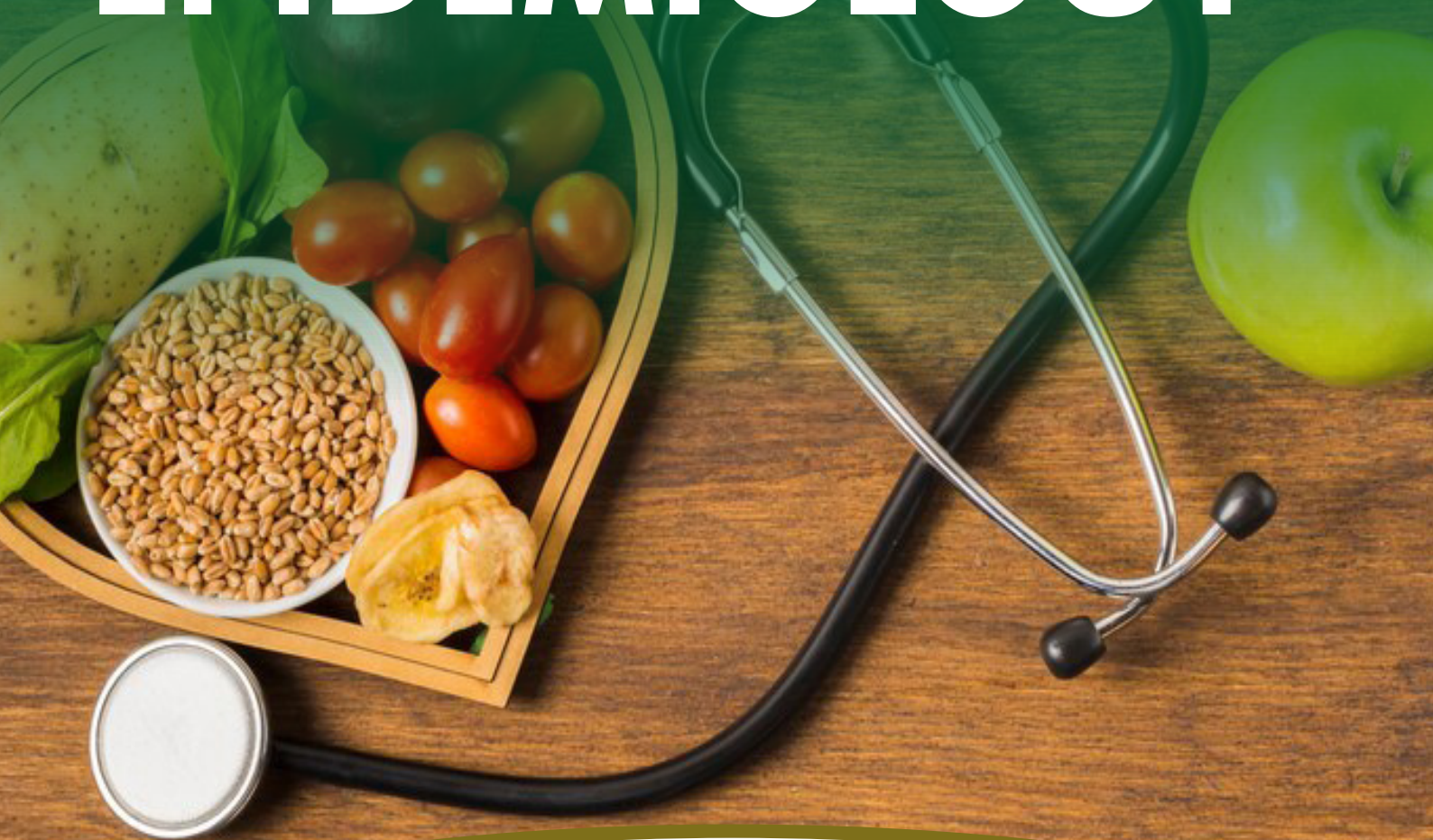


World congress on

PUBLIC HEALTH, NUTRITION & EPIDEMIOLOGY



JULY 30TH, 2024 | VIRTUAL EVENT

Virtual: Zoom Meeting (GMT+1) Time in United Kingdom

DAY 1

JULY 30, 2024

Zoom Meeting (GMT+1) Time in United Kingdom

Keynote Presentation

09:00-09:20

Pubudi Malavige
Edith Cowan University, Sri Lanka

Title: The Association Between Pre-pregnancy Body Mass Index and Pre-eclampsia Among Asian Populations

