



**Proceedings of EADPH Pre-Congress Workshop held
on Wednesday, 11 September 2019 at Het Pand,
University of Ghent, Belgium
Best practices in dental curricula development –
a follow-up to the 2018 EADPH Pre-Congress Workshop**

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Abstract

This document reports the proceedings of a workshop held in Ghent on 11 September 2019, the day before the annual congress of the European Association of Dental Public Health. It is taken directly from the transcription of an audio recording.

The workshop consisted of eight short presentations which described curriculum changes and examples of inter-professional education and practice involving dental public health in European countries. The presentations were followed by discussions in four small working groups and reports from each group which highlighted achievements, barriers and challenges.

Introduction

The workshop was a follow up to last year's EADPH pre-congress workshop - The Boundaries between Caries and Periodontal Diseases-What are the Implications for Education in Dental Public Health?¹

Aims

The aims of the workshop were:

1. To receive and discuss reports of planned or actual changes in dental curricula which have occurred since the October 2018 EADPH pre-congress workshop.
2. To hear and discuss innovative inter-professional activities which address developing public and dental public health challenges.

Programme

- 14.00** Welcome and opening remarks from EADPH President
Colwyn Jones
- 14.05** Aims of the workshop from workshop chair
Kenneth Eaton
- 14.10** Inter-professional activities in the community and educational initiatives to address the health and oral health needs of underserved and/or the disadvantaged
Preparing the future dental workforce in Malta- A public health experience
Paula Vassallo
- 14.20** Curriculum change - The golden opportunity for inter-professional education
Marina Harris
- 14.30** Building cultural competence - listening to older adults
Jenny Gallagher
- 14.40** New ways in education for undergraduate students in Special Dental Care at the University of Witten/Herdecke Dental School
Andreas Schulte
- 14.50** Inter-professional educational activities by the Belgian dental profession of tomorrow Let's start and improve it
Ruth Sederal
- 15.00** Development of undergraduate teaching to deliver prevention and implementation of outreach health promotion - SUGAR SMART schools
Huda Yusuf
- 15.10** Multi-professional educational opportunities for enhancing teamwork in the management of dental caries and periodontal diseases
Debbie Reed
- 15.20** The work of the European Dental Hygienists Federation
Yvonne Nyblom
- 15.30** Break for Small group discussions and their feedback (with tea and coffee)
- 15.50** Small group discussions
- 16.30** Feedback from small group discussions
- 16.50** Summary and closing remarks *Kenneth Eaton*

Sponsorship

EADPH thank Colgate for their generous sponsorship of this workshop and the costs of publishing its proceedings

Welcome and Opening Remarks: Dr Colwyn Jones, President EADPH

I welcome you to Ghent? My name is Colwyn Jones, I'm the current President of the European Association of Dental Public Health and I work at the University of Edinburgh in Scotland. It's great to see so many of you again, so many friends and colleagues from all over Europe and elsewhere. Ghent is a fantastic city. It's a lovely cultural city and I picked up this guidebook last night. I was reading through it: "Ghent, a beautiful, ancient and successful and prosperous city," and I came across the entry about the city of troublemakers and apparently in 1540 there was a bit of a problem with the people that were ruling in Ghent and they were punished, I quote; "the punishment was harsh and the humiliation was even worse as dozens of the city's dignitaries were forced to kneel before the Emperor with nooses around their necks, barefooted and dressed in hair shirts." and as I read that I thought "I wish we could do that with the Westminster Parliament in London."

Today we have a pre-congress workshop looking at best practices in dental curriculum development. Now it hasn't even been a year since we had our first meeting in Mallorca, so we're not expecting huge changes but we are hoping there's going to be some progress for people to report. Colgate have sponsored this workshop, as they did last year in Mallorca. Colgate have been very generous over the last few years now and I really want to thank Colgate for their educational grants and for the support that they're giving us.

On the same theme, we're really keen to continue to hold pre-congress workshops so we are looking for ideas for future years for pre-congress workshops that we can hold. Next year it's in Montpellier in France, so if you have any ideas or any suggestions for future workshops, the Council, the Executive Council will be very keen to hear your ideas. It's not that we don't have any of our own ideas, but if we can get some more ideas from other people that would be great. I'll now pass over to our pre-congress workshop organiser, Professor Kenneth Eaton.

