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**Title of Thesis:** Assessment of Lipid Peroxidation and P53 as a Biomarker of Carcinogenesis Among Workers Exposed to Formaldehyde in Cosmetic Industry

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**Abstract :**

Despite the wide use of cosmetic products, they exert a number of health effects on tissues ranging from irritation to cancer. Our study aimed at assessing the effect of formaldehyde on lipid peroxidation and verifying the susceptibility to carcinogenesis using p53 as a biomarker among workers exposed to formaldehyde in cosmetic industry. Our entire exposed group (n=40) and matched control (n=20) were subjected to estimation of formate in urine, serum malondialdehyde and p53. Also, complete blood picture, liver and kidney function tests were done. The study revealed significant increase in formate, malondialdehyde and p53 in the exposed group compared to their control. Our results showed that workers in cosmetic industry had significant exposure to formaldehyde. Further, the study pointed to the negative impact of formaldehyde as a cause of oxidative and suspicious carcinogen.

**Keywords:**

Cosmetic industry; Formaldehyde; Malondialdehyde and p53.