09:20-09:40

Yasser Mohammed Hassanain Elsayed
Egyptian Ministry of Health, Egypt

Title: Wavy Triple an Electrocardiographic Sign (Yasser's Sign) in Hypocalcaemia: A Novel Diagnostic Sign; Retrospective Observational Study

09:40-10:00

Elie Abdo
University School of Public Health, Lebanon

Title: The Relation Between Malocclusion and Speech Problems

10:00-10:20

Orestis Ioannidis
Aristotle University of Thessaloniki, Greece

Title: Open Abdomen and Negative Pressure Wound Therapy for Acute Peritonitis Especially in the Presence of Anastomoses and Ostomies

10:20-10:40

Ivet Koleva Medical
University of Sofia, Bulgaria

Title: Physio-Prophylaxis and Physical Prevention of Cardio-vascular and Cerebro-vascular Diseases: The Impact of Physical Modalities on Risk Factors

10:40-11:00

Lamrot Yohannes
University of Gondar, Ethiopia

Title: Analysis of Heavy Metals and Minerals in Edible Vegetable Oils Produced and Marketed in Gondar City, Northwest Ethiopia

11:00-11:20

Pamela Mfouth Kemajou
University of Brussels, Belgium

Title: Digital Frontiers in Post-COVID Healthcare: A Systematic Review of Technological Versus Traditional Approaches in Disease Management

11:20-11:40

Itse Olaoye
St Mary's University, United Kingdom

Title: Effectiveness Of Client-Centred Counselling On Weight Management Among Black African Women With Overweight And Obesity In High-Income Countries: A Systematic Review

Panel Discussion | End



World Congress on

Public Health, Nutrition & Epidemiology

July 30

VIRTUAL EVENT

SPEAKER PRESENTATIONS (VIRTUAL)



P.D.P. Malavige, S.M.D. Yasara, H.S. Kothalawala, S.M.D.R. Samarakoon

Edith Cowan University, Sri Lanka, Campus

The association between pre-pregnancy body mass index and pre-eclampsia among Asian populations

Pre-eclampsia, a medical emergency characterized by new-onset hypertension after the twentieth week of pregnancy, is a major contributor to maternal morbidity and obstetric haemorrhage. High pre-pregnancy BMI is a prominent risk factor for pre-eclampsia; however, limited research has focused on its correlation with pre-eclampsia risk in Asian populations. The systematic review aimed to evaluate the association between pre-pregnancy BMI and the risk of pre-eclampsia among Asians. It reviewed five English language articles obtained from a pool of 26,397 articles retrieved from 2014 to 2024, using databases such as CINAHL, PubMed, and Google Scholar. The odds ratio (OR); and 95% confidence interval (CI) were assessed through articles on the correlation between pre-pregnancy BMI and pre-eclampsia in 61,442 Asian pregnant women. Multiple studies in China have highlighted a significant association between pre-pregnancy BMI and the risk of pre-eclampsia. In a birth cohort study, overweight /obese women ($BMI \geq 24 \text{ kg/m}^2$) were found to have a higher risk of pre-eclampsia compared to those with a normal BMI ($18.5 - 24 \text{ kg/m}^2$) ($OR = 1.81$; $95\%CI: 1.37-2.39$). A similar relationship was observed in another Chinese prospective cohort study. Another cohort study indicated a positive linear correlation between overweight/obesity and the risk of pre-eclampsia, with $OR = 2.26$, $95\%CI: 1.75-2.91$ and $OR = 4.49$, $95\%CI: 3.29-6.13$ respectively, in comparison to women with a normal BMI. Research in the Iranian and Indian populations reveal consistent findings on the association between pre-pregnancy BMI and preeclampsia risk. Specifically, Iranian studies indicate that overweight women have a significantly heightened risk of preeclampsia compared to those with a normal pre-pregnancy BMI, with an $OR = 1.47$, $95\%CI: 1.06-2.02$. Similarly, research conducted in India highlights a substantial increase in pre-eclampsia risk among obese mothers. This review revealed a significant positive association between high pre-pregnancy BMI and the risk of preeclampsia in Asian women.

