

NEWSLETTER

GALLE MEDICAL ASSOCIATION

August 2017; Volume 17, Issue 2

ISSN 2550-3316



Medical Trough in Ancient Hospital of Polonnaruwa

This 12th century hospital more or less follows the 8th century Mihintale prototype in having two distinct units built together, namely living and treatment sections. Both sections have open courts at the center. Chronicles mention that the king Maha Parakramabahu built many hospitals. This also can be one of them. The opinion of the archaeologists is that this hospital had been functioning in two sections as residential and outdoor. In excavations carried on this site had found surgical scissors, clippers, surgical blades and wound incisors as well.

Kannangara AP. The history of dermatology, Venereology and Dermatopathology in different countries - Sri Lanka. Glob Dermatol 2015; 2(7): 71-76.

| CONTENTS | |
|---|----|
| Professionalism: At Cross Roads? | 2 |
| Novel oral anticoagulants | 4 |
| Crossword puzzle | 5 |
| The quality of the laboratory report - Where it went wrong? | 6 |
| Upcoming Events | 9 |
| A Message from the Editors | 9 |
| Achievements of our members | 10 |
| News | 10 |
| Photo Gallery | 11 |
| | |

Professionalism: At Cross Roads?

We all, members of the Galle Medical Association (GMA) belong to the "medical profession." We work in clinical or academic environments in hospitals or medical schools and are aware and so very "conscious" of the fact that we are **medical professionals.**

What is professionalism?

It is so very important for us to behave as professionals at all times and tread on a conduct and practice pathway that is expected from a medical professional. This conduct should never be deviant or harmful. We have to be mindful that patients submit their lives to us reposing utmost confidence on us in order to get their ailments treated. We in fact form a contract with the patient. We all have to be mindful that this obligation and the trust reposed should never be breached be it in the public or the private sector. Medical professionals need not "demand" respect but they should "command" respect through good professional conduct. A good professional is respected by patients through his good, honest and committed work and it spontaneously flows out from happy and content patients. Dedication, commitment, honesty and simplicity are the hallmarks of a successful doctor. The same attributes are valid for a medical academic as well.

If a doctor displays **professionalism** in his professional conduct, he / she will be a good doctor. What is professionalism? If one looks at literature there is an array of definitions. However, the *GMA Newsletter* is not a forum to give a lengthy analysis of meanings and etymology! There is no clear, concise and currently relevant definition of professionalism - it is a construct of attribution, meaning of it consists of various traits, characteristics, behaviors and qualities that are attributed to those that others hold in high esteem, especially colleagues in the same profession¹. Widely stated qualities / attributes stated include altruism (= disinterested and selfless concern for the well-being of others), accountability, respect, integrity, submission to an ethical code, life-long learning, honesty, compassion, excellence, self-regulation and service.

These attributes have been well synthesized in General Medical Council's (GMC) "Good Medical Practice Guidance". The GMC guidance goes on to state "Good doctors make the care of their patients their first concern: they are competent, keep their knowledge and skills up to date, establish and maintain good relationships with patients and colleagues, are honest and trustworthy and act with integrity".

The GMC guidance goes on to state that "Relationships based on openness, trust and good communication will enable to work in partnership with your patients to address their individual needs". The GMC guidance is available for reference on the web and it has a global validity. It covers four principal domains - *firstly* knowledge, skills & performance; *secondly* safety and quality; *thirdly* communications, partnership & and work and *fourthly* maintenance of trust.

Professionalism: should it manifest from within or formerly taught

Professionalism is taught and learned from a wide array of sources - teaching sessions at medical school within a defined curriculum, the reflection within the informal curriculum and role models within a "hidden curriculum". Although professionalism can be formerly "taught", it becomes a mere exercise to pass examinations. We also talk about "soft skills". Can these soft skills be inculcated at mere workshop sessions? We all know medical ethics and professionalism go together to a great extent.

However, attributes of professionalism go well beyond ethical tenets. Furthermore, our professional behavior is also governed by the law of the land and medical guidelines.

