

organization commitment ($p=0.001$), state of mind ($p<0.001$), resilience ($p=0.031$), confidence level ($p<0.001$), physical symptoms ($p<0.001$), energy levels ($p<0.001$), workload ($p<0.001$), relationship ($p=0.006$), personal responsibility ($p<0.001$), home-work balance ($p=0.017$), type A drive ($p<0.001$) and life-work balance ($p=0.019$). Lecturers were significantly more satisfied in their job than medical officers ($p=0.019$) and house officers ($p=0.027$). Consultants were more committed than medical officers ($p=0.029$) and house officers ($p=0.004$), and had a better state of mind than the other three groups. House officers had the poorest state of mind and were least satisfied. Working relationships problems, heavy workload and home-work imbalance were the main sources of stress. This study concluded that early career doctors were most stress and least satisfied and thus steps need to be taken to mitigate these stresses in order for doctors to provide a better quality of care to patients.

OT26-4

Pb-Air and Its Correlation with Concentration of Pb-Blood in Surabaya Street Children

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The greatest source of lead pollution is from exhaust gas transportation mode, especially emission which come from internal combustion engine exhaust gas, that use gasoline, which contains of Lead. Many researches found the evidence for Pb exposure are more than 10 µg/dl are very dangerous for children and can cause brain damage, kidney, bone marrow, and other children organ damage. The objective of this research was to make a model of Pb-Air and its correlation with concentration of Pb-Blood in street children in Surabaya. This was an observational study with cross-sectional study approach. This research was brought in 6 locations. The research sample were street children that took by inclusion criteria, such as: 5-12 years old with time exposure 5 hours/day. Data about respondent characteristic were collected through interview guided by questionnaire, took street children blood for laboratory essay using leadcare test, also air sample using High Volume Sampler (HVS) for laboratory essay to know the concentration of Pb-Air. Data were analyze using descriptive and analytical method by tabulation and linier regression ($\alpha = 0.05$). The result of this research and laboratory essay showed that average traffic volume in Siola crossroad, Ambengan crossroad, Banyu Urip crossroad, front of Joyoboyo terminal more than 2400 smp/hour, such locations categorized as crowded traffic volume. Pb-Air concentration in front of JMP shops was 0,553 µg/m³, Siola crossroad was 0,46 µg/m³, Ambengan crossroad was 0,293 µg/m³, Banyu urip crossroad was 0,452 µg/m³, Adityawarman crossroad was 0,405 µg/m³, and in front of Joyoboyo terminal was 0,437 µg/m³. Mostly, the Pb-blood concentration in street children (67%) less than normal concentration (< 10 µg/dl). The highest was

19,6 µg/dl. According to linier regression test, the model of Pb-air and its correlation with Pb-blood in street children in Surabaya was $y = 8,658 - 9920,059 X1 + 10390,817 X2$. Where X1 expressed concentration of Pb-air at noon (µg/m³), X2 expressed concentration of Pb-air at night (µg/m³), and y expressed concentration of Pb-blood in street children (µg/dl).

OT26-5

Indoor Acanthamoeba as Potential Pathogens of Building Related Illnesses

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Microbes in the indoor environment can be aetiological agents for building related illnesses (BRIs). Since 1995, Acanthamoeba has been reported to cause keratitis, granulomatous amoebic encephalitis, and other pathological lesions in Malaysia. The roles of Acanthamoeba as pathogens and as vectors for infections caused by their endosymbiotic microorganisms are being studied. We studied the pathogenic potential of indoor isolates of Acanthamoeba based on culture, morphological, molecular and experimental infection characteristics. Primary isolates of Acanthamoeba from dust samples of air-conditioners were obtained. Selected environmental isolates were axenised. Established axenic Acanthamoeba isolates were determined for their clonality using PCR and sequencing. Pure-cloned isolates were characterised morphologically and molecularly. Five species were identified according to morphological criteria as *A. castellanii*, *A. culbertsoni*, *A. griffini*, *A. lenticulata*, and *A. polyphaga*. These were placed in the T3, T4 and T5 genotypes on molecular characterisation. Two clinical isolates and other environmental isolates were placed into T4 genotype. Species identities for some isolates could not be determined morphologically. Many isolates were predicted as potentially pathogenic based on PCR analysis, temperature tolerance and osmotic tolerance tests. The pathogenic potential of isolates was further confirmed by their ability to cause glial cell death in in vitro cytopathogenic assays and pathological lesions in experimentally infected Balb/c mice. Electron microscopy showed that physical contact of Acanthamoeba trophozoites to glial cells could trigger apoptosis and necrosis of glial cell. The potential role of Acanthamoeba as causative agents in building related illnesses is discussed in the light of these findings.