Keywords: Pre-pregnancy BMI, Obesity, Pre-eclampsia, Pregnancy induced hypertension

Biography:

Ms. M. Pubudi Danodya is a dedicated professional in the field of biomedical sciences. She graduated with a Bachelor of Science in Biomedical Sciences from Edith Cowan University, Sri Lanka. She is working full-time as a trainee medical laboratory technician. In addition to her primary role, she also volunteers as a research assistant at Edith Cowan University, Sri Lanka, along with her colleague Ms. Dulmini Yasara, under the supervision of Mrs. Dinithi Samarakoon and Mrs. Supeshala Kothalawala on research projects. With a strong passion for the pathophysiology and molecular biology of non-communicable diseases, M. Pubudi Danodya is committed to advancing her knowledge and expertise in these areas. She is eager to pursue postgraduate studies in the near future to further her career and contribute to the field of biomedical sciences.



Dr. Yasser Mohammed Hassanain Elsayed

Scientist, Independent researcher, Critical care physician, and cardiologist Critical Care Department Egyptian Ministry of Health, Egypt

Wavy Triple an Electrocardiographic Sign (Yasser's Sign) in Hypocalcaemia-A Novel Diagnostic Sign; Retrospective Observational Study

Aim of the study: Aim of the study is a clearing of the presence of Wavy triple an electrocardiographic sign (Yasser sign) in hypocalcemia and its diagnostic and therapeutic value.

Background: Hypocalcemia is a well-known serious electrolyte disturbance characterized by calcium deficiency. It is associated with non-specific electrocardiographic changes.

Method of study and patients: My case study was an observational retrospective 37-case report series. The study was conducted in both Fraskour Central Hospital and (in both the Emergency Department, Internal Ward, and Intensive Care Unit) and Physician Outpatient Clinic. The author reported the 37-cases through nearly 15-months, started from March 12, 2018, and, ended on Jun 8, 2019. Tetany or latent hypocalcemia are included. Parenteral or oral calcium preparation was supplied.

Results: The Mean age was: 38.4 years, with female sex predominance (72.97%). Hyperventilation syndrome (45.95%) and malnutrition (24.32%) are the most common risk factors. Carpopedal spasm was the main complaint (89.19 %). Manifested tetany was the commonest final diagnosis (89.19 %). The Wavy triple sign is a positive and triple sign in 97.3% (36 cases) but it is only double in 2.7% (1 case). The Mean number of affected electrocardiographic leads: 4.13, Max.:10, and Min.:1). The number of affected ECG leads correlate with the level of ionized calcium in the investigated group. Electrocardiographic recovery after calcium administration in the first group was completed in 97.3% vs. partial in 2.7%.

Conclusions: The Wavy triple an electrocardiographic sign (Yasser sign) is a new diagnostic sign seen in 97.3% (36 cases) of hypocalcemia. Dramatic improvement of both clinical manifestation and the new electrocardiographic sign simultaneously after calcium replacement had happened.

