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• **Immunoglobulin and Physical Activity in Chemical Victims: Sardasht-Iran Cohort Study**

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Background: Physical activities have useful effects on different organs. The previous studies showed that the effect of exercise on immunoglobulin levels was not completely understood. The goal of this study was to assess the relationship between immunoglobulin classes and physical activity. **Materials and Methods:** In a historical cohort study, Sardasht-Iran cohort study (SICS), 372 SM exposed participants were studied 20 years after exposure. The global physical activity questionnaire (GPAQ) was used to obtain a self reported measure of physical activity. Serum levels of Immunoglobulins were assessed by Elisa quantitative method. **Results:** Based on the result of this study, it is found that there is a significant negative relationship between IgE with physical activity ($P=0.05$). The mean of IgE in low, moderate and high physical activities was 234.95 (SD=329.97), 196.51 (SD=289.31) and 151.77 (SD=187.31) respectively. There was not a significant relationship between IgM, IgA and IgG with physical activity. **Conclusion:** Because of poor pulmonary condition of SM exposed people, it seems that physical activity under supervision is a suitable option for them.

Keywords: Immunoglobulin, physical activity, chemical victims