

**TITLE:****THE USE OF SMARTPHONES IN RESPIRATORY MEDICINE: THE FUTURE****ABSTRACT:**

Chronic Respiratory diseases are very common and had tremendous economic burden. They cost \$389 billions/year in USA in contrast, to the second, the cardiovascular, that cost \$183 billions/year.

The economic burden is primarily due to frequent exacerbations of those diseases, needs to enhance of medical treatment, admission to the hospital and in ICU's. One significant reason for the above is the loss of coherence to the every day treatment or/and not following the instructions given by the medical staff in order to handle an exacerbation!

The use of SMART-PHONES can significantly improve this mismanagement of the Chronic Respiratory Diseases.

The current available literature point towards this use but it is still in a primitive stage. One way to overcome the problem would be to continuously monitor (every day) the condition of the patient by asking 5 simple questions concerning the symptom of the disease and biomarkers such as: Body temperature, heart rate, Oxygen saturation of Heogrobim, and an index of expired air flow.

All the above could be monitored by the Smart phone itself without the need of external devices. Then, this simple application for the user, will be transmitted and would be compared with the basic information and the overall stage of the severity of the patient. In case of worsening various flags will be raised given the proper instruction to the patients: for example increase your medications, call your doctor, go to the hospital ect.

Such a system, by improving the self management, aims to decrease morbidity, emergency room visits, hospitalizations and mortality of theses patients and thus, reduce the overall cost of these diseases!

It is obvious that such a system would need an advanced computing architecture, including mobile apps, algorithms, cloud technology, data analysis and others.

**NIKOLAOS M. SIAFAKAS MD, PhD, FRCP**

*Professor of Thoracic Medicine*

*Medical School University of Crete*

*Dept of Thoracic Medicine,*

**Tel: +30 2810 392 433**

*University General Hospital*

**Fax: +30 2810 542 650**

*71110 Heraklio Crete, Greece*

**Email: [siafak@med.uoc.gr](mailto:siafak@med.uoc.gr)**

- Date of birth:** 08.06.47
- Place of birth:** Athens
- Marriage status:** Married: Three children
- Undergraduate training:** Athens University, Medical School 1965-1971
- Medical specialties:**
- Internal Medicine 1971-1974 (Boards 1975),
  - Pulmonary Medicine 1975-1980 (Boards 1980)
- Academic Degrees:**
- MD, Athens University 1976
  - PhD, London University 1980
- Honors:**
- Honorary Fellow of Royal College of Physicians (London) 1995
- Postgraduate training:**
- London University, Gardiothoracic Institute. Clinical Assistant, (1975-1978)
  - Paris University, St Antoine Hospital. Research Fellow (1978-1979)
  - Mc Gill University, Meakins-Christie Lab, Montreal: Clinical Lecture (1979-1980).
- Posts:**
- Head of Department of Thoracic Medicine of Evangelismos Hospital (1981-1989)
  - Professor of Thoracic Medicine and Head of Department of Pulmonology, University of Crete (1989- today)

- Sabbatical as a Research Scientist in the Division of Physiology, Univ. of California, San Diego (1996-1997)
- Head of Department of Internal Medicine, University of Crete (2000-2002)
- Vice Rector for the Development and Financial Affairs of the University of Crete (Oct.2001-2004)
- Member of the board of Ethics Committee of the University of Crete
- Vice-President of the European Respiratory Society (Sept. 2007-8)
- President Elect of the European Respiratory Society (Sept. 2008-09)
- President of the European Respiratory Society (Sept. 2009-10)
- Past President of the European Respiratory Society (Sept.2010-11)

**Research interests:**

- Pathophysiology of COPD, Respiratory muscles, Control of Breathing, Mechanics of Breathing

**Editorial Board member:**

- Chest, Pulmonary Pharmacology & Therapeutics, Respiratory Medicine, Monaldi Archives, Chest Disease, World Journal of Respirology, BioMed Research International, European Medical Journal, Hellenic Journal of Medicine

**Reviewer of Journals:**

- Chest, Thorax, Eur. Respir Journal, Respir Med, AJRCCM, Respiration

**SUMMARY OF PUBLICATIONS:**

**Publications in peer reviewed Journals:** > **310 (Pub Med, ISI)**

**Abstracts** in international Meetings: > **377**

**Citations:** > **8.000**

**H- index** **36**

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