

**COMPARATIVE STUDY OF OCCUPATIONAL DERMATOSES  
AMONG WORKERS IN CEMENT INDUSTRY AND CONSTRUCTION WORKERS**

**A Thesis**

**Submitted as a partial fulfillment for the  
M.D. Degree in Industrial Medicine and Occupational Health**

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### ACKNOWLEDGMENT

It is a real pleasure to express my sincere gratitude and cordial thanks to professor Dr. **Aly A. E. Massoud**, Vice dean of post-graduate studies and research, Faculty of Medicine, Ain Shams University for his helpful guidance, constant encouragement and supervision all through this study.

I wish to express my deepest gratitude and sinserest thanks to professor Dr. **M. Abdel-Rahiem Abd-Allah**, Department of Dermatology and Venereology, Faculty of Medicine, Ain Shams University, For his immeasurable help, generous and real assistance in preparing and writing every word in this thesis.

I would like also to express my thanks to Dr. **Ahmed Abdel Karim**, Assistant Professor of occupational health, National research center for his continuous help during this work.

My deep gratitude goes to Professor Dr. **Rifky Faris**, Head of the Department of Community, environmental and occupational medicine, for his suggestions, guidance and constant help.

I feel greatly indebted and exteremly grateful to Dr. **Hussien Abdel Daïem**, Lecturer in the Department of Dermatology and Venereology for his useful help.

I express my thanks to Dr. **Mohsen Abdel Hamid**, Lecturer in the Department of Community, environmental and occupational medicine, for supervising the statistical analysis of this work.

I would like also to thank all the members of the department of community environmental and occupational medicine for their continous co-operation.

Finally I should not forget to thank every person who freely cooperated with me to make this work possible especially Mr. **Fouad Emmara**, Mr. **El-Fouly**, Mr. **M. Ibrahiem** and Mr. **El-Khateeb**.



**TO MY WIFE AND DAUGHTERS**

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# *INTRODUCTION*

## INTRODUCTION

With the creation of man-made dwellings, arose the need for some sorts of binder. Primitive men used for their buildings a mixture of clay and water. The ancient Egyptians used a mortar made of burnt gypsum mixed with sand in constructing the pyramids.

The Romans attained a higher degree of perfection in their buildings, in the making of mortar made of lime.

Since the invention of portland cement by Aspedin in 1824 in England, the incidence of occupational dermatoses among construction workers has been considerably increasing due to the expansion in civilization.

Nowadays, the erection and development of cement industry in any country is considered a sign of progress, to such an extent that civilization of a country is actually measured by the amount of its cement production.

Skin diseases in cement industry are widely reported and have been said to account for about 25% and more of all occupational skin diseases. However, these are more frequent among cement users than among cement manufacturing plant workers. It was suggested that cement eczema might be due to the presence of hexavalent chromium in the cement (Prodan, 1983).

In Egypt the number of workers in the different construction activities and cement manufacturing plants, and exposed to cement represents an important segment of the total active working population of the country and is considerably expanding especially after 1973 war. However, no complete information is available about the prevalence of the various dermatoses among them. This study was, therefore conducted to develop such information and to investigate the risk factors that may affect the prevalence of these diseases among cement users and cement manufacturing plant workers. Also, to cover the lacking informations about the chemical composition and trace elements of different types of Egyptian cement.