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Tuesday Abstract Posters

SESSION TITLE: Tuesday Abstract Posters

SESSION TYPE: Original Investigation Posters

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THE EFFECTS OF ACTIVE AND PASSIVE SMOKING TO PREDICTED PEAK EXPIRATORY FLOW RATE AND OXYGEN SATURATION AMONG INDONESIAN PRIMARY SCHOOL CHILDREN (AGED 10-13 YEARS) IN BANDAR LAMPUNG, INDONESIA

RETNO ARIZA SOEMARWOTO MD, FCCP* SYAZILI MUSTOFA HETTI RUSMINI FRANSISCA SINAGA AND NIKMA FADHILA

PURPOSE: The goal of this study was to point out the effects of active and passive smoking to the value of predicted peak expiratory flow rate (PEFR) and oxygen saturation in the primary school children.

METHODS: A cross-sectional study was used in this research. It was conducted at 20 elementary schools in the Bandar Lampung, Indonesia. The sample consisted of 666 students who were 10 to 13 years. They were divided into three groups: active smokers, passive smokers and those not exposed to cigarette smoke (control group). Each of subjects' predicted PEFR was determined using a peak flow meter. Measurements were performed in triplicate with the highest value recorded as the predicted PEFR. Pulse oximetry was calculated using a Finger Pulse Oximeter. Demographic data including age, sex, and smoking history were obtained through questionnaires.

RESULTS: The sample consisted of 101 active smokers, 450 passive smokers and 115 controls. Age distribution was similar among group. We observed a significant difference in predicted PEFR between the group of active smokers (88.47 SD ±11.647), and passive smokers (87.81 SD ±11.056) if we compared to control group 92.56 (SD ± 11.996), $p = 0.01$ and $p = 0.04$ respectively. In the case of oxygen saturation, active smokers group (94. 76 SD 2.577) was significantly different if we compared to passive smokers (95.45 SD± 2.509) and control group (95.92 SD± 2.236), $p = 0.000$, whereas oxygen saturation in passive smokers group was not significantly different with control group, $p = 0.085$.

CONCLUSIONS: The predicted PEFR in Primary School Children active and passive smokers was significantly lower than control group. In addition, oxygen saturation in in Primary School Children active smokers was significantly lower than control group. This study confirms that smoking both active and passive disrupts the children's airways.

CLINICAL IMPLICATIONS: It confirms that smoking both active and passive disrupts the children's airways.

DISCLOSURES: no disclosure on file for Nikma Fadhila;

No relevant relationships by Syazili Mustofa, source=Web Response

no disclosure on file for Hetti Rusmini;

no disclosure on file for Fransisca Sinaga;

No relevant relationships by Retno Ariza Soemarwoto, source=Web Response

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