

## Factors Influencing Peak Expiratory Flow Rate among Selected People in Basrah City

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**How to cite this article:** Adil G. Fadil, Hussein Sh Al-Essa, Firas Abdulkader et. al. Factors Influencing Peak Expiratory Flow Rate among Selected People in Basrah City. Indian Journal of Forensic Medicine and Toxicology 2022;16(4).

### Abstract

**Background:** In many obstructive airway diseases, including asthma, the Maximum Expiratory Flow (PEFR) measurement offers a reliable and objective technique for estimating the amount of airway blockage. Peak expiratory flow rate can be easily evaluated with a peak flow meter at home by the patient or their parents. The peak expiratory flow rate test measures how fast the air is circulating through the lungs.

**Materials and Methods:** The study was done in college of Dentistry, University of Basrah, we select 301 person who agree to participate of this study, an anthropometric measure were obtained from all subjects after simple interview, peak expiratory flow rate was obtained by using peak flow meter, then the result were analyzed using SPSS.

**Conclusions:** Peak expiratory flow rate in males was higher than females and showed a strong positive correlation with the study participants' age, height, weight, and body surface. The subjects' age and body mass index had an inverse relationship with peak expiratory flow rate; however, it was not statistically significant

**Keywords:** PEFR, BMI, height, weight, surface area

### Introduction

Knowledge of the normal function of individual organs in humans is fundamental in examining the effect of the patient's pathological process. In many obstructive airway diseases, including asthma, the Maximum Expiratory Flow (PEFR) measurement offers a single, reliable, and objective technique for estimating the amount of airway blockage. The PEFR

can be easily evaluated with a peak flow meter at home by the patient or their parents<sup>1</sup>. The anatomy of the respiratory system is well adapted to its primary function of transporting gases (O<sub>2</sub>) and out (CO<sub>2</sub>) of the body. The tidal volume (TV) is the amount of air moving in and out of each respiratory cycle of the lungs. In a healthy male and a healthy female, it measures around 500 mL, and on average, 400 ml respectively. The extra volume of air that can be

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