Keywords: Wavy triple an electrocardiographic sign, Yasser sign in hypocalcemia, Hypocalcemia, Tetany

Biography:

Dr. Yasser Mohammed Hassanain Elsayed; A scientist, critical care physician, cardiologist, and independent researcher at Egyptian Ministry of Health. Publicized articles; (136). Innovations (13); (3) "Signs", (4) "Phenomena", (1) "Modification", (1) "Maneuver", (1) "Method", (1) "Test" and (2) "Syndrome". Speaker (International conferences); (24). Reviewer; (251) articles for (85) Journals. Honorable editor; (272) Journals. International Conferences OCM; (9). Instructor; (9) official and (96) non-official. COVID-19 publicized articles; (42). Prizes nomination; Breakthrough Prize, Einstein Prize, Abdul Hameed Showman Award for Arab Researchers, and ESICM Awards. Excellence certificate (more than 130). The most famous articles are; 1. Wavy Triple an Electrocardiographic Sign (Yasser's sign). 2. Wavy double an Electrocardiographic Sign (Yasser's sign). 3. Graded Phenomenon (Yasser's phenomenon). 4. Connected Aircraft Squadron Electrocardiographic Sign (Yasser's sign). 5. Electrocardiographic Passing Phenomenon (Flying Phenomenon or Yasser's phenomenon). 6. Movable weaning off an electrocardiographic phenomenon (Yasser's phenomenon of hypocalcemia). 7. Yasser's COVID-19 Discrepancy phenomenon. 8. Yasser's maneuver in the Psychogenic Coma. 9. Yasser's modification or Oxygen test. 10. Three and One Method (Yasser's Method). 11. Yasser's stressor test (Fear and Calm Test). 12. Triphasic Yasser's stressor syndrome (Fear, Calm, and Fear Syndrome). 13. Right to left angina Yasser's syndrome (Swinging Yasser's central heart syndrome) or Dancing Yasser's heart syndrome.



Dr. Elie Abdo

BDS, post grade diploma in Oral Biology, post grade diploma in Oral Surgery.
Lecturer, Department of Speech Therapy of the Lebanese University School of Public Health. Oral Surgeon and Implantologist.

The relation between Malocclusion and speech problems

Malocclusion, a common dental condition characterized by misalignment of teeth and jaws, is viewed often primarily as an orthodontic issue.

However, studies showed its significant impact on speech which is a vital aspect of human communication, can be affected by the structural anomalies in the oral cavity.

This conference will include the effects of different types of malocclusions on speech, the relation between orthodontic treatments and speech therapy and enhance the collaboration between dental and speech therapy specialists.

Biography:

Dr. Elie Abdo graduated from Dental School at the age of 25 years as dental surgeon and in 2008 he accomplished his postgraduate diploma in oral Biology and in 2010 his postgraduate diploma in oral Surgery. He was a member of the oral radiology department of the Lebanese University dental school from 2006 till 2021 as a chief of clinics and actually he is a lecturer at the department of speech therapy of the Lebanese university School of public health since 2013 till present. He published 5 articles and presented more than 10 conferences including 3 international conferences. He has his private practice in oral surgery and implantology.



Orestis Ioannidis

4th Department of Surgery, Medical School, Aristotle University of Thessaloniki,
General Hospital "George Papanikolaou", Thessaloniki, Greece

Open abdomen and negative pressure wound therapy for acute peritonitis especially in the presence of anastomoses and ostomies

