

Table 1. The Overall health status of first year medical students in the City of Dasmarinas, Cavite, Philippines

Overall Health Status	Frequency	%	
Healthy and not at risk of having other health condition	16	5.30	
Healthy but at risk of having other health condition	118	38.8	
Unhealthy but not at risk of having other condition	26	8.60	
Unhealthy and at risk of having other health condition	144	47.4	

# **Table 2.** Association of the health status and academic performance of first year medical students



	Academic Performance				
Overall health status	<b>Good</b> 87.5-93.5	<b>Average</b> 80.6-87.0	<b>Fair</b> 75-80.5	<b>Poor</b> 74.9 and below	Total
Healthy and not at risk of having other health condition	3 1.79 0.82	4 7.63 1.73	9 <i>6.53</i> 0.94	0 <i>0.05</i> 0.05	16
Healthy but at risk of having other health condition	16 13.2 0.6	56 <i>56.28</i> 0	45 <i>48.13</i> 0.2	1 <i>0.39</i> 0.96	118
Unhealthy but not at risk of having other health condition	0 <i>2.91</i> 2.91	19 <i>12.4</i> 3.51	7 10.61 1.23	0 <i>0.09</i> 0.09	26
Unhealthy and at risk of having other health condition	<b>15</b> 16.11 0.08	66 68.68 0.1	<b>63</b> 58.74 0.31	0 <i>0.47</i> 0.47	144
Total	34	145	124	1	304

\* $X^2$ =13.99 df=9  $X^2$ /df=1.56 **p**-value= **0.1225** (level of significance <**0.05**)

#### CONCLUSION

 Medical students may still achieve good, average and fair academic performances regardless of overall health status.

#### CONCLUSION

 Other factors may also contribute to the academic performance regardless of the overall health status of the student.

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