

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قال تعالى :

( وَلَسَوْفَ يُعْطِيكَ رَبُّكَ فَتَرْضَى )

صدق الله العظيم

سورة الضحى الايه (٥)

## DEDICATION

*We dedicate this research to*

*Our mother.....*

*Our father.....*

*For their support and kindness*

*Our friends and our colleagues .....*

*Everyone from whom we learned.....*

## Acknowledge

*We are greatfully thanks to Allah firstly*

*And thanks to supervisor Hisham Abd Alhamed*

*We wish to thank the management and the workers at the cement factory where this study was conducted for this cooperation*

**List of abbreviation :**

CBC	Complete blood count
WBCs	White blood cell
HGB	Hemoglobin
RBCs	Red blood cell
HCT	Health check test (Hematocrit)
MCV	Mean cell volume
MCH	Mean corpuscular hemoglobin
MCHC	Mean corpuscular hemoglobin concentration
RDW.cv	Red cell distribution width.coeffetion variation
RDW.sd	Red cell distribution width. Stander devolution
PLT	Platelets
MPV	Mean platelet volume
PDW	Platelet distribution width

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## **Abstract**

This study was conducted in cement factory in barber to assess cement dust exposure and relationship to complete blood count change and allergic condition among workers .

A total 120 exposure workers and 30 non exposure (control), participated in this case control study , this study measured haematological parameters in construction workers exposure to cement dust , silica, and other hazardous material . this was done in order to identify a simple , readily available , and cost effective screening test that could help to identify the presence of disease and its severity in workers potentially related to their work space

Blood sample were collected from each participate and percentage of hemoglobin, total WBCs count , platelet count ,and different, RBCs count and RBCs indices ,Where are variation in above after investigation.

And increase in eosinophil due to allergic disorder.

## الخلاصة:-

اجريت هذه الدراسة بمصنع اسمنت بربر وهذه الدراسة وصفية تحليلية لتقييم التعرض لغبار الاسمنت وعلاقته بالتغيير في الدم الكامل و بحالات الحساسية عند عمال المصنع. جمعت مائة وعشرون عينة من عمال متعرضين لغبار في عملهم وثلاثون غير متعرضين . قيست تحاليل الدم المعملية للعمال المتعرضين للغبار والسيكا واي مواد خطرة اخرى . رتبت هذه التحاليل ترتيب بسيط ومتاح ويسهل التعرف علي قدر فعالية عمليات الاختبار للمساعدة علي وجود المرض وخطورته علي العمال واحتمالية علاقته بمكان عملهم . اخذت عينات الدم للعمال المشاركين ووجدت حالات حساسية لبعض العمال وكذلك التغيير بدمهم الكامل بعد تحليل الهيموقلوبين ، كريات الدم الحمراء ، كريات الدم البيضاء ، الصفائح الدموية ، مؤشرات كريات الدم الحمراء المختلفة بالنسب المئوية .