Acute peritonitis is a relatively common intra-abdominal infection that a general surgeon will have to manage many times in his surgical career. Usually it is a secondary peritonitis caused either by direct peritoneal invasion from an inflamed infected viscera or by gastrointestinal tract integrity loss. The mainstay of treatment is source control of the infection which is in most cases surgical. In the physiologically deranged patient there is indication for source control surgery in order to restore the patient's physiology and not the patient anatomy utilizing a step approach and allowing the patient to resuscitate in the intensive care unit. In such cases there is a clear indication for relaparotomy and the most common strategy applied is open abdomen. In the open abdomen technique the fascial edges are not approximated and a temporary closure technique is used. In such cases the negative pressure wound therapy seems to be the most favourable technique, as especially in combination with fascial traction either by sutures or by mesh gives the best results regarding delayed definite fascial closure, and morbidity and mortality. In our surgical practice we utilize in most cases the use of negative pressure wound therapy with a temporary mesh placement. In the initial laparotomy the mesh is placed to approximate the fascial edges as much as possible without whoever causing abdominal hypertension and in every relaparotomy the mesh is divided in the middle and, after the end of the relaparotomy and dressing change, is approximated as much as possible in order for the fascial edges to be further approximated. In every relaparotomy the mesh is further reduced to finally allow definite closure of the aponeurosis. In the presence of ostomies the negative pressure wound therapy can be applied as usual taking care just to place the dressing around the stoma and the negative pressure can be the standard of -125 mmHg. However, in the presence of anastomosis the available data are scarce and the possible strategies are to defer the anastomosis for the relaparotomy with definitive closure and no further need of negative pressure wound therapy, to low the pressure to -25 mmHg in order to protect the anastomosis and to place the anastomosis with omentum in order to avoid direct contact to the dressing. The objective should be early closure, within 7 days, of the open abdomen to reduce mortality and complications.



What will audience learn from your presentation?

- Open abdomen should be carefully tailored to each single patient taking care to not overuse this effective tool
- Every effort should be exerted to attempt abdominal closure as soon as the patient can physiologically tolerate it
- All the precautions should be considered to minimize the complication rate
- Negative pressure wound therapy in peritonitis seems to improve results in terms of morbidity and mortality and definitive abdominal closure
- When an ostomy is present there are only subtle differences in management
- When an anastomosis is present consider:
 - Placing the anastomosis remotely to visceral protective layer and thus the negative pressure
 - Place the omentum over the anastomosis
 - Decrease the negative pressure to even as low as -25 mmHg
 - Perform a sutured anastomosis rather than a stapled one

Biography

Dr. Ioannidis is currently an Assistant Professor of Surgery in the Medical School of Aristotle University of Thessaloniki. He studied medicine in the Aristotle University of Thessaloniki and graduated at 2005. He received his MSC in "Medical Research Methodology" in 2008 from Aristotle University of Thessaloniki and in "Surgery of Liver, Biliary Tree and Pancreas" from the Democritus University of Thrace in 2016. He received his PhD degree in 2014 from the Aristotle University of Thessaloniki as valedictorian for his thesis "The effect of combined administration of omega-3 and omega-6 fatty acids in ulcerative colitis. Experimental study in rats." He is a General Surgeon with special interest in laparoscopic surgery and surgical oncology and also in surgical infections, acute care surgery, nutrition and ERAS and vascular access. He has received fellowships for EAES, ESSO, EPC, ESCP and ACS and has published more than 180 articles with more than 3000 citations and an H-index of 28



Ivet KOLEVA^{*1,2,3}, Borislav YOSHINOV⁴, Radoslav YOSHINOV⁵

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Physio-prophylaxis and physical prevention of Cardio-vascular and Cerebro-vascular diseases: The impact of physical modalities on risk factors

Physio-prophylaxis is a system of mechanisms for reduction of risks of appearance and development of pathological processes, illness, and disability; applying natural and preformed physical modalities (mineral waters, seaside and mountain climate, fitness; inhalations, etc.). The goal is achievement of prosperity, better health and quality of life of the individual and the society.

The systematic analysis of 87 risk factors in 204 countries and territories for a period of 20 years (1990-2019), presented in the Global Burden of Disease Study 2019 (published in Lancet), demonstrated the high prevalence and mortality of cardio-vascular and cerebro-vascular diseases in many regions, including Eastern Europe and Bulgaria. Leading risk factors for cardiac and circulatory events comprise: high blood pressure, incorrect diet, metabolic syndrome (high body-mass index, high LDL-cholesterol), tobacco, alcohol consumption...