Aims of the Workshop: Professor Kenneth Eaton: Workshop Chair

Well Colwyn, thank you very much for your introduction. It's great that you're all here. Everything that is being said is being audio-recorded, but not video-recorded and as with last year's workshop, we will be publishing proceedings of this workshop in Community Dental Health. I am really so grateful to Colgate, I'm not going to say anymore because it's already been said but Irina Chivu, their representative, will be here tomorrow so I think it's good to thank her. Some of you in the room may well have travelled here through travel scholarships and five of those are awarded by Colgate, so those of you who have got these awards, please thank her in person. So a brief format for the workshop; we've got the introduction and aims, then there are eight, 10 minute presentations, followed by small group discussions and feedback, a summary and then as I've mentioned, the whole thing is being audio-recorded. The small groups, there'll be four: three of them will be in this room and one in the room next door.

A reminder of the aims, they are in the programme, but just in case you have not read them, they are to receive and discuss reports of planned or actual dental curricula changes which have occurred since last workshop. Not much will have happened because of the short time since the last workshop. Also in some of the bigger countries where there is a very controlled dental curricula, it will take ages and ages to change things. If you're lucky enough to be in a small country with one dental school, your chances of change rapidly are much greater. So many of the presentations will be talking about, innovative inter-professional activities and that is the theme of the conference; how we can train all members of the dental team and indeed, the medical team together so that we are more effective at improving the oral health and general health and wellbeing of our populations. So that is what we're all about. We really have to stick to time so I'm going to say no more and hand over to the first speaker who is Dr Paula Vassallo from Malta, Paula.

INTER-PROFESSIONAL ACTIVITIES IN THE COMMUNITY AND EDUCATIONAL INITIATIVES TO ADDRESS THE HEALTH AND ORAL HEALTH NEEDS OF UNDERSERVED AND/OR THE DISADVANTAGED. PREPARING THE FUTURE DENTAL WORKFORCE IN MALTA - A PUBLIC HEALTH EXPERIENCE

Dr Paula Vassallo

Thank you very much everybody. I will be talking to you about preparing the future workforce in Malta, which has only one dental school, it is one of the smallest dental schools in Europe. The dental school in Iceland is now smaller than ours, so we're the second one but it is the smallest faculty we have at the University of Malta. As Professor Eaton said, how did we think about the change? Was it easy? Well, it wasn't as easy, even though we are only one school but it took a gradual change for us also to put public health as one of the main topics in the curriculum. Nevertheless, we have succeeded in introducing a five-year dental curriculum on dental public health, which incorporates statistics, practice management, preventive and dental public health. So this for us was a success story and our students are now very cognisant and knowledgeable about what dental public health is, what public health is and what is the role of the dentist in not only treating patients, but also providing prevention, not only at an individual level but also at a community level.

To give a brief overview: despite being one of the smallest dental schools, we have the Master's of Dental Surgery which is a six-year programme, leading to qualification as a dentists, the Bachelor of Science programme for dental hygiene, the BSc course in dental technology and the Diploma in dental surgery assistance. The advantage of having all the courses under one roof in one university, is that it allows us to provide integrated training to all the team members and for us to not only teach them about the concept of team dentistry but to enact it in practice. We also provide postgraduate training and have a joint programme with King's College in orthodontics and a Master's in Restorative Dentistry, we also offer doctoral programmes. The current training programme in which all the dental assistants, dental hygienists, dental technologists and dentists, are trained together, allows for true integration and allows for better patient outcomes and excellent clinical students' performance.

What have we done to take in to account the current trends? We have set up the faculty which is currently located within the teaching hospital, we've set up another one in an old peoples' home, the main residential home, because like any another country in Europe, we are facing an ageing population so we have set up dental chairs, a dental unit within the elderly home so 30% of the training and clinical sessions actually take place within a residential home. This is where the new dental teaching clinic was set up (pointing to a slide), in the residential home which is a hybrid between a nursing home and a hospital for elderly people. This gives the opportunity to students to work with gerontologists, to actually see the reality of what they are going to face in future life when they see large numbers of elderly people who come and attend the clinic. It definitely provides the perfect setting for clinical research and for better managing to work with the elderly population. We have 25% of our population who are I would say, are in the young elderly category and they form a large proportion of the elderly. Our demographics are changing with the influx of foreign nationals so that is now changing, but we still have a large elderly population. Here is our, the geriatric ward (pointing to a slide) so it's accessible for people who need wheelchair access. Here you can see our dental students, student dental nurses, dental assistants and dental hygienists working together. We also have a mobile dental clinic as part of the university, because we feel we need to access the people. We need to get to the people, and we need to see the reality of the people who we are actually going to be seeing in the future. It means of the corporate social responsibility for our university and with the use of the mobile dental clinic, we are going around the different centres. We go to schools, we go to some villages and towns, we work with local councils, so we are getting to see a lot of the population who have never previously accessed dental care. This is an obligatory part of the curriculum. So it's obligatory for the dental students, it's obligatory for the hygienists, it's obligatory for our dental surgery assistants and even our dental technologists get the opportunity to go and do a session. So it's fully accessible, we actually have to walk the talk, we can't just talk about it but we have to really do it. As far as our five-year module of Dental Public Health is concerned, which we have actually changed over the period; I think it took us a good six, seven years to change it from a one-year preventive module to a five-year incorporated module. We start off the first year with statistics, to give students an insight into understanding and critically appraising any papers that they read. Then during the first two years we teach the principles of preventive and community dentistry. This is followed by teaching in dental public health and practice management, including for instance, how we are the future advocates for better oral health and better general health, students are going to address the public health challenges we face of disease, of obesity? It's not only about dental caries, but as a dental profession, we have a role to play, a very important role to play to address the bigger picture. The students are also given assignments in which they have to look at the fat, sugar and salt content of all the different products in a supermarket. Some students are

