

**Determining the factors affecting the knowledge levels of ECG interpretation of the pediatric residents and interns (last year medical students) in ECG learning program**

*Levent E., Avcu G.A., Ozyurek R., Bozobali S., Sahan Y.O.*

*Ege University, Faculty of Medicine, Pediatric Cardiology Department, izmir, TURKEY*

Electrocardiography occupies a significant place in the diagnosis of cardiovascular diseases. In this study, it was aimed to determine the factors affecting the knowledge levels ECG interpretation of the pediatric residents and interns (last year medical students) before and after ECG learning program. 24 pediatric residents and 35 rotating interns were included. Interns and assistants were randomized into two groups. They were asked to complete a questionnaire (comprised of 20 EKG samples lacking clinical data other than age of the patients and of 30 findings) in 20 minutes. After training the same test presented to participants at one month and at one year. 16 (69.5%) of the residents were females and 7 (30.5%) were males. 3 (13%) of the residents were one-year residents, 8 (34.7%) were two-year residents, 6 (26%) were three-year residents and 6 (26%) were four-year. The rates of correct answering to the total findings pre-training were 24.2% in residents and 17.1% in interns; however post-training rates were 38.5% in assistants and 41.8 % in interns; at one month they were 33.4% in residents and 42.1% in interns; at one year they were 32.7% in residents and 34.37% in interns. At the assessments performed during pre-training and at one month a statistically significant difference was found between groups. It was observed that the most correctly answered EKG sample was normal EKG; residents rate increased from 60.8 % pre-training to 78% at one year; however, interns rate did not change significantly, 52.9% pre-training and 52.4% at one year. Pre-training, post-training and one-year total finding rates known by assistants who received cardiology rotation were higher than those who did not receive. However, similar values were observed at the end of one year and a statistically significant difference could not be found between two groups. In first three sessions, there was an increase in assistantship years and known total finding rates. At the end of one year the total finding rate known by 1-year assistants was detected as 15%; this rate was similar (30%) in 2-3-4-year residents and a statistically significant difference could not be found.