

# POSTGRADUATE MEDICAL LABORATORY SCIENCE EDUCATION AND PRACTICE IN WEST AFRICA

By

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Protocol

## **Background**

Let me start by quoting Dr. Michael Ryan, Executive Director, WHO Health Emergencies Programme, who in his speech on the International Biomedical Laboratory Science Day on the 15th April, 2021 said:

- “There is no need to tell you how difficult the last 15 months have been for us all, we are acutely aware of the suffering, the losses, the pressure, the despair, the gaps, the inequalities that have been revealed and the lasting impact that this global pandemic will have on our communities. It has been a tremendously challenging period, but it has shed light on some of our unsung heroes, to recognise, acknowledge and thank those who worked quietly in the background, who are the drivers of diagnostics, of research, of knowledge, of innovation, of treatment, of prevention and understanding the population dynamics of this pandemic.
- In 2020, medical laboratory scientists around the world have been delivering on massively expanded testing, accelerating research and innovation at an unparalleled scale that has led to the development of new diagnostics, vaccines and therapeutics.
- The world was watching and waiting, and medical laboratory scientists were expected to deliver solutions and you did.
- There are over 2 million biomedical laboratory scientists worldwide with vast disparities in their presence. Expertise has been built over many decades, but it was the global pandemic that has shined a light on your vital role within the healthcare delivery and innovation sectors.

- Biomedical laboratory scientists have worked around the clock dealing with the immense numbers of samples that have needed to be tested, .....you have also had to deal with potential exposures to the virus within the laboratory environment;
- If there is something we have learned, it is that laboratory systems and medical laboratory scientists are of vital importance to national and global preparedness and that this should become a priority investment moving forward.”

## **Introduction**

Human resources constitute the most important element in any service, especially in the healthcare service sector. Professional practice is a knowledge-based occupation. It is therefore imperative to consider this very appropriate topic: Postgraduate Medical Laboratory Science Education and Practice in West Africa at this momentous occasion of the 2021 Annual General and Scientific Meeting of the West African Postgraduate College of Medical Laboratory Science, Ghana Chapter. As the first nation to gain political independence in Sub-Saharan Africa, Ghana has always been in the vanguard of initiating and catalyzing developmental milestones in our continent and region. I am very delighted to join you in marking this epochal event of College Chapter Conference in our region.

## **Healthcare Practice in the 21st Century**

Modern healthcare practice is a multi-professional and multi-disciplinary endeavour. It has outgrown the scope and capacity of any single profession. The earlier all stakeholders in the healthcare sector in West Africa recognise, appreciate and reconcile themselves with this existential reality, the better for us all in our region.

The word profession, has been defined as: “occupation, especially one requiring advanced education and special training”. (The Advanced Learners Dictionary of Current English 2nd Ed).

It is in realization of this definition that, the statutory provisions regulating the practice of any given profession vests the responsibility of determining the standard of knowledge and skill to be attained by its practitioners on a regulatory body. Professions arise out of identified human and social needs.

The Honorable Justice Babatunde A. Adejumo OFR, the former President of the National Industrial Court of Nigeria had said in a landmark judgment:

“It is not being argued that anybody brought any profession from heaven; all formal professions are created by laws; they are acquired by passing prescribed examinations and fulfilling the conditions precedent”

“It is for this reason that, the law, which does nothing in vain, in its wisdom, cuts off those portions of medical practice which it believed are sufficient to make whole the practice of the profession of medical laboratory science as the areas to be covered to become a medical laboratory scientist. Immediately this was done, the profession created, and the qualification acquired makes the Medical Laboratory Science an autonomous profession (and its

professionals, independent) in its own right without any blemish or inadequacy, and medicine (pathology) equally a profession in its own right, .....The law actively intends to prevent a situation where one person would be jack of all trade. It fears the inefficiency that results thereby and the negative and grave implications for health delivery.”

“The American Society of Clinical Laboratory Science (ASCLS) defines the profession of medical laboratory science as encompassing the design, performance, evaluation, interpreting, and clinical correlation of clinical laboratory testing, and management of all aspects of these services. It has long been established that medical laboratory science is a profession distinct from the practice of medicine; characterized by its own body of knowledge and scope of practice, and requires of its practitioners a high level of competency in scientific, technical, managerial and scholarly principles as well as high standards of performance and professional conduct.”