given the liquid products, some are given preservatives, some are given breakfast cereals and they all have to present their findings to each other. So when they are giving advice to patients, they understand it's useless to recommend something which is low in sugar but high in salt and fat. The message they have to give is one which is good for their oral health but also for the general health. We have complaints from some students that the foods in the freezer are a bit cold, they're going to catch a cold, we have a few of these challenges, but the outcome has been a very positive one. The students gain a broad understanding of the problem of how best to encourage healthy eating. The reality is when they start to learn how to read food labels they see that very few of the foods out there are healthy, they start to appreciate that in public health, they need to understand the broader picture. Whereas before it was a bit all victim-blaming, the actual exercise really helps them understand the realities.

All this training is carried out together and all the teaching days are in the main hospital and in the residential home. When we look at success factors, we've seen an increase in the number of patient contacts by our students, the number of appointments we've seen in elderly homes, the number of patients we've actually managed to access, the clinical research we're allowed to do because we go out in the mobile. Because we're in the elderly home, very positive exam results, a positive review at the end and high satisfaction rates of both students and patients. Just one point, as a take-home message, what do we have to keep on considering? Sustainability, the single-use plastics, this is something we do, sustainability of the profession, the new future, resilience, how can we build resilience with all this change? The sustainable development goals, what is the role of the dental surgeon in achieving the sustainable development goals? Personalised dentistry to fit in with personalised medicine, how do we fit in? Digital dentistry, artificial intelligence, tele-dentistry, and also, as you know, one more; the importance of inter-professional education. Thank you very much.

Kenneth Eaton - Paula, thank you very much for getting us off to a really good start. We are one minute ahead of schedule, let's keep it that way.

CURRICULUM CHANGE - THE GOLDEN OPPORTUNITY FOR INTER-PROFESSIONAL EDUCATION

Dr Marina Harris

Hello everybody, my name's Marina Harris and thanks so much for the opportunity to come here and speak to you about what we do at Portsmouth. My background is that I am a dental hygienist, and I am a Senior Lecturer and Periodontology at the University of Portsmouth. I was interested to see, the proceedings from last year's workshop and to look at the work that was done by working group one. It included a recommendation that it is up to us (the dental profession) to train providers of care in residential homes. I thought that was really good because that's actually something that we do at Portsmouth University, well our students do, which I'll talk about in a moment. The second recommendation which I empathise with, this time from working group two, is that inter-professional education (IPE) should not just be within dentistry but also involve other professions. This is again something that we're doing at the University of Portsmouth. It also fits in with the global picture and the concept of integration of the health and social services workforces. So we've got a good background with what we all want to try and achieve.

This is the University of Portsmouth Dental Academy, (points to a slide). It's a lovely place so if any of you ever come over to the United Kingdom and want to have a little tour around, contact me and I'd love to show you. We are very proud of where we work and of those we train. There are dental nurses, so we have a diploma in dental nursing. We also award a certificate in higher education nursing and we've just introduced, and are one year into, a degree programme, for dental nursing. We have a pure dental hygiene, honours degree programme and we have an honours degree programme in dental therapy, which is a dual qualification, for dental hygienists and therapists. We also train fifth year King's College London dental students who come to us for their final year and this is where we have intra-professional education. My colleague and Head of School, Professor Chris Louca, will be speaking about this tomorrow.

