

**Study of cardiac involvement in 200 cases of dengue fever” in Shanti I.D Clinic Vadodara (Gujarat State ) India.****Omnia Mubarak Saad Abdallah***Nile University, Sudan*

Statement of the problem: people who work in Rabak cement factory are highly exposed to cement dust, which results in respiratory as well as non-respiratory diseases such as hypertension. AS hypertension leads to lethal complications if not treated, secondary prevention provides early detection and treatment of the disease and prevention of comorbidities. The purpose of this study was to determine the prevalence of high blood pressure (BP) and to associate the dust exposure with blood pressure. Methods and Materials: it was analytical, cross sectional study, 125 workers were randomly selected and divided into two groups according to level of exposure. Group A included 79 workers who were working at unites of production, crushing, packing, control, maintenance, electricity, and portorage. While group B included 46 workers from administration, safety and security, laboratory, financial unit, and transportation. Data was collected through a structured interview after informed written consent was taken from each subject. Asking about the sociodemographic data, work unit and duration. Then, blood pressure was measured using mercury sphygmomanometer while the subject was sitting, and the reading were double checked after 5 minutes. Data was analyzed using chi square test in SPSS v 21®. Findings: prevalence of high blood pressure was 48.8% ,61 workers either had systolic BP  $\geq 140$  mmHg, diastolic BP  $\geq 90$  mmHg or both. high blood pressure was found to be significantly high in males, age group 49-58 compared to females, younger workers. There was also a statically significance increase in BP in group A in comparison to group B as shown in figure 1. Moreover, both SBP and DBP were high in workers who worked for 5-10 years. Conclusion: there is significant association between dust exposure and increase in blood pressure. Recommendations for further case control studies to be conducted in other factories to either emphasize or reject these results.

Figure 1: I shows systolic blood pressure (SBP) among group A and B where  $P = 0.014$ , II showing diastolic blood pressure (DBP) amon group A and B where  $P = 0.038$ .

Normal BP: systolic blood pressure (SBP) 90-120 mmHg, diastolic blood pressure (DBP) 60-90 mmHg

Low BP: SBD less than 90mmHg, DBP less than 60mmHg

Prehypertension (Pre-HTN): SBP 120 -139 mmHg or DBP 80-89 mmHg

**Biography**

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