It is for these reasons the profession has its own different regulatory framework in many countries of the world, including West African countries such as Nigeria, Ghana etc.

### **West Africa Situation**

The West African Health Organisation was created by ECOWAS Protocol A/P2/7/87 of 9th July, 1987 signed by all the Heads of State and Government in the region.

“The objective of the West African Health Organisation shall be the attainment of the highest possible standard and protection of health of the peoples in the sub-region through the harmonisation of the policies of the Member States, pooling of resources, and cooperation with one another and with others for a collective and strategic combat against the health problems of the sub-region”. - Article III of the Protocol establishing WAHO.

In 2003, the West African Heads of State and Government reached an agreement for the development of education protocol and resolution of the General Convention on the recognition and equivalence of degrees, Diplomas, Certificates and other qualifications in ECOWAS member States. Furthermore, the 46th Ordinary Session of the Authority of Heads of State and Government in December 2014 reiterated the desirability of harmonizing professional training curriculum in the region. Consequently, the ECOWAS Assembly of Health Ministers deliberated and adopted the proposed harmonized healthcare professional curricular articulated by WAHO to address the health needs of the sub-region both at the undergraduate and postgraduate levels. This led to the six-year ‘Doctor of Medical Laboratory Science Degree Curriculum for the Training of Medical laboratory Professionals in Universities in ECOWAS Region’, which Ghana in her characteristic manner of recording firsts in Sub-Saharan Africa has commendably championed and blazed the trail by initiating and already produced several batches of graduates of this wonderful regional harmonized Doctor of Medical laboratory Science (MLSD) curriculum.

### **WAHO Harmonised Fellowship Curriculum for Specialist/Consultant Medical Laboratory Scientists**

The WAHO Harmonised postgraduate Fellowship training curriculum has led to the establishment and inauguration of the West African Postgraduate College of Medical Laboratory Science (WAPCMLS), which was officially inaugurated on the 22nd February 2020 in Lagos, Nigeria. Consequently, the 21st Ordinary Session of the ECOWAS Assembly

of Health Ministers in August 2020, approved the Inclusion of the College as a Statutory Member of the Regional Council for Health Professionals' Education. The College is therefore a fully internationally recognised legal entity of the ECOWAS regional Authority, with a mandate to train and certify specialist and consultant medical laboratory scientists within the West African region to actualize the dreams of our founding fathers of ECOWAS and WAHO, namely: the attainment of the highest possible standard and protection of health of the peoples in the sub-region.

### **General Training Objective of the College Fellowship**

The WAHO approved Fellowship curriculum clearly states:

“There is a compelling need to develop and produce a core of thorough-bred expert medical laboratory scientists in all specialties and sub-disciplines of the profession to meet the ever-growing demands of the West African health system. The Fellowship programme is designed to complement and advance the academic knowledge attained at the first-degree qualification and is intended to equip the candidate with competence to practise at a higher level within the chosen discipline. It is the overall intention of the programme to prepare the candidate to practise as a specialist that could be appointed as consultant in the chosen discipline with sufficient depth of technical and managerial knowledge and skills. It would expand the knowledge and practice from a laboratory-oriented approach to a patient-oriented approach”.

It is very evident therefore that the Authority of ECOWAS Heads of States and Government through its highest Health Technical body, WAHO, is clearly resolute on the nature of medical laboratory services, caliber of personnel mix and scope of practice it desires in the ECOWAS region. The ball is now in the courts of professional actors, national political leaders and administrators of the healthcare system in the region. There is no doubt whatsoever that the ECOWAS Authority desires nothing less than the best available professional standards comparable to any in the 21st Century West Africa.

### **Challenges**

It has been said that: “Old habits die hard”. First-born mentality syndrome at work in the healthcare space in Africa.

It was John F. Kennedy who said: “Change is the law of life, and those who look only to the past or present are certain to miss the future”.

Clinical laboratories represent an area of healthcare that has always undergone major changes because of technological advances and economic pressures, argues Plebani (2002).