The necessity of stimulation of physical activity is highlighted in the Global Action Plan on Physical Activity (2018-2030), developed by the World Health Organization and the Pan-American Health Organization, with an important goal: 15% relative reduction in the global prevalence of physical inactivity in adults and adolescents.

Authors recommend a complex algorithm for prevention of cardio-vascular and cerebro-vascular diseases, including regular physical activity, analytic exercises, aerobic endurance training, balance and walking exercises, mechanotherapy, occupational therapy and some preformed physical modalities. We must motivate potential patients for a physically active lifestyle. The individualized exercise prescription should include parameters for intensity, duration, frequency, and mode; with periodical progression. The self-control of risk factors is important.

Efficacy of application of systematic physical fitness is underlined.

Keywords: *prevention, physical modalities, cardio-vascular and cerebro-vascular diseases, risk factors, stroke, myocardial infarction*

Biography:

Prof. Ivet KOLEVA is a medical doctor, specialist in Neurology and in Physical & Rehabilitation Medicine (PRM), with 30+ years of clinical practice and 3 dissertations (2 PhD thesis and 1 thesis for Doctor-es-Sciences). Actually, she works as professor in PRM at the Medical University of Sofia. Consulting specialist in three hospitals (1 for active care and 2 rehabilitation hospitals). Mentor of 10 PhD students and 12 PRM trainees. Borislav YOSHINOV is a medical doctor, actually trainee in Neurology. Radoslav YOSHINOV is an engineer, bachelor and master in Information technologies (IT), actually - PhD student in IT.



Lamrot Yohannes

University of Gondar, College of medicine and other Health Science, Ethiopia

Analysis of heavy metals and minerals in edible vegetable oils produced and marketed in Gondar city, Northwest Ethiopia

Analysis of heavy metals and minerals in edible vegetable oils produced and marketed in Gondar City, Northwest Ethiopia: Nowadays, food safety is considered to be one of the most significant global public health concerns. Edible oil is among the most important components of food processing that are used and consumed in every Ethiopian household. However, its safety is not emphasized. A laboratory-based cross-sectional study was conducted from May to July 2021 in Gondar City. Seventeen edible oil samples were collected using simple random sampling techniques. Heavy metal content was determined by atomic absorption spectroscopy using standard procedures and techniques. The collected data were entered into Microsoft Excel and Stata for analysis. The non-parametric Kruskal-Wallis test was used to assess significant variations. The concentrations of Zn, Cu, Fe, Pb, and Cd were found to be 0.8 mg/l, 0.06 mg/l, 0.8 mg/l, 0.18 mg/l, and 0.27 mg/l, respectively. Most values fell within the permissible quality limits for edibility as prescribed by the World Health Organization (WHO) and the National Agency for Food and Drug Administration and Control (NAFDAC). However, the levels of Cd and Pb exceeded the reference levels in 23.5% and 17% of locally produced vegetable oils. To address the exceeded levels of heavy metals, it is imperative to implement more careful handling, processing of raw materials, and filtering practices. Producers and marketers should take the necessary precautions to prevent contamination. Strict regulatory control from responsible bodies and stakeholders is also recommended to ensure its safety.

Biography:

Lamrot Yohannes completed her MSc at 23 at the University of Gondar. She is a lecturer at the University of Gondar. Alongside her academic duties, she has been working as a secretary in the Environmental and Occupational Health and Safety Association, as a coordinator in the exit exam program, and as a member of the research and community service committee in the College of Medicine and Other Health Sciences, University of Gondar. She is a young researcher working in a team and has published two papers and five co-authored articles. She has made short-term visits to conferences to present her findings.