In my personal opinion professionalism should emanate from core human values. If we are dedicated and reasonable human beings we automatically become good professionals. None in our generation got any formal training or teaching in ethics. We never had any workshops in soft skills. However, we had great role models to emulate - both academics and clinicians. This stresses the importance of setting an example to juniors and undergraduates - the "hidden curriculum"

Another attribute that is pivotal in the genesis of a good medical professional is **empathy**. Although we all know the meaning of the word, I shall make a restatement - Empathy is the capacity to understand or feel what another person is experiencing from within the other person's frame of reference, i.e., the capacity to place oneself in another's position. Empathy is an important attribute when dealing with patients, your colleagues, juniors and seniors. That will make one a good professional and a great team player. Most of the crises in the health sector and academic sector have their origin in lack of empathy.

Professionalism under siege: Conclusion

Lack of commitment, lackadaisical attitude and lack of guidance all lead to the black hole away from professionalism. Furthermore, pressure of work, administrative demands, commercial considerations make people drift away to unprofessional doldrums. In a research setting factors related to productivity and funding pressures are key factors contributing to deviation away from professionalism, although fabrication, falsification and plagiarism are seldom seen. Professional misconduct in a clinical or research setting needs censure as it is gross breach of trust and confidence.

Let all of us inculcate professionalism and enhance it further to become good doctors and good researchers. Although there is guidance, if we adhere to basic human core values with dedication, commitment and empathy, all will automatically become members of a wonderful fraternity of professionals practicing "professionalism"!

References

- 1. Rowley BD, et al. Can professional values be taught? A look at residency training. Clin Orthop Relat Res 2000; **376**: 110-114
- 2. GMC. Good Medical Practice [cited 2017 16/07/2017]; Available from; http://www.gmc-uk.org/ guidance/good_medical_practice.asp; 2014.
- 3. Hillis DJ, Grigg MJ. Professionalism and role of medical colleges. The Surgeon 2015; 13: 292-299.

Dr. Satish K Goonesinghe

MBBS(Col), LLB(OUSL), MS(Col), FRCS(Edin), FCSSL Consultant Urological Surgeon Teaching Hospital, Karapitiya

Novel oral anticoagulants

Thromboembolism is a leading cause of morbidity and mortality. Anticoagulants are used in the treatment and prevention of wide variety of thromboembolic diseases. Rapid acting parenteral anticoagulants are used for the acute treatment and prevention whereas oral anticoagulants, slower in onset are used for long term therapy.

Warfarin which is a vitamin K antagonist remained the only oral anticoagulant agent used for many years, despite many drawbacks regarding the usage and monitoring. Introduction of ximelagatran was licensed in Europe only for brief period and has been withdrawn from the market in 2006 due to its potential hepatotoxicity, leaving again warfarin alone as the oral anticoagulant.

After several years, recently dabigatran, rivoroxaban and apixaban were introduced as novel oral anticoagulants (NOACs).

Dabigatranetexilate is a prodrug of the active compound dabigatran. It is the first oral direct thrombin inhibitor. Rivaroxaban and apixaban are direct factor Xa inhibitors.

With the promising results in the phase II studies with above mentioned three drugs Phase III studies were done and they are now approved for the use in the prevention of stroke and systemic embolism in patients with non valvular atrial fibrillation and in the primary prevention of venous thromboembolic events in adults who have undergone elective hip or knee arthroplasty.

In addition, rivoraxaban is approved to use in the treatment of deep vein thrombosis, pulmonary embolism, to reduce the risk of recurrent deep vein thrombosis and pulmonary embolism after initial treatment.

NOACs have shown similar effectiveness compared to warfarin. They are more predictable, no routine monitoring and dose adjustments are needed. Their half lifes are shorter and have a rapid onset of action compared to warfarin. With all above advantages the disadvantages are the cost of drugs and unavailability of antidotes.

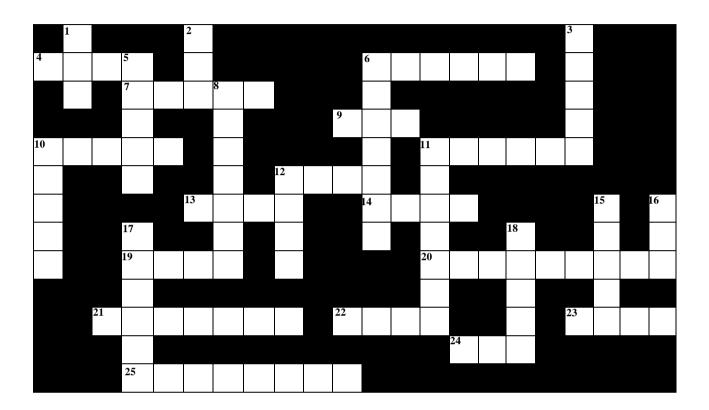
But considering the frequent monitoring, frequent clinic visits and difficulty in educating patients, very soon warfarin will be replaced with NOACs.