### **The United Kingdom Model**

In February 1999, the National Health Service (NHS) of the UK, came up with the “Agenda for Change Agreement” which provided a Knowledge and Skills Framework (KSF), a competence framework to support personal development and career progression for all professionals within the NHS. The Agenda for Change National Agreement included a commitment to introduce a system of annual development reviews and to create lifelong learning development opportunities, to enable all professionals to develop vertically and

attain to the zenith of their career potentials. This created a strong commitment to a common national ideal and Motto namely:

“Working Together, For Patients, With Compassion, As One Team, Always Improving”.

It led to the development and creation of specialist and consultant positions in all healthcare professions in the NHS. A major step in building synergy in any team is to engender an atmosphere that reassures every member of the team that their professional and personal growth and enhancement is in no way a threat to other members of the team. Someone has illustrated TEAM to mean:

T..... Together

E .....Everyone

A ..... Achieves

M ..... More

□ A look at the UK Biomedical laboratory science profession:

Dr. Gary Moore, Consultant Biomedical Scientist in Haemostasis and Thrombosis, Guy's & St. Thomas' Hospital, London.

Interview (Video Clip).

### **A Call for Collaboration, Cooperation and Concord in the Health Sector in West Africa**

In a very exemplary display of collaboration, cooperation and concord, the Royal College of Pathologists and the Institute of Biomedical Science in the UK have worked together through the establishment of Conjoint Examination Boards. This is the joint professional model that has been used to produce a standardized and structured approach for the delivery of the training and assessment of biomedical laboratory scientists wishing to undertake histopathological reporting. The successful candidates will work alongside physician pathologists as part of an integrated reporting team and be able to dissect, independently report and present cases at multidisciplinary team meetings. They will play an integral part in teaching and clinical audit as part of an overall service improvement strategy. This role is not in any way a replacement for medically qualified pathologists, but a key part of an integrated clinical pathology team that is able to deliver a flexible and efficient service.

There is no need whatsoever to feel threatened by the growth and contributions of other members of a team. The sky, they say is big enough for all stars. The pursuit of this ideal is the missing link, the West African healthcare educators, administrators and managers need to urgently discover and vigorously promote for an enduring stability, harmony and efficiency of the healthcare system in the region. The UK Institute for Clinical Excellence advocates for a collaborative model.

## Conclusion

Ralph Emerson said: "Thoughts or ideas rule the world". It should be our hope that by the end of this conference, new thinking and ideas that will positively change the management and administration of healthcare delivery system in Ghana and indeed West Africa would have been generated. Since the building process involves and demands deliberate action steps, professional and bureaucratic leaders should exercise the will to implement and operationalize the ideas to bring about the desired synergy, cooperation, collaboration and concord among our healthcare professionals. This will naturally and invariably lead to an efficient and effective healthcare delivery system, that is patient-focused and draws its strength from a formidable team of well trained and motivated professional players that celebrate each other in our countries and region.

The task of inculcating and building the values and essence of synergy, collaboration and teamwork into healthcare practitioners rests squarely with on the shoulders of educators, trainers and policy makers. We need to constantly nurture and cultivate the attitude of inter-professional and inter-personal cooperation and collaboration in healthcare education and practice in West Africa, in keeping with the spirit and vision of ECOWAS and the untiring effort of WAHO.

"Wherever there is will, there is a way" - says Victor Hugo.

Thank you for your audience.

## References

1. <https://youtu.be/EAQWC156rtU>
2. SUIT No. NICN/ABJ/284/2014
3. <https://ascls.org>>scope -of-practice
4. ECOWAS Protocol A/P2/7/87 of 9th July,1987 <https://documentation.ecowas.int>>p
5. 46th Ordinary Session of the Authority of Heads of State and Government Abuja 15, December 2014. <https://www.ecowas.int>>ecowas-law
6. Mauro Panteghini (2004); The future of Laboratory Medicine: Understanding the New Pressures. Clin Biochem Rev Vol 25: 207-2015
7. Interview with a Consultant Biomedical Scientist in Haemostasis and Thrombosis, Dr. Gary Moore <https://youtube.com/watch?v=JKhskzCHY0I&feature=share>
8. Okara G. C. (2019); Building the Desired Synergy Between Healthcare Professionals for Efficient Healthcare Delivery. (An Invited Guest Lecture delivered at International Conference on Hospital Management and Administration, Abuja, Nigeria).
9. Okara G. C. (2004); How to Achieve Excellence in Medical Laboratory Practice in Nigeria. Labnews 4:8