## Factors Related to Asthma Control of Adolescents and Adult Patients at Center of Excellence Allergy, Asthma and Pulmonary diseases, Thammasat University Hospital

Center of Excellence for Allergy, Asthma and Pulmonary Diseases, which cares for asthma patients. There have been problems with adolescents and adults who have poor control over the disease, as a history has shown that patients still have relapses, and according to data from Thammasat Hospital Patient Registration, fiscal year 2018 adolescent and adult asthma patients recorded 48 hospitalizations, based on the number of adolescent and adult asthma patients being treated at the Center of Excellence for Allergy. There were 124 cases of asthma and respiratory disease, 38 percent of which were interested in studying factors correlated with asthma control levels. To be used as information and as a guideline for the development of healthcare systems for asthma patients who are being treated in the Center of Excellence for Allergy. Further asthma and respiratory diseases

This research studies about Descriptive Correlation Research which aims to 1) Study Asthma control in teenage and adult patients, Center of Excellence for Asthma, Allergy and Pulmonary Diseases, Thammasat University Hospital 2) Study relationship among Asthma control in teenage and adult patients, and demographic factors, which are age, education, household income, disease severity, illness duration, comorbidity, body mass index, and stress 3) Study relationship between abilities of Asthma patients to take care of themselves and Asthma control in teenage and adult patients 4) Study relationship between knowledge towards Asthma, and Asthma control in teenage and adult patients. Samples include 101 Asthma patients in teenage and adult age range who had medical care at Center of Excellence for Asthma, Allergy and Pulmonary Diseases, Thammasat University Hospital, Patumthani during July 2020 – January 2021. Data collection tools include (1) Personal data record form (2) Stress test (ST-5) of Department of Mental Health, Ministry of Public Health (3) Questionnaire to measure abilities of Asthma patients to take care of themselves (4) Questionnaire to evaluate Asthma knowledge (5) Asthma Control Test: ACT). Statistics is used to analyze correlations among variables which are age, household income, illness duration, stress, abilities of Asthma patients to take care of themselves, knowledge towards Asthma, and Asthma control in teenagers and adults by applying Pearson's Product Moment Correlation Coefficient, then analyze correlations among education, disease severity, comorbidity, body mass index, and Asthma control of patients by applying Spearman Rank Correlation Coefficient.

Therefore, nurses should evaluate stress level, knowledge towards Asthma, and age range of Asthma patients in order to identify related problems and provide proper treatment for Asthma patients.

| Variables                    | Correlation coefficient(r)<br>of asthma control | p-value | Relationship level |
|------------------------------|---|---------|--------------------|
| age                          | 247*  | .013    | Low                |
| illness duration             | .074  | .464    |                    |
| body mass index              | .004  | .965    |                    |
| stress                       | 351**   | .000    | moderate           |
| abilities of Asthma patients | .094  | .352    |                    |
| knowledge towards Asthma     | .227*   | .022    | Low                |

Findings shown that age, stress, and knowledge towards Asthma are related to abilities of patients to control Asthma, in which, stress shown the highest inverse relationship with Asthma control (r = -.351, p = .000), followed by knowledge towards Asthma (r = .227, p = .022), and age (r = -.247, p =.013), respectively, while education, household income, disease severity, illness duration, comorbidity, body mass index, and abilities of patients to control Asthma shown no relationship with Asthma control of teenage and adult patients (p > .05).