**Pamela Mfouth Kemajou**

School of Public Health, Centre for Research in Epidemiology, Biostatistics and Clinical Research, Université Libre de Bruxelles (ULB), Brussels, Belgium

Digital Frontiers in Post-COVID Healthcare: A Systematic Review of Technological Versus Traditional Approaches in Disease Management

Background: Post-COVID Conditions (PCC) emerged during the pandemic, prompting reliance on social media and Digital Health Technologies to manage lockdowns and hospital overcrowding. Tracking information and misinformation through Infodemics was crucial, leading to the updated COVID-19 Global Preparedness, Readiness, and Response Plan in 2022, which emphasizes high-quality, accessible digital information to strengthen the global Health Information System. This study aimed to map as well as to compare modern digital approaches to traditional healthcare models, in estimating prevalence, predicting, diagnosing, treating, monitoring, and prognosing PCC.

Methods: Two independent reviewers conducted a systematic review by searching PubMed and Scopus databases keywords and synonyms related to Digital Health Technologies, Smart Healthcare Systems, and infodemics. Articles were screened for eligibility based on predefined inclusion criteria, and the PRISMA checklist was used to assess the quality of selected studies.

Results: The search identified 377 manuscripts. Among these, studies employing Digital Health Technologies, AI, and infodemics to diagnose, estimate prevalence, predict, treat, and monitor PCC were retrieved. Few interventions used infodemics to identify clinical presentations of the disease, while most utilized Electronic Health Records (EHR) and AI tools for diagnosis and prevalence estimation. AI tools for monitoring symptoms were scarce, and studies involving Smart Healthcare Systems were non-existent in Low- and Middle-Income Countries (LMICs).

Conclusion: LMICs face significant health challenges and lag in the utilization of Smart Healthcare Systems. Enhancing Digital Healthcare Technologies and integrating AI and infodemics provide promising avenues for managing epidemics and related complications, such as PCC.

Keywords: Post Covid Conditions, Modern digital approaches, Traditional Healthcare models, Digital Health Technologies, Smart Healthcare Systems, infodemics.

Biography:

Pamela Mfouth Kemajou is a medical doctor and a young researcher who graduated from the School of Public Health at Université Libre de Bruxelles one year ago. She is currently applying for a Ph.D. in public health with a focus on epidemiology and biostatistics. Her areas of interest include emerging diseases, social health inequities and the use of AI in healthcare.



Itse Olaoye¹, Kyriaki Myrissa¹, Eirini Kelaiditi¹, Fotini Tsofliou², Nicola Brown¹

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²Department of Rehabilitation and Sport Sciences, Faculty of Health and Social Sciences. Bournemouth University, Bournemouth, England

Effectiveness of Client-Centred Counselling on Weight Management among Black African Women with Overweight and Obesity in High-Income Countries: A Systematic Review

Client-centred counselling, a collaborative style of counselling, aims at reducing ambivalence and enhancing behavioural change for weight loss. This systematic review aimed to assess the effectiveness of client-centred counselling on weight management in Black African women with overweight and obesity in high-income countries and identify any culturally tailored strategies and theoretical underpinnings. This study was reported in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses. Nine databases were searched from 1970 to June 2022. The systematic review included 22 studies, with 93% (n=20) reporting positive effects on weight loss. Face-to-face and a combination of in-person and telephone client-centred counselling sessions were effective for weight loss. Although the optimal treatment duration was unclear, interventions lasting between six to twelve months were most beneficial. These interventions were delivered by registered dietitians, physicians, nutritionists, and health coaches. Most interventions (n=14) were informed by social cognitive theory and included cultural adaptations (n=19) such as language considerations, socio-cultural values, constituent involvement, and leveraging target group experiences. Studies that employed a combination of at least two cultural adaptation strategies were more likely to be effective. Client-centred counselling appears effective for weight management in Black African women with overweight or obesity. Future research among Black African women should consider countries of origin and migration status, as well as migrant populations in other high-income countries.

Biography:

Itse is at present a PhD candidate in Health Studies at St Mary's University, Twickenham, London and with over 9 years of public health experience working with WHO, UNICEF and CDC/AFENET on disease surveillance, outbreak response, immunisation, community nutrition programs, primary health care revitalisation and data management at all levels of the health care system. She has published 16 papers in reputed journals and has also been serving as a reviewer of many journals of repute.

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