



Predictive, Precise, Personalized and Prognostic Medicine for NAFDL, NASH and Liver Cancers in Sub-Saharan Africa: Challenges, Solutions and Perspectives

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Abstract

Background: Five P Medicine (Predictive, Personalized, Preventive, Participating, and Precise, Evidence-Based) for the Management of NAFDL, NASH, Fibrosis, Compensated Cirrhosis, Liver Cancer, HCC Risk and Prognosis, is well established in Rich Western Countries. However, Innovations and Artificial Intelligence such as Glycomics, Genomics, Molecular biology are lacking in Democratic Republic of the Congo (DRC).

Abstract: Thus, this lecture of the Art reports the natural history, the pathogenesis, and the prognostic value of Metabolic Hepatic Steatosis (NAFDL and NASH) for Subclinical Hypothyroidism with Insulin Resistances, Metabolic Syndrome, Ischemic Atherosclerosis, Type 2 Diabetes Mellitus, and HCC Complex Liver diseases (CLD) among Central Africans in Kinshasa from 2000 to 2018.

Methods: Cross-Sectional, Comparative, and Prospective Approaches were used between 1999 and 2004 for inclusion of 228 adults aged ≥ 40 years after rural – urban migration and CLD.

A prospective study of incident comorbidities CLD was undertaken from 2005 to 2018.

Results: All participants were aged 59.1 ± 11.1 yr with 114 men and 114 women, 75 % (n = 171) and 74.1 % (n = 171) occurred with Insulin Resistance / Metabolic syndrome – subclinical Hypothyroidism and Metabolic Hepatic steatosis (MHstea respectively in the MHstea, 66 % n = 113) and 34 % (n = 58) presented NAFDL and NASH, respectively the Most Important and Independent predictors of Metabolic Hepatic were physical inactivity, smoking Non O – ABO groups, low intake of fruits – vegetables, and diet rich in sugar, fat, salt and highly processed foods.

The most important and independent predictors of comorbidities CLD were Metabolic Hepatic Steatosis Insulin, Hypovitaminosis D, elevated CRP, low selenium, and Hypoalbuminemia Compared to Histopathology (Gold Standard), Ultrasound, Metabolic Hepatic steatosis showed excellent diagnostic performances of HCC (Sensitivity = 94 % and Specificity = 95 %).

Conclusions: As the Diagnosis of HCC is epidemic and late in Kinshasa, Glycomics will anticipate the prevention, the diagnosis and the treatment of NAFDL, NASH, and HCC among poor Congolese Central Africans facing nutrition transitions.

Biography

Professor Benjamin LONGO – MBENZA demonstrated Leadership in Training, Supervision of Master/Phd Theses, Mentoring, Coaching, Awards, Patents, and Engagement for Development, Human Rights, and Medicine of 4P to control traditional endemic or pandemic communicable infectious diseases.

Publications

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