

**Environment and risk factors for Childhood Leukemia in the Gaza strip: Case-control study****Heiam A Elnuweiry**

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**Background:** Childhood leukemia is one of the most common types of cancer developed children until 12 years old in Palestine without unknown causes and one of the top ten cancer types killers. The aim of this study is to identify the main environment risk factors for childhood leukemia among children in Gaza Governorates.

**Methods:** A case control study conducted from five Gaza strip governorates and consisted of 132 child divided in two groups (44 cases who had confirm of childhood leukemia and 88 controls had not). Controls and cases are matched by age, sex and residency. The cases distributed on Gaza Governorates. The cases were matching as 1 case: 2 control

**Finding:** The results of the study showed that risk factors associated with childhood leukemia were as follows: 54.5% were males and 45.5% were females. exposure to Ultrasound during gestational period (P value = 0.009), family cancer history (P value = 0.036), daily beverage intake (P value = 0.002) and additives in

drinking (P value = 0.000)), also, there was association between family history of smoking (P value = 0.016) and pregnant exposed to passive smoking as (P value = 0.018), pregnant exposed to aerosol (P value = 0.011), child exposed to paints and aerosol (P value=0.001), child exposed to white phosphorus (P value=0.016), electromagnetic field (P value = 0.007), while the study found child age, birth weight, child occupation, child exposed to (passive smoking and X ray) were not association for childhood leukemia. Also, mother age, mother exposed to X ray, white phosphorus and explosive material were not relevant for childhood leukemia. Likewise, live status, additives in food and Petroleum station in the same region were not associated with childhood leukemia.

**Interpretation:** The main of the environment risk factors appeared are avoidable and can be prevented.

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