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Validation of Previous Spirometric Reference Equations and New Equations

Hye Sook Choi ¹, Yong Bum Park ^{2,3}, Hyoung Kyu Yoon ⁴, Seong Yong Lim ⁵,
Tae-Hyung Kim ⁶, Joo Hun Park ⁷, Won-Yeon Lee ⁸, Seoung Ju Park ⁹,
Sei Won Lee ¹⁰, Woo Jin Kim ¹¹, Ki Uk Kim ¹², Kyeong Cheol Shin ¹³,
Do Jin Kim ¹⁴, Tae-Eun Kim ¹⁵, Kwang Ha Yoo ¹⁶, Jae Jeong Shim ¹⁷ and
Yong Il Hwang ^{3,18}

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Address for Correspondence:

Yong Il Hwang, MD

Division of Pulmonary, Allergy and Critical Care Medicine, Department of Internal Medicine, Hallym University Sacred Heart Hospital, 22 Gwanpyeong-ro 170-beon-gil, Dongan-gu, Anyang 14068, Republic of Korea.
E-mail: hyicyk@hallym.or.kr

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ORCID iDs

Hye Sook Choi
<https://orcid.org/0000-0001-8387-4907>
Yong Bum Park
<https://orcid.org/0000-0002-5814-6104>
Hyoung Kyu Yoon
<https://orcid.org/0000-0003-4783-2077>
Seong Yong Lim
<https://orcid.org/0000-0001-8098-3622>
Tae-Hyung Kim
<https://orcid.org/0000-0002-3863-7854>
Joo Hun Park
<https://orcid.org/0000-0001-9971-7025>
Won-Yeon Lee
<https://orcid.org/0000-0002-5461-6770>
Seoung Ju Park
<https://orcid.org/0000-0003-0454-6118>

¹Department of Internal Medicine, Kyung Hee University Medical Center, Seoul, Korea
²Division of Pulmonary, Allergy and Critical Care Medicine, Department of Internal Medicine, Hallym University Kangdong Sacred Heart Hospital, Seoul, Korea
³Lung Research Institute, Hallym University College of Medicine, Chuncheon, Korea
⁴Division of Pulmonology, Critical Care and Sleep Medicine, Department of Internal Medicine, College of Medicine, The Catholic University of Korea, Seoul, Korea
⁵Division of Pulmonary and Critical Care Medicine, Kangbuk Samsung Hospital, Sungkyunkwan University School of Medicine, Seoul, Korea
⁶Division of Pulmonology, Department of Internal Medicine, Hanyang University Guri Hospital, Hanyang University College of Medicine, Guri, Korea
⁷Division of Pulmonary and Critical Care Medicine, Department of Internal Medicine, Ajou University School of Medicine, Suwon, Korea
⁸Division of Pulmonary, Allergy, and Critical Care Medicine, Department of Internal Medicine, Yonsei University Wonju College of Medicine, Wonju, Korea
⁹Division of Pulmonary, Allergy and Critical Care Medicine, Chonbuk National University Hospital, Chonbuk National University Medical School, Jeonju, Korea
¹⁰Division of Pulmonology and Critical Care Medicine, Department of Internal Medicine, Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea
¹¹Department of Internal Medicine, Kangwon National University School of Medicine, Chuncheon, Korea
¹²Department of Internal Medicine, Pusan National University School of Medicine, Yangsan, Korea
¹³Regional Center for Respiratory Disease, Yeungnam University Medical Center, Yeungnam University College of Medicine, Daegu, Korea
¹⁴Division of Allergy and Respiratory Medicine, Department of Internal Medicine, Soonchunhyang University Bucheon Hospital, Bucheon, Korea
¹⁵Department of Clinical Pharmacology, Konkuk University School of Medicine, Seoul, Korea
¹⁶Department of Internal Medicine, Konkuk University Medical Center, Seoul, Korea
¹⁷Division of Pulmonary, Allergy and Critical Care Medicine, Department of Internal Medicine, Korea University Guro Hospital, Seoul, Korea
¹⁸Division of Pulmonary, Allergy and Critical Care Medicine, Department of Internal Medicine, Hallym University Sacred Heart Hospital, Anyang, Korea

ABSTRACT

Background: Pulmonary functions are interpreted using predicted values from reference equations that vary with ethnicity, gender, age, height, and weight. The universally used Choi's reference equations are not validated for Korean populations, and the purpose of this study was to validate them and develop new reference equations.

Methods: Subjects with normal spirometry and chest radiographs, no co-morbidities, and non-smokers, from the Korean National Health and National Examination Survey (KNHANES)-VI were enrolled (n = 117). Intraclass correlation coefficient (ICC) was assessed for reliability of reference equations. New reference equations were developed using linear regression analysis. Differences between observed and predicted values were assessed

