Proceedings of the 20th Annual Conference and Continuing Professional Development of the Ethiopian Medical Laboratory Association (EMLA)

50th Anniversary and Golden Jubilee 1964 - 2015

‘Laboratory Medicine: The Gate to Better Health’
Date: 9 – 10 May 2015
Venue: Ghion Hotel
Addis Ababa, Ethiopia

Proceeding compiled and edited by
Yosef Tiruneh (Bsc, MA)
Acknowledgment

The Ethiopian Medical laboratory Association wants to express its appreciation and heartfelt thanks for all governmental organizations, partners, members and individuals who contributed their share to the successful completion of the 20th Annual Conference and continuing medical education (AC-CME) and 50th anniversary and Golden Jubilee.
I. Inagural Session

A spectacular spirit of pride and accomplishment was on the air as the members and partners of the Ethiopian Medical Laboratory Association gathered to mark the 50th anniversary and Golden Jubilee of the association at its annual conference and professional development event on 9th May 2015 at Ghion Hotel, Addis Ababa. The theme of the conference “Laboratory Medicine: The Gate to Better Health” inspired many discussions and partnerships among professional disciplines and services. The inaugural event saw high level representation from the Federal Ministry of Health, Ethiopian Public Health Institute (EPHI), Food, medicine and healthcare administration and control authority (FMHACA), Universities, partner organizations and the private sector. More than 300 participants were in attendance at the conference. This session included the welcoming address, the official opening remarks as well as the annual awards program.

Welcoming Address

After the introduction of the program by the master of ceremony Mr. Yosef Tiruneh, Dr Gemeda Abebe, President of EMLA welcomed all guests with an address. Dr Gemeda outlined some of the historical milestones that EMLA came through in the past 50 years as it celebrates its Golden Jubilee. He also noted some significant achievements and challenges in the profession. The unprecedented growth for the appetite and service of medical laboratory has helped in expansion of medical laboratory education, despite challenges. With better commitments of members and strong partnerships with government and supporters, EMLA is set out to advance the field of medical laboratory medicine with the ultimate goal of public service and professional growth. Dr Gemeda said the 50th anniversary also welcomes the launch of the Journal of the Ethiopian Medical Laboratory Association, which is a significant milestone in the history of EMLA. He finally congratulated members of EMLA and partners for the Golden Jubilee celebration. He also thanked government and NGO partners, associations, sponsors and individuals who made valuable contributions towards the successful organization of the conference.
In his key note address representing the Director General Dr Amha Kebede, Laboratory Capacity Building Director, Gonfa Ayaana, started his note by congratulating EMLA and its members for the 50th anniversary and Golden Jubilee celebration.

Ato Gonfa noted that Ethiopian Medical Laboratory Association has been closely working with EPHI in the past fifty years in a number of national initiatives with the ultimate goal of improving medical laboratory services. He said as a principal agency of the FMOH to oversee laboratory services in the country, EPHI has worked tirelessly to the field of medical laboratory medicine through designing national road maps, strategies and providing technical guide and support to regions in the country.

The director underscored that a lot has changed since the early days of medical laboratory where cumbersome tasks that required hours to get results were common features in the field. Dr Gonfa further noted that despite marked advances in the service and science of laboratory medicine in Ethiopia, a lot remains to be done in coping up with continuous advancements and professional growth. Addressing these challenges requires collective efforts by all concerned parties in the sector. He said it is for this purpose that EPHI takes its partnership with EMLA seriously. He concluded his key note by promising to work together with EMLA and its members in the years ahead for a better service to the public.

World Health Organization (WHO) Ethiopia representative, Dr Pierre M’Pele Kilebou, took the stage following Ato Gonfa to highlight key points in his key note address. Dr Kilebou said WHO takes its partnership with professional associations, most notably very seriously as it is a functional vehicle to reach professionals who serve the public on day to day basis.

He said WHO particularly is happy to engaging EMLA and its members in the laboratory accreditation scheme that it rolled out years ago with the goal of ensuring that laboratories provide high quality services. The country representative also promised that WHO will continue its strong partnership with EMLA in addressing various public health issues relevant to the field of laboratory medicine and its professionals. He concluded his notes by congratulating EMLA for its 50th anniversary and golden Jubilee.
Opening Remarks

Dr Addis Tamire, Director General Office of the Minister, FMOH was the guest of honor invited to officially open the conference. Dr Addis first congratulated EMLA and its members for the 50 years of service and a Golden Jubilee on behalf of the Federal Ministry of Health.