Dr. Gayani Liyanage

Senior Lecturer in Pharmacology Faculty of Medicine University of Ruhuna

Crossword puzzle

Fill the puzzle with suitable medical terminology and submit your answers to gmathk@gmail.com or hand them over to the GMA office on or before 30th September 2017 and win a prize.



Across

- 4 Cell
- 6 Skull
- 7 Instrument for examination
- 9 Before
- 10 Excessive, increased
- 11 Liver
- 12 Surrounding, around
- 13 Many
- 14 Nose
- 19 Kidney
- 20 Brain
- 21 Cartilage
- 22 Deficient, decreased
- 23 Fungus
- 24 New
- 25 Eye

Down

- 1 Pus
- 2 Ear
- 3 Relating to cell death
- 5 Bone
- 6 Cancer
- 8 Lung
- 10 Tissue
- 11 Uterus
- 12 Fever
- 15 Slow
- 16 Muscle
- 17 Joint
- 18 White

The quality of the laboratory report - Where it went wrong?

Now it is a well-known fact that in the western world almost about 80% diagnostic decision making is based on investigations. We may call it "loss of art of medicine" or "obtaining diagnosis by a battery of investigations". Even though the art of practice is maintained, investigations are indispensable and definitely improve outcomes of patients. A major portion of investigations requested in patient care include laboratory tests and test menu reaches above 5000 globally! New tests are being introduced daily to this list giving more "accuracy and precision" of prediction. However, to what extent we rely or utilize laboratory investigations need inquiry and discussion. We have seen clinicians loosing trust on results generated by some laboratories and demanding test repetitions from elsewhere.

Therefore, looking in to real reasons why we fail in quality is a timely question which needs discussion.

Quality of a test depends on three major contributors namely "good sample", "good test process" and "good people". How we can define quality can vary. The management definition of "customer satisfaction" is applied to the doctor who will be happy when the results are reliable for accurate management of the patients. However, in the private sector, reports are directly given to patients thus market competes to satisfy patient as the customer! Therefore, appearance of the report envelope and many logos appearing as promising indicators of quality are included with names of consultants visiting the laboratory. This gives the impression that report has "quality".

The quality of a test if looked in detail in more factual manner would be "a reliable results of the test requested of the correct patient reported with all the required information correctly and which is released on time to the correct destination at affordable cost!".

Reliability of a test report means accuracy and precision. Accuracy is how far reported value or finding is closer to the true value. Always test system can have a bias and can deviate from the target. When the bias is small, we can consider test is accurate. The variation of this can be noted between different laboratories and machines and methods! Therefore comparison of reports from two different laboratories is difficult and not rational unless both are standardized!

Repeatability is precision. Basically when we repeat the test, how close the repeat values are to each other is precision. Precision without accuracy is a disaster. When the actual target value of a particular test is 10, the accuracy means our value of the test is 10.1 or 9.8 or 10! For a target of 10 if a laboratory reports 15, it is unacceptably deviated from the target. However, if the laboratory has precision and repeating the test any number of times, giving results like 15.1, 14.9, 15, 14.8, 15.1, 15.2, 15 ...etc, we assume that the reading is correct but it is not!. Therefore, "repeated and confirmed" in the report gives no assurance of reliability unless they have accuracy!

Achieving accuracy and precision depends on test method, machine, reagents, calibration, calibration verification and preventive maintenance of the machine. If any of these are lapsed, results can go wrong. To verify attainment of accuracy and precision, external quality assurance (EQA) and internal quality controls (IQC) are applied. Both EQA and IQA are needed and they have to be implemented with true monitoring and with appropriate actions when deviations or trends noted. When IQC is not analyzed on time before the release of results or reviewing them at the end of the day or week is a disaster! It should happen on time and rectified appropriately. EQA participation only is useless unless deviations and trends are monitored and actions are taken! Commercial EQA providers issue a certificate for each laboratory for their participation but that does not mean it is optimized!

