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• **Relationship between Poorer Sleep Quality with IL- $\beta$  Cytokine in Chemical Victims: Sardasht-Iran Cohort Study**

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**Background:** Sleep problems in chemical victims are frequently overlooked despite negative impact on patients' perceived health-related quality of life. Sleep deprivation induces significant elevation of serum IL-1  $\beta$  in healthy people. Furthermore, IL-1 $\beta$  and TNF- $\alpha$  are considered as sleep regulatory cytokines. The aim of this study was to evaluate the relationship between poorer sleep disorder with IL- $\beta$  cytokine in sulfur mustard exposed people. **Materials and Methods:** In a historical cohort study, Sardasht-Iran Cohort Study (SICS), 372 SM exposed participants were studied 20 years after exposure. The Pittsburgh sleep quality index (PSQI) was used to obtain a self-reported measure of sleep quality. Cytokine was assessed by ELISA quantitative kit.

**Results:** Based on the result of this study, there is a significant relationship between IL- $\beta$  cytokine with sleep quality (P= 0.01). **Conclusion:** Further insight into the functional role of cytokines on the sleep disorder of SM exposed individuals may result in the identification of novel therapeutic perspectives.

**Keywords:** Cytokines, Sulfur Mustard, IL- $\beta$ , sleep disorder