ABSTRACT BOOK ABSTRACTS



A new ERA for global Dermatology 10 - 15 JUNE 2019 MILAN, ITALY

EPIDEMIOLOGY

ASSOCIATIONS BETWEEN AIR POLLUTION, CLIMATE FACTORS AND OUTPATIENT VISITS FOR ACNE VULGARIS IN WEST CHINA HOSPITAL, CHENGDU, SOUTHWESTERN CHINA: A TIME SERIES ANALYSIS

Angi Li⁽¹⁾ - Li Li⁽¹⁾

West China Hospital, sichuan University, Dermatology, Chengdu, China⁽¹⁾

Introduction: As a chronic inflammatory disease of the follicle sebaceous glands, the incidence of acne vulgaris has been increasing in recent years. Our previous study indicated that the proportion of the outpatient department of acne vulgaris has ranked second in the dermatological outpatient department in West China Hospital. With the continuous development of society, environmental pollution has become a serious problem affecting public health. Whether environmental pollution is a contributing factor to acne remains to be determined.

Objectives: To master the change and trend of numbers of outpatient visits in department of dermatology;

To analysis of meteorological factors and air pollutants effects on outpatients with acne outpatient and its regularity;

Materials and Methods: Data of daily outpatient visits for acne vurgaris at the clinics of dermatology in West China Hospital within the last 5 years was collected. Data of environmental factors of Chengdu during the same period, including temperature, relative humidity, barometric pressure, wind speed and air pollutants concentrations like sulfur dioxide(SO2), nitrogen dioxide(NO2) and particular matter (PM10) was gathered. The Distributed lag non-linear model were used to statistically examine the relationship between eczema and environmental factors and their lagged effects.

Results: Correlation analysis showed that patients with acne vurgaris are positively correlated with NO2, relative humidity, air pressure, and negatively correlated to SO2. According to the DLNM analysis air pressure collaboratively affect the outpatients with acne vurgaris with wind speed, temperature, relative humidity and air pollutants. The influence of air pollutants on acne has a lag effect within 4 days.

Conclusions: This study provides evidence that environmental factors like relative humidity,











A new ERA for global Dermatology 10 - 15 JUNE 2019 MILAN, ITALY

multiple air pollutants influence the incidence and prevalence of acne vulgaris and have lagged effects.



24[™] WORLD CONGRESS OF DERMATOLOGY MILAN 2019



International League of Dermatological Societies Skin Health for the World

