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A Study of Pulmonary Functions in Punjabi Type-2 Diabetics and Non-Diabetics

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Abstract

Aim: To observe pulmonary functions in Punjabi type-2 diabetics and non-diabetics. **Material and methods:** Fifty diabetic and fifty non-diabetics in the age range of 40-60 years voluntarily participated. The spirometery was performed to observe forced vital capacity (FVC), Forced Expiratory volume in 1 second (FEV1), (FEV1/FVC) and peak expiratory flow rate (PEF).**Results:** The mean age, height, weight, and BMI of type 2 diabetics and non-diabetics was 52.58 ± 4.70 years & 48 ± 4.72 years, 172.08 ± 6.30cm & 172.56 ± 7.44 cm, 70.36 ± 9.16 kg & 80.55 ± 9.41 kg and 23.74 ± 2.68kg/m^2 & 27.17 ± 3.71 kg/m^2. The mean FVC, FEV1, FEV1/FVC and PEF of type-2 diabetics and non-diabetics was 3.95 ± 0.59 liters & 4.59 ± 0.89 liters, 3.43 ± 0.50 liters & 3.83 ± 0.83 liters, 87.12 ± 5.12 % & 83.44 ± 0.81 %, 8.73 ± 1.22 liters/sec & 9.85 ± 1.69 liters/sec respectively. **Conclusion:** It was concluded that the various pulmonary function variables were reduced in Punjabi type-2 diabetics than non-diabetics. The reduced pulmonary functions in diabetics may be due to microangipathy of the alveolar capillary network in the lungs.

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Key Words: BMI, FEV, FVC, PEF, Spirometery

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