## 11th International Conference on

## **ALLERGY, ASTHMA & CLINICAL IMMUNOLOGY**

September 07-08, 2017 | Edinburgh, Scotland



Hikmet J Jamil

Michigan State University, USA

## Impact of post-91-gulf war environment on allergies after ten years, among Iraqis who residents in or near war zone

Background: Gulf War 1991 (GW) syndrome is defined as a group of illnesses including allergy. Although it has been over two decades since GW is over, more research is needed to address the impact of GW chemical (Ch) & GW non-chemical (NCh) environmental exposures on the health of Iraqis. The Ch & NCh are the two main etiologies that could explain the high rate of medical conditions, including allergy. However, in 2015, 30% of adults & 40% of children in the US reported allergy.

Objective: (1) To examine the prevalence rate of allergy among the study population at different war zone location, (2) To predict risk factors for each type of allergy studied, and self-rated health of Study population, (3) To explore the impact of Ch & NCh agents on different types of allergy & its relation to war zone location.

Methods: In 2002, a cross-sectional study of 1155 Iraqis males, age 18-45, who were residents within 300 Km from GW-1991 were studied. Resident physicians from Basrah University, were trained to implement a structured interview with the participants. The study population were those who accompanied the patients who attend any of the three government outpatient clinics at two provinces general hospitals, which are free of charge to all people. The study population were classified into three zones according to their location during the GW: war zone 1 (Within 100 Km of Kuwait), zone 2 (within 100-190 Km) & zone 3 (within 200-300 km). The study questionnaires include different types of Allergy and the participants were asked to answer yes or no for the following allergies: (1) Pre-asthma symptoms (2) rhinitis (3) skin allergy (4) eye allergy (5) chemical sensitivity allergy and (6) other allergy (could be food, drug etc.). For Ch exposures, participants were asked if during the GW they had direct contact with certain exposures: E.g. petrochemical fuel. For NCh exposures the questions included: E.g. missiles exploding. Different statistical tests were used through SPS version 22.

Results: Study results showed a significant difference in the prevalence of allergies (combined or separated) except for eye allergy by different zones (higher in war zone). Regarding type of allergies, the highest rate was rhinitis (36.2%) and the lowest was chemical sensitivities (2.4%). There was difference in the prevalence rate of allergy when testing their demographic variables at different war zones (higher at war zones). The results identified the predictor risk factors for each type of allergy, in which some of them were related to Ch or NCh. 22.1% of the study population who lived in war zones reported their current health was fair to poor, compared to 8.6% among those who were in zone 3.

Conclusion: There were significant differences between the locations of participants during the GW-1991 in relation to different types of allergies. Those who reported excellent heath were: younger age, less years in army, hold high school or above, labor work, never smoke, have low scale of allergy and did not exposed to Ch or NCh.

## **Biography**

ISSN: 2155-6121

Hikmet J Jamil received his Medical Degree from Baghdad University, He holds several Postgraduate degrees from England. In 1979, he joined Baghdad University, then in 1998, he joined Wayne State University and in 2015 joined Michigan State University. He has published 20 books and 191 field research articles. He is one of the founders of "The International Society of Iraqi Scientists" in 2000 and "The AlNahrain International Society of Iraqi Scientists" in 2017. He was elected in 2002 as President of International Society of Iraqi Scientists until 2015. He received the Best Teacher Award from Wayne State University in 2006, 2010 and in 2013.

Hikmet.Jamil@hc.msu.edu