
Epidemiology of acne in adolescence

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Acne is a chronic inflammatory disease of the pilosebaceous glands located on the face, chest, and upper back. It is characterized by the formation of comedones, non-inflammatory acne lesions (comedones) and inflammatory lesions (papules, pustules and nodules). Scarring and hyperpigmentation are also found in addition to the typical lesions of acne. Acne can occur around puberty and thereafter it gradually improves in the late teens or early twenties, but it may remain a clinical problem up to the age of 40 years or even older ages. The etiology and pathogenesis of acne are multi-factorial, including increased sebum production, abnormal follicular differentiation, Propionibacterium acne infection, inflammatory mediators, immunological status, genetic and hormonal factors. Many other factors might be considered as contributing factors to acne prevalence and severity including: physiological factors such as the menstrual cycle, pregnancy, anxiety, depression, and external factors such as hot and humid weather, lack of skin cleanliness, cosmetics, mechanical skin irritation from excessive washing, diet and smoking. In Egypt detailed studies on the magnitude of acne problem as regards, prevalence, sex distribution, and probable associated risk factors are lacking. The sample used in this study was 1000 students (300 males and 700 females) enrolled in Helwan University Hospital during the period from July to September 2008 for pre-college medical assessment. The prevalence of acne in the studied group was found to be 21.5% (30.3% males and 17.7% females). The mean age of onset was in males was 15.75 ± 1.1 while in females it was 14.33 ± 1.5 . The most common acne lesions were comedones 98.1%, the most affected site of acne was the face. In 95.6% of males and 99.1% of females. Important risk factors were family history which found to be positive in 43% of patients, stress which aggravates acne in 86.1% of patients, hot weather, exposure to sun light and excessive heat during summer time were believed to aggravate acne in 84.2% of patients. Seborrhea was found in 79% of acne patients (84.6% males and 75% females). Some types of foods were claimed to aggravate acne in 33.4% of patients specially spices and chocolates, the use of cosmetics exacerbate acne in 28.2% of female patients. Premenstrual flare of acne was found to affect 78.2% of female patients. Residence of acne patients may be of importance as proved by the high prevalence in the most polluted areas in Cairo. CONCLUSION Our findings demonstrate that: Acne is a common disease in our country affecting male adolescents more than females (30.3% versus 17.7%) The age at onset of acne in female Egyptian patients is earlier than in males (15.75 ± 1.1 in males and 14.33 ± 1.5 in females). It is a chronic skin disease of adolescents with a multi-factorial

etiology where stress, diet, genetic factors, seborrhea, excessive exposure to sunlight, excessive sweating, menstruation and cosmetics were believed by acne patients to affect their acne condition. Recommendation 1- Further studies are needed in Egypt to detect the prevalence of acne in rural and urban areas separately. 2- we need health education in our community to encourage adolescents to seek appropriate help with skin problems. 3- Co-operation between dermatologist and other health professionals would ensure the provision of accurate and up to-date information about acne and change dietary habits and life style of adolescents in our country. 4- We require an educational program for the public, particularly for adolescents and school students to fill the gap in their knowledge regarding acne and to improve their behavior to lessen the psychosocial impact of the disease on the patients.