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and insight
for the future

A MUAS-TU Webinar on International Exchange Program

Date: 08.00-10.10 (Fin. Time) 15.00-17.10(Jap. Time)
January 30th (Mon.) 2023
Venue: ZOOM (https://metropolia.zoom.us/j/63862061434)
Themes: Current Issues of Oral Health Promotion with COVID-19
Before seminar read this blog: https://cochraneohg.wordpress.com

Jan. 30th (Mon.). 2023 (Jap. Time)	Title	Presenter	Institution /Organization
7.30 – (14.30 -)	Internet Connection Check for Zoom		
08.00 - 08.10 (15.00 - 15.10)	Registration to Zoom		
08.10 - 08.15 (15.10 - 15.15)	Opening words/ Greetings from Tokushima	Dean; Prof. Otto Baba	Tokushima University
08.15 – 08.20 (15.15 - 15.20)	Opening words/ Greetings from Metropolia	Head of Degree Program; Prof. Riikka Jokimäki	Metropolia UAS
08.20 - 08.40 (15.20 - 15.40)	Special Lecture Title: The History and Future of the International Exchange Program between MUAS and TU	Prof. Hiroki Iga	Tokushima University
08.40- 08.50 (15.40 - 15.50)	Education Title: Current Student Life and Education of Oral Health Promotion under COVID19 Crisis	Undergraduate student, 3rd year Ms. Hinata Itsuki	Tokushima University
08.50 - 09.05 (15.50 - 15.05)	Research Title: Relationship between the incidence of aspiration pneumonia and the oral environment in Japanese older adults	Undergraduate student, 2nd year Ms. Mutsuki Hoshikawa Graduate Master course 1st year Ms. Ichika Sone	Tokushima University
09.05- 09.20 (16.05 – 16.20)	Coffee break		
09.20 - 09.50 (16.20 – 16.50)	Photodynamic therapy in Dentistry	Oral-hygiene students, Ms. Carolina Cavalcante Bitu	Metropolia UAS
09.50 – 10.05 (16.50 – 17.05)	Discussion of Oral Health promotion	Ms. Saila Pakarinen Prof. Kosuke Kataoka	Metropolia UAS Tokushima University
10.05 – 10.10 (17.05 – 17.10)	Closing of the Seminar	Director; Prof. Miwa Matsuyama	Tokushima University

The History and Future of the International Exchange Program between Metropolia University of Applied Sciences and Tokushima University

Hiroki Iga

Department of Oral Health Care Education, Tokushima University, Graduate School of Biomedical Sciences

Metropolia University of Applied Sciences and Tokushima University have been in an international cooperative relationship from 2010, and we concluded the first agreement and MOU. As this event was remarkable and acclaimed highly, it was published in the Newspaper Article in Tokushima. Furthermore, we concluded the second and third Agreement and MOU of International Cooperation in 2016 and 2021, respectively.

Over the past 12 years, we have carried out various joint research collaborations and the student exchange programs on the education of dental hygienists and have achieved many results. So, I believe that this mutual relationship will have more fruitful outcome in the future and contribute to the new dental hygiene education in both universities.

In this presentation, I would like to introduce The History of the International Exchange Program between MUAS and TU, and express my opinion about the future of this program. So, I would be very happy if many students will be interested in becoming a part of the program after this presentation.

Student Life and Education of Oral Health Promotion under COVID-19 Crisis

Hinata Itsuki

School of Oral Health and Welfare, Tokushima University Faculty of Dentistry

I was in the first batch of students that entered college when the COVIT-19 pandemic began. There were various difficulties both in school life and in daily life. Classes and practical training were held online because it was not possible to meet face-to-face with teachers and friends due to infection control. Not only in school life, but also in our daily life, we had to put up with many things because of the measures against COVID-19. I could not eat with a large group or go on a trip, so I could not lead a life like a university student.

