A STUDY OF INSOMNIA AT PRECLINICAL AND CLINICAL STUDENTS, FACULTY OF MEDICINE

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ABSTRACT

Insomnia is one of sleep disorder. Prevalence of insomnia in health students group is higher than non-health students group. This study aims to compare of insomnia level at preclinical and clinical students faculty of medicine. A cross sectional study was conducted on medical students, Faculty of Medicine, University of Muhammadiyah Semarang (Unimus). Determination of sample using Slovin formula with simple random sampling technique. students did not have problems such as had stopped in the previous semester, college not because of his wishes, was not being sad condition, and not smoking were included in study. Insomnia level was measured using Insomnia Severity Index (ISI questionnaire) and analyzed using chi-square test. Among 86 samples divided into 2 groups (preclinical and clinical stage), there is a significant difference insomnia level (p = 0.006) at preclinical and clinical students. Insomnia level of clinical students is higher than preclinical students in Faculty of Medicine.

Keywords : insomnia, preclinical student, clinical student

INTRODUCTION

One of the sleep disorders is insomnia. Insomnia is a condition where individuals are difficult to start or maintain sleep at least three times a week for a month.[1] Insomnia is found in the Indonesian population of 11.7%.[2] Insomnia that is not treated immediately can cause a problem in student learning concentration, so that the learning process becomes inefficient.[3] There are limited data about insomnia in Indonesia, so the aim of this study is to compare of insomnia level at pre-clinical and clinical students in faculty of medicine.

RESEARCH METHODS

A cross sectional study was conducted on medical students, Faculty of Medicine in Universitas Muhammadiyah Semarang (Unimus), Indonesia. The determination of sample used Slovin formula with simple random sampling technique. The samples divided into 2 groups (pre-clinical and clinical stage) with ratio of 1: 1. The sample of each group was 43 people from total population of 74 pre-clinical and 60 clinical people respectively. The students' characteristics that included in this study were they should not have problems such as; (1) had stopped in the previous semester, (2) studying in medicine faculty not because of their wishes, were not in sad condition, and not smoking. The samples were excluded with severely ill like: kidney failure, prostatic hypertrophy, congestive heart failure, asthma, and Diabetes Militus (DM); had been or were experiencing a mental disorder (schizophrenia); taking drugs such as: amphetamine, antidepressants, anorexia, or anti tuberculosis; consumed alcohol; consumed caffeine every day (such as coffee, tea, etc.).

Insomnia level was measured using Insomnia Severity Index (ISI questionnaire) [4,5] and being analyzed using chi-square test.

RESULTS

Among 43 samples of each group (pre-clinical and clinical stage), the baseline characteristics were described in Table 1. Most insomnia at pre-clinical stage was mild insomnia (74.4%), whereas most insomnia in the clinical stage was moderate-severe insomnia (41.9%). There was a significant difference insomnia level (p = 0.006) at pre-clinical and clinical stage with 18 samples (41.9%) of clinical students suffered moderate-severe insomnia (Table 2).

Table 1. Baseline Characteristics Of Samples

Characteristics	Pre-clinical stage n 43 (%)	Clinical stage n 43 (%)
Age (y.o)		
19	23 (53,5)	0 (0,0)
20	15 (34,9)	0 (0,0)
21	3 (7,0)	6 (14,0)
22	2 (4,7)	20 (46,5)
23	0 (0,0)	17 (39,5)
Sex		
Male	9 (20,9)	12 (27,9)
Female	34 (79,1)	31 (72,1)
Insomnia level		
No insomnia	6 (14,0)	5 (11,6)
Mild insomnia	32 (74,4)	20 (46,5)
Moderate-severe insomnia	5 (11,6)	18 (41,9)

Table 2. Insomnia Level At Pre-Clinical And Clinical Stage

Insomnia level	Stage		n (%)	p-value
	Preclinical n (%)	Clinical n (%)		
No insomnia	6 (14,0)	5 (11,6)	11 (12,8)	0,006
Mild insomnia	32 (74,4)	20 (46,5)	52 (60,5)	
Moderate-severe insomnia	5 (11,6)	18 (41,9)	23 (26,7)	
Total n (%)	43 (100,0)	43 (100,0)	86 (100,0)	

DISCUSSION

This study was similar to those of previous studies at Universitas Sebelas Maret (UNS) which found significant differences between incidence of insomnia in pre-clinical and clinical education students (p = 0.017) in which more than 50% of the insults were experienced by clinical stage students (65.7%).[6]

This study showed that insomnia in clinical stage students (88.4%) were more than the previous research (60%).[7] Insomnia in the clinical stage could occur due to physical fatigue and emotions that could increase stress. Insomnia could also occur due to changes in circadian rhythm of the previous stage. Insomnia level of clinical students was higher than pre-clinical students in Faculty of Medicine, Unimus.

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