The School opened in 2004 and already as you see, (pointing to a slide) we've actually had two curriculum changes. So the title of my presentation is how curriculum change is a golden opportunity for IPE because we all know trying to fit something into something that's already established is like square pegging a round hole, it's actually impossible. I think that's why we are where we are now because it's a very full curriculum, and it's very stressful for undergraduate training. We know that from research. So trying to give or get students to do something that they may perceive as extra is very, very difficult. Having a curriculum change is the opportunity to get something in, where you can plan. It's all about planning. So with the first curriculum change in 2011, I led on this change in our curriculum and we called it Clinical Practice in the Wider Community. Our students were timetabled across the year, they were third year dental therapy students, so they each experienced six exposures to these different environments. The group of

students would make three visits to one residential home and then three visits to another. So what we made sure of is that the visits were programmed and not optional as they had been in the past. Previously we had tried to get students to do things optionally in their own time because it would benefit them. However, now the visits are within the curriculum and have a learning outcome within their degree programme.

Now we can we plan work in residential homes ahead. The students are able to liaise with the managers of the care homes and then run training sessions in the care homes for the carers and issue Continuing Education certificates, so the carers, as well as disseminating good oral health practice to the residents in the homes, are now able to put the CE certificates into their portfolios as evidence of their professional development.

The students also go to drug and alcohol rehabilitation centres, where the sort of clientele that they are exposed to, when they visit ,are people who want to rebuild their lives. They are very keen then to focus on oral health which has probably been neglected over the past. I'm sure you're very familiar with, the sort of difficulties that people in these circumstances have. However, some of our students come from backgrounds in which they have never been exposed to such people with these problems so it gives them a really good insight into the wider population. Linking these visits to a summative assessment ensures that the students really engage with it because it's something that they have to pass as this module as part of their degree.

We have recently had a big curriculum review and it will soon change again. Our students will be teaching and learning with students from other groups, such as pharmacy and nursing students. I think that is really fantastic for us and will broaden pharmacy student's education. In the UK, there has been emphasis on broadening the role of pharmacists, including giving oral health advice and the public are going to have greater access, with pharmacies open for longer hours. This is real inter-professional education. The type of topics that our students, or the students of all the different disciplines are learning together are generic ones. So in the first year it's 'science informing practice' and 'foundations of evidence-based practice'. I think we can learn a lot from students and the staff in nursing because they're hot on the evidence-based practice and other topics in year two, including 'engaging with service improvement which is something they do much more than us. In the third year, they have a research project and study 'leading safe and effective care'. This inter-professional programme is starting now (beginning of October 2019). Developing it has caused many headaches, and much inter-professional collaboration. We must get things right because we want everybody to benefit but I'm sure it's going to be a great success, so hopefully I might be able to come back again and let you know how we have progressed.

So what is this benefit for the students? If we think back to what some of the outcomes were from your last year's workshop. We wanted to hear about, professions actually learning together utilising a more multi-sectorial approach. I think you'd agree that's hopefully what's going to happen, at least at some dental schools. More importantly for the public, can we really start thinking about true, holistic, [multi]-disciplinary healthcare. Thank you.

Kenneth Eaton : Marina, thank you very much. I think it just goes to show what you can do in newly-established dental schools. Our next speaker is Professor Jenny Gallagher from King's College, London and Jenny it's great that you're here, thank you very much for being with us.

BUILDING CULTURAL COMPETENCE - LISTENING TO OLDER ADULTS

Professor Jenny Gallagher

Thank you Ken, and thank you everybody, it's a real pleasure to be here again this year. I'm based at King's College, London and my role there is as Dean for International Affairs. We are the biggest dental school in the UK and so because of our size, things sometimes happen very differently to in a small school. What I want to present today is one of the projects we've been working on, it's called Building Cultural Competence: Listening to Older Adults. One of my interests is how we serve our older population, but combining this with dental public health education and of course last year we looked closely at the boundaries between caries and periodontal diseases and actually how we can really promote education and action in relation to tackling these diseases, so it's been a real joy already to hear the presentations this afternoon. I just want to remind you, for those of you who haven't seen the series of papers, which were informed by the EADPH Special Interest Working Group (SIWG), that I have the privilege of chairing. What we're doing this afternoon really aligns to that. In the Dental Public Health SIWG we carried out a survey of Europe over the last few years, it's en route to publication, we hope in Community Dental Health. What we did have the opportunity to do, was to influence the Association for Dental Education in Europe guidelines on the graduating European dentist and so we touched on that last year and particularly the fourth paper which highlights the outcomes, and is titled Dentistry in Society. It's one of the four domains, in the guidelines, and it describes how we take dental students and dental care outside dental schools to build their cultural competence and help them to have an understanding of the wider world. Within the key domains the underpinning element is actually how can we help dental students build a set of skills, values and principles that acknowledge and respect work towards optimal