Under such circumstances, we have created a fun time in our own way by participating in club activities and working part-time. In addition, guidelines have been established in case we are infected with corona, and the university has successfully responded to many corona problems. Recently, countermeasures against corona infection have been established, and the normal life has gradually returned. Classes and practical training can now be held face-to-face under infection control measures. I will introduce my experience of responding flexibly to such problems, as well as my daily life with consideration for the new class system and COVID-19 countermeasures.

Relationship between the incidence of aspiration pneumonia and the oral environment in Japanese older adults

Mutsuki Hoshikawa[1], Ichika Sone[2]

1 School of Oral Health and Welfare, Tokushima University Faculty of Dentistry
2 Department of Hygiene and Oral Health Science, Tokushima University Graduate School of Oral Sciences

Background
Many of the older adults in the later stages of life suffer from aspiration pneumonia and the relevance of oral care has also attracted attention in recent years.
Purpose
The aim of this study is to investigate the relationship between the oral environment of older adults and the onset of aspiration pneumonia, and consider the future role of dental hygienists.
Subject and method
The mortality rate due to aspiration pneumonia in older adults was examined from the database of the Ministry of Health, Labor and Welfare. In addition, as baseline data, we used the results of a questionnaire survey and dental examinations obtained from older adults living in Tokushima City who participated in a dental examination program for those aged 75 years and over, and the results of aspiration pneumonia obtained from the annual data of “National Health Insurance database (KDB)”.
Result
In 2021, aspiration pneumonia in the older adults in Japan was 40.3 per 100,000, making it the sixth highest mortality rate. Among 666 older adults, 11 subjects (1.7%) developed aspiration pneumonia during 6 years of follow-up. According to Kaplan-Meier analysis, the incidence of aspiration pneumonia was significantly increased in those who met the items of "moderate/large amount of plaque and food deposits" and "4 mm periodontal pocket or more" compared to those who did not.
Conclusion
Aspiration pneumonia in older adults was closely related to oral hygiene and periodontal conditions. In Japan, where the population is aging, the mortality rate due to aspiration pneumonia is expected to increase in the future, indicating the importance of oral care by dental professionals. Dental hygienists are therefore expected to play a role in providing oral care to patients admitted to hospitals and older adults living in nursing homes, and also to instruct nurses and nursing staff on oral cleaning.

Photodynamic therapy in dentistry

Bitu, C.C.[1]; Halen, P.[1]; Lehti, S.[1]

[1] Metropolia University of Applied Sciences

Background

Dental biofilm control is the most important preventative methods against common oral diseases, such as caries and periodontitis. The most effective plaque control method is mechanical removal of biofilm. Adjuvant use of antimicrobials for biofilm control, although efficient, can be used only for limited periods of time, due to their indiscriminate effect on the oral microflora and the increasing risk of bacterial resistance. Therefore, alternative antimicrobial methods and technologies are very interesting for long-term dental plaque control. One such method, antimicrobial photodynamic therapy (aPDT), is currently also being successfully used in dentistry. Of particular interest, we highlight the home-applied dual-light aPDT Lumoral®.

Contents

We present the key concepts of aPDT, its applications in dentistry, and the possible future benefits of long-term use in dental biofilm control. We also present a research project, which aims to investigate the effect of the protocol of the home-applied dual-light aPDT Lumoral® on the formation of dental biofilm in healthy adult volunteers.

Research project methods

We will recruit healthy adult participants from the population of students of the Metropolia University of Applied Sciences. These participants will be divided into a control and a test group. Dental biofilm will be measured with the help of the Rustogi Modified Navy Plaque Index. All participants will receive oral hygiene instructions both orally and written. The test group will also use the Lumoral® photodynamic therapy device and Lumorinse®, an indocyanine green dye, twice a week. After a month, we will perform the final plaque assessment in both participant groups. We will also collect feedback about their experiences with their self-care routines. The initial and final plaque measurements will be analyzed through the Student's T-test statistical method. The feedback from the participants will be analyzed qualitatively through content analysis method.

Outcomes

To briefly summarize the applications of aPDT therapy in dentistry, to present our research project, and to welcome feedback from participants.