He noted that the country is registering remarkable results in many of the health outcome indicators it has set in its plans. Dr Addis said the role of laboratory services in these achievements was very clear and significant over the past 50 years and more.

The DG went on to say that the ministry is striving to strengthen partnerships with professional associations and the private sector to deliver the best care possible to the public and EMLA has been one of the associations in front. Dr Addis mentioned that the country is stepping to the 20 year vision plan with the Health Sector Transformation Plan putting the transformation of health care service delivery as a strategic pillar. High quality and public centered laboratory service provision will be playing a key role to the success of this strategic direction and FMOH is happy to have built a strong relationship with EMLA to bring this goal to fruition. He concluded by noting that FMOH will continue working closely with EMLA and its members as the association starts to embarks on a journey of public service and professional development of its members.

Students Award Ceremony

As is the tradition in the inaugural session of the conference, EMLA board President Dr Gemedo Abebe and EMLA board member Dr Berhanu Seyoum joined Dr Addis Tamire (FMOH), for the annual Student Award Ceremony. The annual student award ceremony recognizes students of medical laboratory sciences with the highest GPAs from all universities with awards, as a show of appreciation and welcoming them to the exiting service of medical laboratory medicine. Accordingly the following students received their awards as per the official communication sent to EMLA from the universities with their official GPAs.

1. Asnake Simeneh  
   (CGPA 3.88)  
   Hawassa University

2. Lemma Worknesh  
   (CGPA 3.87)  
   Jimma University

3. Asegedech Alemayehu  
   (CGPA 3.86)  
   Addis Ababa University

4. Yetemwerk Aleka  
   (CGPA 3.82)  
   Gonder University

5. Birhan Gebrey  
   (CGPA 3.79)  
   Wollo University

6. Challa Kumiisa  
   (CGPA 3.68)  
   Haromaya University
50th Anniversary and Golden Jubilee Cake and Coffee Ceremony

The guest of honor Dr Addis Tamire, Ato Gonfa Ayana (EPHI), WHO Ethiopia representative Dr Pierre M’Pele Kilebou and Dr Gemedo Abebe (EMLA) were invited to the stage to cut the cake and pour the Champagne for a Happy Anniversary wish.

EMLA was also honored to have two of our oldest graduates of medical laboratory Mr Yilma Habet-eyes and Mr Worku Bekele at this session. That colorful scene of 50th Anniversary celebration effectively ended the inaugural/opening session of the 20th annual conference and continuing professional development, paving the way for the panel discussion and scientific sessions after the coffee break.

Members of EMLA have also donated blood at the event in collaboration with the Ethiopian Red Cross Society, for which the society expressed appreciation and gratitude.

II. Plenary Session

The plenary that followed the coffee break and visit to the scientific poster presentations and exhibition stands displaying the latest technologies, products and services proceeded with hosting four major topics. The panel was moderated by Dr Aster Tsegaye and Dr Belay Tesema. A brief summary of the presentations for the panel are listed as follows:

1. The Evolution and Future Road Map of Laboratory Services in Ethiopia; Gonfa Ayana, Director, Regional Laboratory Capacity Building Director, EPHI

Mr. Gonfa presented the major milestones of laboratory services in Ethiopia focusing on three major areas; the scope of services, methods and technologies and facilities providing services. The time line that span 1944 – 1974 E.C in laboratory services was characterized by limited test menu, microscopic tests with classical analytical methods that were manually operated. Tests were provided mainly provided by the then Pasteur Institute, later joined by Arsho Laboratories and few hospital laboratories like St.Paul’s and Black Lion.

The 1975 – 1998 E.C. time line saw considerably expanded test menu and semi- and fully automated technologies were employed in almost all laboratory disciplines (ELISA, RIA, Fluorescence, Luminescence, turbidimetry, particle counters...). Advances in science of immunology offered opportunities for the qualitative detection or quantitative estimations of antigens and antibodies of clinical significance. Facilities with high tech diagnostic technologies expanded at EHNRI and regional reference laboratories established. It was also in this period that government and private health facility laboratories showed a boom.

1999 E.C. and onwards, test menu expanded very much with semi and fully automated analytical systems in all disciplines at almost all laboratory facilities mainly driven by the needs of the National ART & TB Programs through funding from international donors. EPHI,
Regional Reference Labs, all hospitals and well established health centers as well as private health facilities including standalone labs have been providing these services. Focus on quality of testing and services has been the major issue of this era! Implementation of LQMS guided by the National Laboratory Master Plan.