interactions between the individual and the various cultural and ethnic groups that they might come in contact with. It can be anything from their awareness, either their bias or reaction, their attitude, causing them to think about their own belief systems, their knowledge, particularly in relation to inequalities, and their skills, having an excellent grasp of an effective and respectful communication, whether within an organisation or between individuals and of course that includes body language. Each one of us needs to think about these challenges in our own dental schools and who is coming into our own dental schools because they will vary from place to place, but I can guarantee that in most countries they are likely to be middle and upper class. They're likely to be from the upper social classes or they may well be second or third generation immigrant families who have got aspirations in that direction, so the nature and shape of your dental graduates, will differ and so how they relate to the local population will differ. They may or may not be representative of the groups of patients that they treat and actually in this globalised world, we really do need to think seriously about how we communicate and how we build that cultural competence. You can see from some of this, by taking people out of their comfort zone, it makes students and ourselves think about how we react, what our thoughts and belief systems are, what our world view is. At King's, the context is such that we're looking to our 2029 vision and you can see that item four of that vision is an international community that serves the world. So, within our university, we have been setting up an international strategy and I'm Dean for International Affairs in our faculty and I work with Professor Olonisakin, who's from war studies. Interestingly, she's been leading the work on how we build and strengthen the international community that serves the world and of course that very much requires cultural competence and so within the college we're thinking about our identity. We are also thinking about internationalisation at home, how we actually connect and think internationally at home and how we have global outreach. This involves a story with the staff and the students to really think seriously about cultural competence. In our faculty, which has about 150 dental students per year, it is a large group of students and we have a Smart Society, which is a voluntary society and I insist that they have formal training because they want to be involved in health promotion, health education in the community. So they have to come to training sessions and there might be 100-150 dental students in a big lecture theatre at 5 o'clock in the evening. It is so exciting to see their interest and enthusiasm in relation to their promoting oral health, there may be a lot of naivety but we want to build on their enthusiasm and harness it and my core trainees, the junior dentists working with me, chaperone them on their various projects. So the students are learning a lot and it's a good example of our service to our culturally diverse society, but in building this cultural competence, I want to give you an example of one of the projects, one of the more innovative projects that we've done with the dental students. We've called it Listening to Older Adults and we work with Professor Tinker, who is a social gerontologist in the global health team, and Dr Awojobi who's one of my post-docs and the rest are students, undergraduate students from the Smart Society. We have a portfolio of locations for the students, the opportunity to go to Portsmouth, which we've just heard about, which is great. For the students, who have to stay in London or want to stay in London, we have a new health and wellbeing centre which was set up and opened in 2014, where there is everything from a dance studio, swimming pool, gym etc. and a doctor's surgery and then there's a 14 surgery dental clinic. So it's a great opportunity for working together. It is a community hub set up by and for the community and so basically, espousing these principles from the ADEE document through to what King's is seeking to do with our students, we involve them with the local community in relation to research and research in relation to older adults. So we invited older adults from the community to come to the community room in that facility and to meet with our dental students. We gave them lunch, gave them cards on the table and said "Which of these issues are important to you?" and we'd researched the range of issues from the literature, but we also gave them some blank cards so they could identify what the key issues were for them. In those sessions, so we had two students with two or three or four adults at the table and the students were allowed to ask questions, but they weren't allowed to answer. The older adults were to lead those sessions and identify what the issues were that were important for them. So students and dentists and health professionals were very quick jump in and give feedback on what ought to happen but in that first session, the students weren't allowed to answer those questions. They could explore them, but they weren't allowed to answer them. Basically, the issues that the older adults raised, as you can see in the blue section on the left-hand side (pointing to a slide), were the things that you would expect. However, the older people were quite interested in medical conditions, they wanted to know much more about fluoride. which was interesting. Of course dental attendance is always a challenge for them, particularly because their dental practitioners keep changing in an inner city area. Often their dentists move to the private sector, which is a particular frustration for them. At the beginning of the afternoon, I wondered if the older people would last the session with all the subjects we wanted to cover, actually at the end of the day it was the students who were exhausted I think, not the older adults because they had really enjoyed talking and sharing their issues. Then the students had to go away and produce leaflets and you can see on the right-hand side (pointing to a slide), the range of areas, which were the top areas that came out of the list and so they then went away and worked on those and brought them back to the older adults.

Some of this is published, but I'll just share a few of the headlines in terms of the student learning, let's see some of these quotes.

"I've learnt about the importance of active listening and how important it is to provide a holistic approach to the care of patients."

“They perceive all this as important and often the thing they remember most is how pleasant or nasty the dentist was to them.”

“I learnt more about what the priorities are for older adults in terms of oral health.”

“Trust and communication was much more strongly emphasised than expected.” “Students in the clinic are so busy and consumed with the technical side of dentistry they actually forget the person-centred side.”

