



TRAINING OF TRAINERS (TOT) WORKSHOP ON DENTAL AMALGAM, BEST MANAGEMENT PRACTICES, PREVENTION AND ALTERNATIVE MATERIALS

**Held at the School of Public Health Dental Officers,
Mulago Hill Kampala, Uganda**

FROM 6th to 7th MARCH, 2013

WORKSHOP REPORT

ORGANIZERS

UNITED NATIONS ENVIRONMENT PROGRAM (UNEP)
WORLD HEALTH ORGANISATION (WHO)
INTERNATIONAL ASSOCIATION OF DENTAL MANUFACTURES (IDM)
WORLD DENTAL FEDERATION (FDI)
THE NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY (NEMA), UGANDA
UGANDA DENTAL ASSOCIATION (UDA)
DEPARTMENT OF DENTISTRY, MAKERERE UNIVERSITY, UGANDA
SCHOOL OF PUBLIC HEALTH DENTAL OFFICERS, UGANDA

PARTICIPANTS AT THE TRAINING

Facilitators/Speakers

Dr. Desiree Narvaez - United Nation Environment Programme (UNEP)
Dr. Jean-Luc Eisele - World Dental Federation (FDI)
Dr. Shunichi Honda - Ministry of Environment, Japan
Ms. Pam Clark - International Association of Dental Manufactures (IDM-Australia)
Prof. Nanna Jurgensen - World Health Organisation (WHO Collaborating Centre, University of Copenhagen)
Prof Poul-Erik Petersen - World Health Organization (WHO-Switzerland)
Prof. Ramon Baez - United States of America (USA)

Trainees

Dr. Bernina Kyale Kisumbi - Kenya
Dr. Patricia Mwere - Kenya
Mr. Godfrey Wakhungu Makhanu -Kenya
Dr. Kabulwa Nicodemus Msafiri - Tanzania
Dr. Kahabuka Febronia - Tanzania
Mr. Matwili Haruna - Tanzania
Prof. Mugonzibwa Emeria - Tanzania
Dr. Charles Rwenyonyi - Uganda

Dr. Steven Mugabe - Uganda

Mr. Patrick Nsanja - Uganda

In attendance

Dr. Isaac Okullo - Dean, School of Health Sciences, College of Health Sciences, Makerere University

Dr. Juliet Nabbanja Katumba- Principal Dental Surgeon, Ministry of Health, Uganda

Ms. Grace Aninge - Principal, School of Public Health Dental Officers School, Allied Health Professionals, Uganda

Project Coordinators-Uganda

Mr. Alex Winyi Kiiza- National Environment Management Authority (NEMA-Uganda)

Dr. Margaret Wandera- Uganda Dental Association (UDA)

1.0 INTRODUCTION

A two days Training of Trainers (TOT) Workshop funded by World Dental Federation (FDI) was organized in collaboration with United Nations Environment program (UNEP), World Health Organization (WHO) and International Association of Dental Manufactures (IDM). It was hosted in Uganda as part of the activities of the East Africa (Kenya, Tanzania, Uganda) Dental Amalgam phase-down (EADAP) project. The objectives of the EADAP-Project are to : investigate the current supply and trade of dental amalgam and materials alternative to amalgam and make recommendation for future information systems; assess the current waste management practices in the East African countries; create awareness of preventive dental care and encourage a switch to appropriate alternative to dental amalgam, when clinically indicated, among dentists and patients; and, demonstrate environmentally sound management of dental restoration materials waste in selected dental facilities in the three East African countries.

The workshop was a capacity building training focusing on dental amalgam best management practices and environmentally sound management of its waste, oral health promotion, clinical preventive dentistry and alternative dental restoration materials. Training methodology was by lectures and practical demonstration on site at the dental clinics. Trainers were drawn from the Collaborating institutions-UNEP, WHO, FDI and IDM, while the trainees were two Dental Surgeons and one Dental technician from each of the three East African countries. These trainees are tasked with continuing the training to the stakeholders in their respective countries for the duration of the project.