Concluding his presentation, Mr. Gonfa noted that the key area of focus for the future of laboratory medicine will be continuing to build the capacity of the National Laboratory System in all aspects to effectively respond to existing challenges and emerging public health issues with various national and regional initiatives.

2. The Health Sector Transformation Plan; Dr Sintayehu Tsegaye, Advisor, office of the Minister, FMOH

In his detailed presentation of the why and how of the Health Sector Transformation Plan (HSTP), Dr Sintayehu noted that Ethiopia has been led by the health policy endorsed back in 1993. He said much of it is still valid and will remain so in the years to come. However, it is now high time to review the existing policy and strategies as a lot has changed since then including economic growth, demographic and epidemiologic transitions, health care delivery modes and global emerging public health issues.

Accordingly the HSTP was developed over a series of research, discussions and visioning exercises with all stakeholders. The central mission of the HSTP to guide and ensure that Ethiopia is on a path to achieve key health outcomes across its regions and income levels that are consistent with a middle-income country by 2035.

Excellence health care service delivery, quality assurance, leadership and governance, and health system capacity are set to be the strategic pillars of the HSTP with a number of sub themes that ultimately fit into the vision of seeing a healthy, productive and prosperous Ethiopians. Dr Sintayehu finally noted that the 20 year strategic document of the HSTP will be endorsed soon after incorporating inputs from ongoing consolations and recommendations.

3. Ten years of Strengthening Laboratory System using the HIV Platform
Dr Zenebe Melaku, Country Director, ICAP- Columbia University Program Ethiopia

Dr Zenebe started by noting that ICAP works to ensure the wellness of families and communities by strengthening health systems around the world.

After outlining the guiding principles of its work, he highlighted some of the support ICAP has been providing to the health sector in Ethiopia at national, regional and health facility level. He specifically dealt with the HIV program that helped build the laboratory system with the overall concept that there won’t be any meaningful health intervention without strong and reliable laboratories. He said ICAP has been supporting the laboratory system based on the national five year laboratory master plan.

Early infant HIV diagnosis, provision of technical assistance for the preparation of plans, guidelines and training manuals for the national TB EQA program, LQMS and SLIPTA Implementation and laboratory services expansion are some of the support ICAP provided as a member of the national laboratory technical working group.

It also supported regional laboratories in mentoring, equipping them with standardized facilities and the implementation of the national laboratory master plan.
4. In-Vitro Diagnostic Medical Devices Regulatory Framework and PMS Platform
Bezawork Berhane, Products Registration and Licensing Expert, FMHACA

The presenter noted that currently the regulatory framework focuses on pre-market approval of in vitro diagnostic medical device and post marketing surveillance. She also outlined the future plan with regards to addressing challenges in the process.

The premarket approval process is based on article 13 (1&2) of the proc.661/2009 which states that no medical device shall be produced locally or imported and put in use unless:- Importers are required to fulfill the registration guideline set by the authority and pass the conformity assessments as well as the analytical performance tests. The post marketing surveillance relies on compliance from professionals. The presenter concluded by noting that strengthening post marketing surveillance, instituting quality and safety test by the authority’s own laboratory and starting active collaboration with regional and international competent regulatory bodies are among the future plans of the authority in medical devices regulation.

Following the presentations and summary by the moderators, presenters responded to questions raised by participants to make an end to the plenary session to break for lunch.

Day 1 Afternoon: Plenary and Breakout sessions

Promotional Presentation

The Afternoon session was kicked off with a promotional presentation by Mr Essien Qian, Mindary and Afro German Chemicals, Gold Sponsor for the conference. Mr Qian provided basic introductions about the company and latest products and responded to some technical questions from the audience.

Breakout Sessions

Part I. The participants were divided into two groups to attend scientific paper presentations and engage in strong academic and scientific discussions inspiring professional developments. The first group chaired by Dr Gemeda Abebe and Endale Tadesse attended and discussed findings of the following presentations;

- Xpert MTB/RIF Assay for Diagnosis of Pulmonary Tuberculosis in Sputum Specimens in Remote Health Care Facility by Dereje Assefa
- Evaluation of Light Emitting Diode Fluorescent Microscopy for the Diagnosis of Smear Negative Pulmonary Tuberculosis in Bleach Treated Sputum in High Burden Settings by Dossegnaw Aragaw
- GeneXpert MTB/RIF assay for the diagnosis of Tuberculous lymphadenitis on concentrated fine needle aspirates in high TB burden settings by Mululem Tadesse
- Performance Evaluation of Laboratory Professionals on TB Microscopy; Shashemene and Hawassa Town Southern, Ethiopia by Mengistu Hailemariam

The second group chaired by Dr Daniel Seifu and Mistre Wolde dealt with the following presentations and discussed the details through questions and answers.

