



# IMPA

## NEWS

THE OFFICIAL NEWS LETTER OF THE INDEPENDENT MEDICAL PRACTITIONERS ASSOCIATION

### PRESIDENTS MESSAGE

I sincerely appreciate the confidence of the IMPA members in electing me to be the President, for the year 2017/2018, of this prestigious organization for another year.

I take this opportunity to wish all of you the very best for the new year 2018.

I welcome all the elected office bearers and council members and thank the outgoing office bearers and council members for the support extended to me to make my task easy. I undertake to do my best for the benefit of the council and all the members of the IMPA.

I will continue to organize regular medical update programmes (as and when we are able to obtain sponsorships), publish the monthly news letter with the assistance of the Editor Dr. A.L.P. de S. Seneviratne, publish the IMPA Journal 2018, print an updated version of the IMPA Directory of members and update our website in addition to activities of benefit to the IMPA.

I would work closely with the OPA to update our fellow professionals and the general public on several health related issues, encourage independently practicing medical professionals to join the IMPA and strengthen our membership, promote the area of e-health / e-medicine, co-operate with the Ministry of Health and other medical organizations to deliver the health needs of our nation, in addition to all other duties and obligations assigned to me.

I further request all the IMPA council and members to assist and support me in all the activities of the IMPA during the year.

*Dr. A.H.A. Hazari*

### OBITUARY

It is with a deep sense of sorrow we announce the demise of our senior IMPA member Dr. Ranjith K.P. Atapattu who expired on 8<sup>th</sup> January 2018.

He was born on 29<sup>th</sup> April 1933 at Tangalle and was educated at Royal College, Colombo. He graduated from the Colombo Medical College in 1960. He established his own general medical practice in Beliatta and represented the United National Party as a member of parliament. He was the Minister of Health in Sri Lanka.

He was a life member of the IMPA and Vice President for several years.  
May his soul rest in peace.

## IMPA OFFICE BEARERS 2017/2018

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Vice Presidents	Dr. S.M. Goonesekera Dr. Palitha Abeykoon Dr. S.A.P. Gnanissara
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## INTRODUCTION TO ANTIMICROBIAL RESISTANCE

Antimicrobial resistance (AMR) is the ability of a microorganism (like bacteria, viruses, fungi and some parasites) to stop an antimicrobial from working against it. As a result, standard treatments become ineffective, infections persist and may spread to others.

There is an alarming increase in resistance to the major groups of “stronger, newer antibiotics” (e.g. third generation cephalosporins, fluoroquinolones and carbapenems) and also resistance to colistin, the last resort treatment for life-threatening infections caused by Enterobacteriaceae has also been detected recently in several countries and regions. Patients treated for drug-resistant bacteria were more likely to die compared to those with susceptible germs and also patients infected with drug-resistant bacteria were more likely to be admitted to intensive care units and stay more days than those with antibiotic-sensitive strains. Unfortunately discovery and development of new antibiotics is also a long drawn out and expensive process.

There are several factors affecting antimicrobial resistance. Some of the reversible factors are inappropriate prescription of antimicrobials, lack of policies to regulate antimicrobial use, lapses in infection prevention and control policies, self-medication by patients and lack of awareness and knowledge on the impact of antimicrobial resistance among prescribers and patients and wide spread use of antibiotics in poultry and fish farming as growth promoters or to prevent diseases in healthy animals.

Antimicrobial resistance is developing and spreading right now in every region of the world and has the potential to affect anyone, of any age, in any country. Without urgent, coordinated action by many stakeholders, the world is headed for a post-antibiotic era, in which common infections and minor injuries which have been treatable for decades can once again kill people.

*Dr. Dilini Nakkawita*

Consultant Clinical Microbiologist

DGH Vavuniya

## VALIDATION OF AN EXPERT SYSTEM FOR RESPIRATORY DISEASE DIAGNOSIS IN PRIMARY CARE

Dr. Ananda Perera MB.BS;DFM;MD;FCG

### WHY ARE RESPIRATORY DISEASES IMPORTANT?

- Very Common [1,2]
- Commonest group of diseases that antibiotics are prescribed [3,4,5]
- Suboptimal diagnosis of respiratory diseases in primary care [6,7]
- IPCRG have developed for simple tools for diagnosis of respiratory diseases in primary care [8]

### PROBLEM – SUBOPTIMAL DIAGNOSIS

- Interpractice variations
- Missed diagnosis
- Under diagnosis
- Over diagnosis
- Poor clinical evaluations
- Cognitive bias and errors [6,7,9-13]

### SOLUTIONS CURRENTLY

- clinical practice guidelines
- clinical practice protocols
- management algorithms
- standard of care statements

### SOLUTIONS PROPOSED

- Computerized Decision Support Systems (CDSS)
- Expert Systems (ES)
- Point of Care solutions
- CDSS embedded EMR, Personal Health Records – PHR

### RESULTS

**CLASSIFICATION OF PATIENTS BY THE AGREEMENT BETWEEN THE CAMEOS AND THE BOARD - CERTIFIED PHYSICIAN**

board certified specialist in family medicine diagnosis

		board certified specialist in family medicine diagnosis		
		yes	no	
CAMEOS DIAGNOSIS	yes	66	10	76
	no	4	20	24
		70	30	100

FIGURE  
k = 0.64 SE 0.47 - 0.81

### CDSS – ES – EMR – WILL THEY DELIVER ?

- Performs very well in preventive care
- Performs very well in e-Prescribing
- Performs very well in NCD Management
- There is no documented evidence for outcome data

### OBJECTIVES

- Validation of an expert system
- Computerized Assisted Medical Evaluation of Symptoms - CAMEOS
- Designed and Developed for Primary Care

### COMPUTER ASSISTED MEDICAL EVALUATION OF SYMPTOMS (CAMEOS)

Cameos is an expert system ,designed and developed by a primary care physician for primary care doctors. Currently it can diagnose many diseases commonly encountered in primary care. In the respiratory module almost 22 respiratory diseases can be diagnosed.

### RESEARCH METHOD

- 12 primary care physicians
- 12 practices spread over Sri Lanka
- focus current study - board certified family physician diagnoses made
- same cases diagnosed by the cameos
- development of 2 x 2 contingency table

### KAPPA STATISTIC

- calculated using a 2 x 2 contingency table
- summary statistic for agreement between cameos and the board certified family physician

Landis and Koch Criteria :  $k < 0$  no agreement, 0- 0.20 slight, 0.21-0.40 fair, 0.41-0.60 moderate, 0.61- 0.80 substantial and 0.81-1 almost perfect agreement

## CONCLUSION

- cameos validated
- therefore it is as good as the gold standard
- results are preliminary
- needs replication

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