“It should be incorporated into the curriculum as it’s very useful just to talk to patients.”

“In clinics the focus is on the treatment.”

So there were a range of implications that came out of it as well in terms of the education and how we build greater engagement as part of the dental curriculum. For the dental team, really building those humanitarian skills, in terms of working with patients. For the students realising that these were the issues, working with manufacturers in terms of actually making sure the products are tailored toward the older adults and information and policy-makers had a range of actions coming out of this research. Now that was pilot research so we would love to take it further forward and into a national study. What we also did was we got the students, not just to help do the research but to help with the analysis, to help with the presentations, both orally at a meeting and as a poster and subsequently at the British Society of Gerontology conference as a verbal presentation and we’ve been publishing jointly. In the UK at present, the Parliamentary Health and Social Care Select Committee is looking at dentistry, and we’re actually writing some of this up to put it in to their enquiry. Finally, I would like to acknowledge all my colleagues and support from industry and to thank you for your attention.

Kenneth Eaton : Jenny, thank you very much, that was great. Our next speaker is Professor Andreas Schulte and Andreas is from the only private dental school in Germany. Andreas.

NEW WAYS IN EDUCATION FOR UNDERGRADUATE STUDENTS IN SPECIAL DENTAL CARE AT THE UNIVERSITY OF WITTEN/HERDECKE DENTAL SCHOOL

Professor Andreas G. Schulte

Thank you very much. Dear colleagues, I’m very happy that you are here and as Ken said, I’m from the University of Witten/Herdecke, the first private university and the only private university in Germany where you can study dentistry. It was founded about 35 years ago. My topic today is new ways to educate undergraduate dental students in special needs dentistry. Before I start, I want to give you a very short insight into the legal frame for the education of dental undergraduate students in Germany. This has to be carried out in a total of 10 semesters. In the first five semesters it contains basic sciences and pre-clinical sciences and in semesters six to ten it comprises the clinical sciences. But special care dentistry is not listed in the legal requirements so our university decided to add this topic on their own to the dental education and the curriculum.

Let me present to you some figures about disability. In Germany about 10% of the population is acknowledged to have a severe disability. Of course not all disabilities are accompanied by increased risk for poor oral health. The group that is exposed to the main risk of having poor oral health in the general population is the group of persons with intellectual disability and this population group is estimated to be about 1% of the total population, but dementia is not included. We have a population of 80 million persons in Germany, this means that we have about 800,000 persons with intellectual disability, if there’s a proportion of 1%. This figure can be applied to nearly every country. The challenge for people with intellectual disability is that they are in need of support for daily oral hygiene and they also need to be accompanied when they visit a physician or a dentist. We also have the problem, I think not only in Germany but in many other countries as well, that dentists and physicians do not receive adequate education to be prepared for the provision of care for people with intellectual disabilities. In our dental field, there is no systematic provision of preventive care for people with disabilities and especially for people with intellectual disabilities. This is the list of departments that we have in our dental school (pointing to slide) and you see this is my department and I am also the Chair of the only department for Special Care Dentistry in Germany. So it’s really a pity that a big country with so many dental schools is not able to have more dental schools with such a special care department. I am very happy that the university gives room in nearly every year, for special care education for dental students. So they hear the first lecture on this topic in their first year. It’s followed in the second year and then we have weekly lectures in the fourth year and in the fifth year. The programme is completed by an oral examination in the fifth year. We also have practical courses that are mandatory and since 2016, we introduced a new course called communication skills in semester seven, I’ll come back to that in more detail. The students have to assist during the treatment of special care patients in a special clinic and on at least two days they also have to assist in the treatment of special care patients undergoing general anaesthesia. Starting in October 2019, they also have to assist during the provision of dental care for persons with disabilities who live in a special nursing home for persons with intellectual disabilities.

The communication course, which we provide and offer in semester seven, is the first time that the students see their own patients. They have to take part in groups of three in five stations and provide basic information in simulation exercises in which they have to change their perspective because each student has to be the dentist, the dental nurse or the patient. In first station, they have to train on how to communicate with a patient with intellectual disability from the three perspectives. In station two they have to perform tooth-brushing for other persons, it means that both of them for the first time, brush teeth in other adults. Some of them have experience in brushing children's teeth but that's completely different from adults. Then they also have to train how to examine and how to communicate with patients with cerebral palsy. In the fourth station they have to learn how to communicate and examine a patient who sits in a wheelchair, so everybody has to take place in the wheelchair, they have to move the wheelchair to the treatment room and they also have to do the examination in the wheelchair so that they learn that they cannot expect that every patient can be supported from the wheelchair into the dental chair. In station five, they have to communicate with and examine a patient who is blind and this station is the one that impresses our students the most. This is because everybody has to have their eyes covered so that he really cannot see anything and are led from the waiting room to the dental chair and one of the students has to start the clinical examination. So everybody experiences how it is to be blind. We did not expect it but this is the most impressive experience for the dental students.