- Tuberculosis Treatment Restores High Density Lipoprotein Cholesterol (Hdl-C) and Increases Total Cholesterol in Patients with Pulmonary Tuberculosis by Yemane Amare
- A Bird’s Eye View on the Availability and Utilization of Hemoglobin A1C (HbA1C) Testing Service in Ethiopia by Asfawossen Gebreyohannes
- Expired nitric oxide and sputum mycobacterial lipid bodies indicate that pulmonary NO is a double edged sword in tuberculosis by Baye Gelaw
- Distribution and availability of essential items for Smear Microscopy in Tuberculosis Diagnosis in Amhara region, Ethiopia by Mulusew Alemneh.
Breakout session Cont’d...

Part II. The scientific sessions continued after poster sessions and health break to deal with a number of technical and scientific discussions based on the papers divided into two groups. Chaired by Desalegn Admassu and Dr Tilahun Yemane, the first group attended and discussed the following papers;

- Anemia among pregnant women in Southeast Ethiopia: prevalence, severity and associated risk factors by Lealem Gedefaw
- Prevalence of HIV among exposed infants in Amhara Regional state, Ethiopia by Woyneshet Gelaye
- The Comparison between Microhematocrit and Automated Methods for Hematocrit Determination by Misganaw Birhaneselassie

Chaired by Wubet Berhan, the second group attended the presentations and discussed the following papers;
- Prevalence, possible risk factors and antifungal susceptibility patterns of Candida species from vaginal specimen among pregnant women at Debre Markos Referral Hospital, Northwest Ethiopia by Alemabanch Tsega
- Comparison of Ziehl-Neelsen Staining and Fluorescent Microscopy for Diagnosis of Pulmonary Tuberculosis by Adugna Belew
- Assessment of Clinical Laboratory Service Utilization in the Outpatient Department at Gondar University Hospital, North West Ethiopia by. Fikir Asries
- Determinant Factors Associated with Occurrence of Tuberculosis among Adult people Living with HIV after ART Initiation in Addis Ababa, Ethiopia. A Case Control Study by Kelemu Tliahun

END OF DAY ONE 5:45 PM

DAY TWO (10 May 2015)

III. Continuing Professional Development: Plenary Session

The session hosted two presentations that laid the foundation for discussion and reflections as a continuing professional development platform chaired by Dr Gemed Abebe with the co-chair Dr Dawit Wolday.

1. Laboratory Medicine: The Gate to Better Health

Berhanu Seyoum, PhD, Associate professor of Medical Microbiology, HU Area Chapter Focal Person, EMLA

This presentation focused on highlighting a comprehensive definition of laboratory medicine, basic principles guiding the profession, issues of quality and emerging demands brought about the changing faces of disease threats and the challenges faced by laboratories in responding to these demands and needs. Challenges identified included professional competencies, laboratory facility standards and awareness gaps by other professions regarding the laboratory profession and its role in the continuum of diagnosis and care. In his concluding notes, the presenter emphasized on the need for more advocacy works for the profession and professionals as well as building capacity of professionals to address challenges, laying the ground for reflections and constructive engagements of laboratory professionals with others wherever they work.
2. Continuing Professional Development for Health Professionals in Ethiopia

Mastewal Kerebih, Health Professionals Registration and Licensing Coordinator, FMHACA

According to the presenter, Proclamation No. 661/2009 Article 33/1 that states “No person shall practice as a health professional without having obtained a professional practice license issued by the appropriate organ” is the basis for issuance of licenses. The regulation also states that in applying renewal of professional license, any health professional shall present certificate of completion of the required CPD in his/her profession. A technical working group composed of FMOH, FMHACA, professional associations, training institutions, and development partners has been established geared towards establishing a national continuous professional development system in the country. It was also noted in the presentation that the CPD guideline and directive have been finalized and approved by FMHACA.

