

A cross-sectional study to determine the prevalence of pre hypertension in children (5-15 years old) with exposure to biomass and indoor pollution in Rural Sabah.

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A subclass of hypertension known as hypertension was defined as systolic blood pressure 120-139mmHg or diastolic blood pressure of 80-89 mmHg (Roth & Brown, 2006). Not only does Pre- hypertension cause an increase in chances of one eventually developing hypertension but also there is an increase chance of this patient developing other morbidities. Biomass being the world's 4th largest energy source is found vastly in Malaysia due to its tropical weather and location. The research questions in this study are. 1) Is there any prevalence of Pre-hypertension among the children aged 5 -15 years old in rural Sabah? 2)What is the percentage of the prevalence of Pre- hypertension among the children aged 5 -15 years old in rural Sabah. 3)What is the relationship between children with Pre-hypertension and exposure to indoor pollution? The primary purpose of this research is to measure the prevalence of Pre-hypertension among the children aged 5-15 years old and to find out the relationship between Pre-hypertension and exposure to indoor pollution. By carrying out this study, the research will be able to include or exclude an additional risk factor for Pre-hypertension and eventually hypertension. As no such study has ever been done in regards to children, this can further help us to prevent further complications. As a result, this can further decrease the burden on the current healthcare system in Malaysia as we can decrease the prevalence of eventual hypertension by making small modifications. The research methodology is that a Cross-Sectional Study will be conducted with a target population of children aged 5-15 years old located in households in rural areas of Sabah. The equipment used to measure Blood pressure and indoor pollution will be a Pediatric Sphygmomanometer & DustTrak. Two Children per Household will be chosen with a sample size of 165 samples. The Inclusion & Exclusion Criteria is children with SBP of 120-139mmHg , DBP of 80-89mmHg will be included and children above 15 years will be excluded in the research. The sampling Method will be Random. A statistical analysis can then be done to determine if there really is an association between Pre-hypertension and indoor pollution.

Keywords: Pre-hypertension, indoor pollution, Malaysia, Children, Sabah

Biography:

Dr. Talha Zaigham is graduated from Xi'an Jiaotong University, China with a MBBS degree in the year 2019. After which, he has cleared his USMLE Exam step 1 in 2021. He is currently a Master's student in community medicine at UMS, Malaysia. He currently in works of 3 major research projects, leading this particular one and working in a team for the other two. He has a passion for community medicine (public health).