2.0 OPENING OF THE TRAINING AND WELCOME REMARKS

The training was officially opened by the Deputy Executive Director of the National Environment Management Authority (NEMA)-Uganda, Dr. Gerald Musoke Sawula, who welcomed the distinguished guests from United Nations Environment Programme (UNEP), World Health Organization (WHO), International Association of Dental Manufacturers (IDM), World Dental Federation (FDI), and all the invited participants from Kenya, Tanzania and Uganda.

He noted that this was a very important training because it would help to address the problems of mercury-a toxic chemical, with significant health and environmental impacts, and yet it was still being used in dental amalgam. He added, that the National Environment Management Authority (NEMA), the principal agency in charge of environmental management in Uganda charged with coordination, supervision, monitoring, and enforcement of all activities related to the environmental, had been coordinating the management of chemicals in Uganda. This includes mercury management both locally and internationally, and therefore, through funding from UNEP, WHO, IDM, and FDI, it took over the coordination and management of the EADAP Project.

He further said that in order to reduce the impacts of mercury without adversely impacting on the well being of sectors that used mercury added products like Dental Amalgam in the Health Sector, the UNEP Governing Council mandated the Global Mercury Partnership-a programme of UNEP to be a vehicle for immediate actions to reduce mercury pollution. He added that Dental amalgam was one category of mercury-added products that was being addressed by the Global Mercury Partnership, aimed at reducing global mercury demand related to use of mercury in products and promote alternatives.

He informed participants that in 2009, a World Health Organisation (WHO) meeting in collaboration with UNEP was held in Geneva to highlight the future use of materials for dental restoration, where it was agreed that strengthening of disease prevention and health promotion was the most relevant approach to reduce the need for restorative care and; that it would be prudent to consider "phasing down" instead of "phasing out" dental amalgam at this stage. He added that the training was a critical stage of the project that would help Governments to achieve the objectives of phasing down dental amalgam and provide an opportunity to explore essential conditions for a phase down approach in the use of dental amalgam. In addition, he said that this was also an opportunity for awareness raising to promote preventive dental care and encourage appropriate use of alternative materials for dental restoration amongst patients and dentists.

Lastly, he thanked UNEP, WHO, FDI and IDM and the Government of Norway (Overseas Development Assistance) for providing funding for the project. He also thanked all the participants from Kenya, Tanzania and Uganda for participating in the training. Finally, he thanked the School of Dentistry, Makerere University, and the School of Public

Dental Officers for providing facilities for the training, and noted that collaboration was going to continue to ensure the objectives of the project and eventual phase down of dental amalgam are achieved.

3.0 TRAINING SESSION

The presentations and activities that took place during the two days of the training are summarized and presented in the following tables:

3.1 DAY ONE (1)

Activity	Responsible person(s)	Presentation/discussion areas
Mercury life cycle, impacts, the UNEP Global Mercury Partnerships and the Minamata Convention on Mercury	Dr. Desiree Montecillo-Narvaez (UNEP); Jean-Luc Eiselé PhD (FDI)	Mercury in the Environment and mercury exposure to humans and the environment Impacts on human health and ecosystems The UNEP Global Mercury Partnership and the role of FDI The Minamata convention on mercury National objectives to reduce Mercury pollution
BMP on dental amalgam usage and environmentally sound waste management	Shunichi Honda (Ministry of Environment, Japan); Pam Clark (IDM, Australia)	Options in Waste management and recycling Mercury waste with special emphasis on Amalgam
Practical Demonstration BMP on dental amalgam usage and environmentally sound waste management	Pam Clark (IDM, Australia)	Amalgam Separators
Alternative materials for dental restoration	Prof Poul-Erik Petersen (WHO Switzerland), Prof Ramon Baez (USA)	Advantages, disadvantages, applications, and research on alternative materials such as

		resins, Composite, Glass Ionomer cements, e.t.c Technical aspects of alternative materials
Clinical demonstration with patients	Prof Poul-Erik Petersen (WHO Switzerland), Prof Ramon Baez (USA)	This was done in the clinic