In October 2019, our students, will start providing dental care in an outreach setting. It was very complicated to facilitate this because we need the permission of the regional dental chambers (associations) and of the social security system. The social security system and the dental chambers. In Germany oral healthcare is mostly private and the dental chambers are very ambivalent to dental schools providing care in outside settings and we really had to do hard negotiations to convince these groups that we are not trying to extend ourselves for economic reasons. In the end, we successfully gained permission and we now are able to do the dental examinations and to provide preventive care and also restorative care in the residential institutions, where the persons with severe intellectual disabilities are living. Faculty members started providing care in the residential homes in April 2019. From October dental students have to be part of the team. You can see in this picture (pointing to a slide), one of the patients with severe intellectual disabilities who is sitting in his own wheelchair for treatment. To enable this and to be independent of the treatment room, we bought a mobile dental unit so what we see here on the left side is the unit for the dentist and on the right side is the unit for the dental nurse. This equipment was funded by two small regional foundations who gave us the money so we could buy it and we are very happy with their kindness. Reactions from the staff of the nursing homes and from the patients are extremely positive and they now do not have to be transported to the dental school or to a dental practice.

Thank you very much for your attention.

Kenneth Eaton : Andreas, thank you very much, it's very impressive you getting money to help buy that mobile equipment. I think maybe there's a story there for you to tell people about how to go about securing funding.

Our next speaker is Dr Ruth Sederel.

INTER-PROFESSIONAL EDUCATIONAL ACTIVITIES BY THE BELGIAN DENTAL PROFESSION OF TOMORROW - LET'S START AND IMPROVE IT

Dr Ruth Sederel

Thank you for having me here and I'm happy to share with you the way we tried to integrate inter-professional activities in the curriculum, for the future Belgian dental professionals here in Ghent. I'll take you through the content of our curriculum, which address inter-professional educational activities.

My name is Ruth Sederel and I've been working for the past two years at Artevelde University College as a clinical teacher. I've been contributing to the establishment of dental hygienist as a new profession in Belgium. To start with I would highlight the very important inter-professional relationship between the dental professionals at Ghent University and Artevelde University College so that dental hygiene students and the dental students meet during their years of education, at several points. This is mainly when they work on community projects and during lectures connected to the projects and of course during clinical practice where they learn how to co-operate and use their skills in the field.

The latest but not least project, between Ghent University and Artevelde University College, has been to co-operate to organise this congress, which is good. However, the first project I would like to talk about is our oral health promotion project in which the first-year students of the Bachelor in dental hygiene and the first year dental students of Ghent University work together. It's for primary school children and it aims to improve the knowledge of oral health and oral health behaviour of the primary school children. At the same time it's also for our students and is the first time they actually get in touch with real patients, the children, so it makes more of an educational project for both parties. Last year it involved two primary schools, with 250 primary school children, about 20 teachers, 200 of our students

and 15 people from the staff of the two universities. It also involved the staff from the university hospitals, so it was a huge co-operation. Before visiting the schools there was a combined introduction class which all the students attended and were divided into groups. In the schools, they gave instruction on nutrition, oral health behaviour and they use their own self-developed material to provide this education and the instruction. They also provided oral hygiene advice as well as screening. You can see the day in 2018 when I was organising the screening (pointing to a slide).