The guideline and the directive help to establish a CPD system in the country through outlining the process of accreditation of CPD courses and CPD providers and linking CPD with re-licensure. Next list of activities include accrediting CPD Providers and course accreditors, launching/ orientation program, conducting advocacy and undertaking CPD need assessment regularly. CPD credit points shall be a criteria for relicensing of health professionals.

Breakout Session

Scientific presentations for day two of the conference continued a breakout session with two groups. The first group, chaired by Dr Sileshi Kebede and Geremew Tassew attended the following presentations and delved into the technical discussions on items coming out of the presentations which included:

- New foci for Cutaneous leishmaniasis - Ankesha District, Amhara region, Ethiopia by Tsegereda Amsalu.
- Evaluation of non-instrumented nucleic acid Amplification by loop-mediate isothermal amplification (NINA-LAMP) for the diagnosis of malaria in Northwest Ethiopia by Meslo Sema.
- A Comparison of the Sensitivity and Fecal Egg Counts of the Kato-Katz Thick Smear, McMaster Egg Counting Method, and Mini-FLOTAC Technique for the Diagnosis of Soil-Transmitted Helminths by Zeleke Mekonnen
- Prevalence of Intestinal Parasites, Salmonella and Shigella among Apparently Healthy Food Handlers of Addis Ababa University Students Cafeteria, Addis Ababa, Ethiopia by Addis Aklilu

A simultaneous session was also in progress with the second group chaired by Kassu Desta and Dr Khasay Hiruy involving the following presentations that inspired discussions and reflections on the topics of the researches and technical details;

- Molecular epidemiology and drug resistance pattern of Mycobacterium tuberculosis in Northwest Ethiopia: resource limited region by, Tekle Airgecho
- Phenotypic and Genotypic determination of drug susceptibility and molecular characterization of Mycobacterium tuberculosis isolates at Debrebirhan Referral Hospital, Ethiopia by Daniel G.Tsadik
- Genotyping and Molecular Detection of Multi Drug Resistance Mycobacterium Tuberculosis among Tuberculosis Lymphadenitis cases in Addis Ababa, Ethiopia by. Olifan Zewdie
- Multidrug and Heteroresistant Mycobacterium tuberculosis and Associated Gene Mutations in Amhara National Regional state, Ethiopia by Daniel Mekonnen
IV. Business Meeting

The afternoon session was all about the business meeting that looked at activity and, audit report of the association and detailed discussions on matters arising from the reports. It also held election of vacant executive board member positions and award ceremony for best abstracts (oral and poster) presenters.

Activity Report

The activity report of was presented by Gizachew Tadesse, Executive Director of EMLA. The report highlighted some of the major activities that the association has been engaged with over the past year which included conducting trainings, revision and finalization of key guidelines and documents, providing technical expertise, active participation in national policy and strategies and technical working groups. As a core member of national various national committees, EMLA has also been called out for consultations and discussions with various agencies including EPHI, FMHACA, HERQA and partner organizations. EMLA has also been busy strengthening external relations with professional associations. Listed in this category are IFCC and AFCC.

Incomplete executive board members presence and participation, challenges with charities and societies law limiting some activities, lack of focused strategies in EMLA and gaps in creating sustainable collaboration and partnership among partners working in Laboratory Medicine have been cited as challenges by Mr Gizachew. Concluding the report, Mr Gizachew said revitalizing the working modalities of the association, looking for innovative ways of soliciting funds and expanding membership seeking approaches at universities should be the main areas of working, going forward.

According to the project activity report, EMLA had successful year as it was successful in strengthening EMLA as a capable professional association as one of its objectives. The objective of empowering laboratory professionals by offering need based capacity building trainings, workshops and continuing medical education was also met through the provision of in service training and continuous professional development training. EMLA has also been advocating for the profession by participating in national workshops and providing field expertise to various national health programs and strategies, couple with dissemination of scientific publications.

The audit report of the association has also been presented to members for their information and feedback, which was finally accepted with full confidence.

Following the reports, general discussion was held that provided inputs and reflections on the way forward. Many participants have voiced their satisfaction over the conduct of the annual conference as well as the progress the association has made over the past few years, despite challenges. They also identified areas where the association needs to focus and provided inputs for the way forward.

The house also elected the following members to fill the vacant EB positions;
1. Alemwork Tilahun
2. Dawit Wolday

The conference came to a close at 5:30 PM expressing delight over the success the successful completion of the meeting, adoption of conference resolutions and looking forward to another insightful conference next year.
### Balance Sheet As at 31 December 2014

**Currency: Ethiopian Birr**

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**Represented By**

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