What is meant by "results of the test requested of the correct patient"? Can we have a report for a test we did not request? Yes, that is possible. If the test is not identified appropriately by the blood collection officials, that can happen! The main reason for this is poor hand writing of doctors! In a busy hospital it may not be easy to discuss this with the doctor who requested it and rectify! Legible hand writing or test request with printed test names can resolve this issue.

The issue of misidentification of patients can occur in crowded wards. There can be a few patients sharing the same family name or the first name in a ward at any given time. As patients are not educated adequately, they are unaware of why blood is taken and for what tests. When patients are called by their names for blood collection in a busy ward that can lead to sample collection from wrong individual when actual individual is sleeping or in wash room!

The information required in a report includes patient identification, reference ranges, units, cut off values, interpretations and recommendations. Most of the instances this is not an issue. However, we do not have reference ranges for any parameter for our population. Therefore, reference ranges used in different laboratories have been adopted from different sources.

Release of results on time to correct destination has a very important point. On time release of critical and alert values can save lives! All the accredited laboratories report critical and alert values on time to the clinician and patient. On many occasions we have come across reports pasted on wrong BHTs and delays in receiving important results.

We never think of affordability of costs of tests when it comes to public sector reports. However, it is indirectly paid by taxes! The costs of test repetitions, wastage, and poor quality etc are ultimately paid by us!

If we look at literature, laboratory errors are mainly due to pre analytical phase of testing which means sample errors. That can contribute to 70% of errors in a laboratory. For example, simple error in platelet count is misleading and very serious when patients with dengue fever are managed. Inappropriate collection of samples with traumatic venipuncture, slow collection, prolonged tourniquet, delayed filling in to tube, overfilling of tube and inadequate mixing of sample tubes are the commonest reasons for partial clumping of platelets which may not be detectable as clots by naked eye! To verify absence of platelet clumps, blood smear examination is needed. But with busy laboratory work, different laboratories use their own criteria to review the report. Some laboratories will screen the smear when the platelet count is 50,000 or 100,000 and few others will do it when it is above 150,000!

Another example of pre analytical error is non-rejection of saliva samples received for sputum AFB. This leads to wrong negative AFB reports. Some laboratories report it in small prints that the sample contains squamous epithelial cells which indicates improper sample which does not attract the clinician's attention!

Incorrect ratio of citrate to blood causes errors in PT / APTT results. How many occasions we repeat PT / APTT when we are not sure of the results? When the readymade tubes are not in use, appropriate volume needed for coagulation tests may not be accurately filled and this will lead to wider variation of sample volumes. Volume adequacy should be objective assessed at the sample receiving counter and it should not be a subjective assessment saying "this looks OK or only little low or little above optimum volume"! Ideally a 'guide tube' with markings for maximum and minimum allowable limits is needed at sample receiving table to avoid this error! Only few laboratories practice these techniques of sample rejection.

Patient education on preparation for tests and self collected samples need much effort and time. That is well explainable by the fact that mixed growth in urine culture is challenging anywhere in the world due to contamination. Our patients are busy and may not listen properly and may not follow instructions appropriately!

When the non specific test was in use for stools occult blood test, on many occasions we have seen false positive results due to inadequate patient advice on preparation.

Considering above all we can imagine how greater the pre analytical phase can contribute to errors in laboratories and also some facts why we cannot rely on some laboratory reports. We should build a culture of quality practices to minimize these in future.

Ministry of health and private sector equally invest hugely on state of the art technology. People pay for the tests directly or indirectly. Therefore it is a social responsibility of all the laboratories to adhere to quality practices and implement quality assurance in every aspect of testing. Errors of laboratory tests have lead to increased morbidity and mortality, poor patient outcome, increased financial issues etc.

Therefore, I believe it is high time to implement mandatory good laboratory practices in all the laboratories in the country.