3.2 DAY TWO (2)

Activity	Responsible person(s)	Discussion points
Clinical preventive dentistry	Prof Poul-Erik Petersen (WHO Switzerland): Dr. Nanna Jürgensen, PhD (WHO CC, University of Copenhagen)	Dental practitioner's roles in the active prevention and lowering the incidence of Dental Caries.
Clinical demonstration with patients	Prof Poul-Erik Petersen (WHO Switzerland): Dr. Nanna Jürgensen, PhD (WHO CC, University of Copenhagen) And Dental Surgeon trainees	This was done in the clinic
Visit to Demonstration clinics	Shunichi Honda (Ministry of Environment, Japan); Pam Clark (IDM, Australia) And Dental Technician trainees	Team visited Dental Outpatients clinics at Mulago and Mengo hospitals in Kampala, Uganda. This was to view the equipment and discuss the feasibility of demonstration clinics as an activity of project.
Action planning/next steps in the EADAP project	All participants	Refer to summary discussion below.

4.0 COUNTRY PROJECT STATUS

The project activities were presented by the Project Coordinators from the three countries to inform on:-

- (i) What had been done since the project inception workshop was held in Nairobi in December, 2012 to present (March, 2013).
- (ii) How much of the budget had been utilized as at that time.
- (iii) Country specific challenges and opportunities.
- (iv) The current waste management practices in the three east African countries.
- (v) Progress of awareness/stakeholder sensitization.

4.1 UGANDA

- (i) Data collection on supply and trade flows, and waste management in dental clinics was finalized. Data design and entry of the questionnaires was being done.
- (ii) Stake holders' meeting/sensitization scheduled for **End of March**.
- (iii) Installation of separators at demonstration clinics scheduled for the **March**.
- (iv) Training and monitoring for the months of **April-May**.
- (v) Reports on Validation, and TOT **March**.
- (vi) Final results report in **August**.
- (vii) Awareness will take place in the months of **April to August**

Challenges

- (i) Delay in release of funds at the national level.
- (ii) Getting various stake holders to work together takes a lot of time.
- (iii) Low acceptability and accessibility by the dentists to phase down the use of dental amalgam.

4.2 KENYA

Project coordinators were not present; however the Kenyan team of trainees presented the following:

- (i) Validation of the report survey to be done in **March**.

- (ii) Gathering information about setup of demonstration dental clinics to be done in **March.**
- (iii) Creation of awareness among stakeholders how to phase-down amalgam in **April-July.**
- (iv) Train oral health personnel at the three sites.
- (v) Train oral health personnel about the oral health prevention.
- (vi) Demonstration of amalgam separations at the selected centers in **May.**
- (v) Develop initial guidelines and draft regulations for disposal in **May-June.**
- (vi) Monitoring and evaluation in **March-July.**
- (vii) Prepare project report in **July-August.**

4.3 TANZANIA

The team shall report on the TOT to their team in Tanzania. They will set up a meeting on their return and share the plan with the larger group.

5.0 CLOSING REMARKS

Closing remarks were given by Dr. Isaac Okullo, Dean, School of Health Sciences, College of Health Sciences, Makerere University. He said that the project was good and that the training received by the participants was beneficial to the dental fraternity. He noted that amalgam phase down practices should be emphasized and taught during training in Dental Schools. He admitted there was continued use of dental amalgam in Ugandan settings due to its affordability and strength, and welcomed the use of alternatives and added that emphasis should also be put on prevention. He paid tribute to Prof Poul Erik Petersen who dedicated his knowledge to dental public health and prevention. He finally, thanked the organizers of the workshop for the job well done, and the participants for taking time to attend the training, and closed the training at 4:30 pm, on Thursday, 7th March, 2013.