

Assessment and Evaluation of Traffic Noise in Selected Government Healthcare Facilities at Birnin Kebbi, Kebbi State-Nigeria

Authors : Muhammad Naziru Yahaya, Buhari Samaila, Nasiru Abubakar

Abstract : Noise pollution caused by vehicular movement in urban cities has reached alarming proportions due to continuous increases in vehicles and industrialization. Traffic noise causes deafness, annoyance, and other health challenges. According to World Health Organization recommends 60Db daytime sound levels and 40db night time sound levels in hospitals, schools, and other residential areas. Measurements of traffic noise were taken at six different locations of selected healthcare facilities at Birnin Kebbi (Sir Yahaya Memorial Hospital and Federal Medical Centre Birnin Kebbi). The data was collected in the vicinity of hospitals using the slow setting of the device and pointed at noise sources. An integrated multifunctional sound level GM1352, KK2821163 model, was used for measuring the emitted noise and temperatures. The data was measured and recorded at three different periods of the day 8 am - 12 pm, 3 pm - 6 pm, and 6 pm - 8:30 pm, respectively. The results show that a fair traffic flow producing an average sound level in the order of 38db - 64db was recorded at GOPDF, amenityF, and ante-natalF. Similarly, high traffic noise was observed at GOPDS, amenityS, and Fati-LamiS in the order of 52db - 78db unsatisfactory threshold for human hearing.

Keywords : amenities, healthcare, noise, hospital, traffic

Conference Title : ICEPM 2023 : International Conference on Environmental Physics and Meteorology

Conference Location : Tokyo, Japan

Conference Dates : June 15-16, 2023