Dr. K A C Wickramaratne

MBBS, Pg Dip Path, MD (Haematology)

President SLCH

Specialist Haematologist / Senior Lecturer in Pathology

Registered Lead Assessor / Technical Assessor of Medical Clinical Laboratories

Certified Consultant in Accreditation ISO 15189

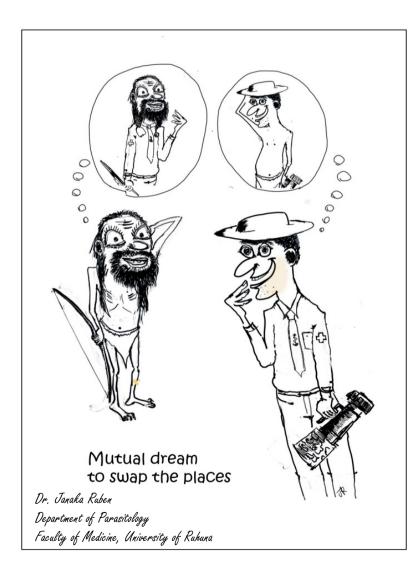
Maths problems

When a patient was wheeled into an emergency room, a nurse on duty showed on a scale of zero to ten, and asked the patient "with zero representing no pain and ten representing excruciating pain, what would you say your pain level is now?"

The patient shook her head. "Oh, I don't know. I'm not good with maths".

Upcoming Events

| Month | Date | Event |
|---|------------------|--|
| August 22 nd 29 th | 15 th | CME Programme on "Osteoporosis; when to treat and how to treat?" by Prof. Sarath Lekamwasam, |
| | 22 nd | Non-Medical Lecture on "Taxation of professionals" |
| | | CME programme – "Symposium on HIV" |
| | 29 th | Epidemiology and natural history of HIV |
| | | 2) Clinical management of HIV |
| | | Post exposure prophylaxis |
| October | 11 th | Inauguration Ceremony of the Annual Academic Sessions - 2017 |
| | 12 th | Academic Sessions |
| | 13 th | Academic Sessions & Annual Dinner |



A Message from the Editors

We would like to invite the membership of GMA to contribute to the GMA newsletter. Please feel free to send articles, letters, picture stories, poems, puzzles, jokes, cartoons, etc. related to medical profession. We would also like to hear your views about the GMA newsletter. Please send them all to Editors GMA via e-mail gmathk@gmail.com

We would like to invite the nonmembers to join the Galle Medical Association (GMA). Please inquire about the membership form at the GMA Office.

Commendable achievements of our members...

Scientists have developed a new technique for investigating the effects of gene deletion at later stages in the life cycle of a parasite that causes malaria in rodents, according to a new study in *PLOS Pathogens*¹. The novel approach, developed by **Upeksha Rathnapala** and colleagues at the University of Melbourne, Australia, could enhance research into potential drug targets for malaria treatment. Ms. Rathnapala is a permanent academic member of Department of Parasitology, Faculty of Medicine, University of Ruhuna.

¹Rathnapala UL, Goodman CD, McFadden Gl. **A novel genetic technique in Plasmodium berghei allows liver stage** analysis of genes required for mosquito stage development and demonstrates that de novo heme synthesis is essential for liver stage development in the malaria parasite. *PLoS Pathog*, 2017 DOI: 10.1371/journal.ppat.1006396

NEWS

Filariasis Research Training and Services Unit (**FRTSU**), Faculty of Medicine, University of Ruhuna has started recruiting filarial lymphoedema patients for a randomized control drug trail (RCT) denoted as **LeDoxy-SL**. All clinician are invited to send patients to FRTSU for said RCT.



Photo Gallery

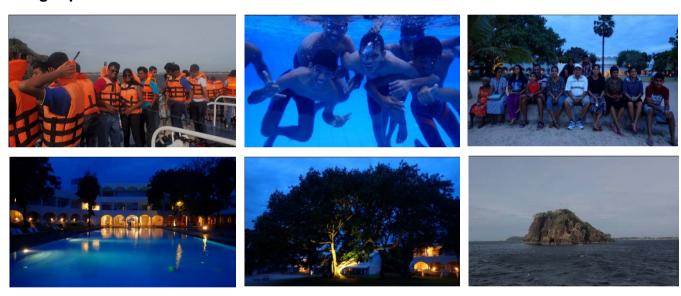
Vesak Bhakthi Gee and Poson Bana











CME Programmes