The second project is also aimed at primary school children but more to the school as a whole, you probably all know about the World Health Organisation's initiative to make every school a health promoting school. It aims to improve schools as health promoting schools. It's about the positive development of healthy behaviours, such as physical activity, recreation and play, balanced nutrition, prevention of obesity and prevention of smoking. This second project was again shared by staff from both universities and the children participating were a bit older, about eight to twelve years old. The university students started with the preparation of a report, in which they stated whether or not the school is already a health promotion school or to what extent it already is a health promoting school and how they can improve. They formulate goals and they plan how they will achieve improvement during their project day. On the project day itself, they provide an intervention and then afterwards they write an evaluation report to see whether or not they actually achieved the goals they initially aimed for. You will see (pointing at a slide) some pictures of students, performing activities with the students in the school, some artwork. At Ghent University the dental students all have a community dentistry project in their second year of their Master's degree programme. They are divided into different groups going to different vulnerable groups within the society and depending on the group they are assigned to. The target population could be 0-3-year-olds, disabled people, elderly, or homeless people. The dental students in the first semester of the second year, perform research on oral health problems and the determinants in the population of interest and in the second semester, they prepare and carry out an intervention, which is focused on one of the determinants they studied in the first semester. During the second year of Bachelor of dental hygiene programme the students also go to organisations, but in their curriculum it's more about putting knowledge and skills into practice, depending on the organisations they go to. So again the target group and aims are kind of similar, although it's about treating and educating the professionals who work for the particular organisations. I would like to highlight some examples. One of which is activities in the elderly care homes where the students train the nursing personnel to provide oral health care. We think that this is one of the most important parts of the work when it comes to inter-disciplinary approaches. We also bring a mobile unit for dental check-ups and treatment as far as possible. You will see a photograph of some of us and there are the students working in the care homes. Activities in child consultation clinics and daycare will be at first, more focused on introducing the theme oral health to these very young children and mostly their parents and again, we try to co-operate with the staff of the daycare and the staff of the child consultation clinics to teach them how they could highlight these subjects in their location.

Last year our students used a toolbox, which they made themselves in the first semester. It contained toys focusing on the 0-3-year-olds. It included puzzles, colouring pictures and reading books, all to use to get the children get in touch with oral health care. You will see some pictures of this here (pointing to a slide). You will see some students, the daycare personnel and then the children. In the last year of the Bachelor programme in dental hygiene we have an elective course, meaning that all students from Artevelde in their last year can choose a course. They are not only dental hygiene students but it could also be students from other programmes and it should be about inter-disciplinary health promotion. The purpose of this course is that they plan and perform inter-disciplinary health promotion with students from different expertises. Because they are from different programmes the approach should be more holistic and the students can learn from each other and that way the healthcare should be more efficient and could be of higher quality. Last year we organised it for the first time. However, only dental hygienist students took part. We performed a project on a primary school, the International School of Ghent (ISG). We spent a lot of time on planning the health promotion, the project, using the intervention that they modelled and afterwards we visited ISG for one half day to perform the interventions.

I would next like to highlight the inter-professional educational activities organised within the curriculum. There are also several regional campus community partners and one of the universities who will cooperate and the students have played significant roles sometimes. I think that those are good examples of inter-disciplinary outreach as well. Dr Lambert, will elaborate more on some of those initiatives in his keynote lecture on Friday.

To conclude, I would like to look at the position papers, which we discussed during the last pre-congress workshop in 2018. I was evaluating with my colleague Professor Vanobbergen to what extent we put them into practice at our Artevelde University College and it was clear that our goal actually should be to put the evidence into the theory we provide to the students, and that the theory can then actually be implemented in our clinical practice. Some of our Professors do try to implement the evidence in their courses and in how they do their jobs. However, as our programme at Artevelde is still very young, we are still searching for more unity in the content of our courses and how we as staff do our jobs. We are aware of the fact that this is something in which we most definitely have room for improvement within our school. Thank you.

Kenneth Eaton: Ruth, thank you very much and I think your last comment was very apt, there's always room for improvement and I'd be very interested to hear what comes out from the small group discussions which will follow today's presentations.

Our next presenter is Dr Huda Yusuf.

DEVELOPMENT OF UNDERGRADUATE TEACHING TO DELIVER PREVENTION AND IMPLEMENTATION OF OUTREACH HEALTH PROMOTION - SUGAR SMART SCHOOLS

Dr Huda Yusuf

Thank you very much for inviting me here today. I'm going to be talking about two initiatives that have been done at Queen Mary University of London (QMUL). One was patient-focused and the other was focused on the community. At QMUL we've got dental undergraduates and dental hygiene and dental therapists students and we thought they could be agents of change for patients as well as in the community. So the majority of the research that's been carried out has focused on treatment and diagnosis in outreach settings and not much has related to prevention. We've got two outreach dental centres and a dental hospital located in a very deprived area with a large population of Bengali communities in East London. Child and adult oral health are significant public health problems but we have issues with cancers, cardiovascular disease and obesity.

When I start at QMUL, the aim of the programme was to review the dental public health curriculum for the undergraduates and to develop and audit a structured teaching programme, which was focused on patients. This was because I had to get the patient care first right before I went on and conducted the community programmes. What I did first was a baseline focus group with the dental students and the therapists and the hygienists, to find out about their training needs and delivery of prevention. Then after, taking the findings into consideration, I developed a structured teaching programme that looked at communication skills and the principles of motivational interviewing. We also covered oral hygiene, diet, smoking cessation and alcohol advice using the AUDIT-C tool.

As part of the programme, I employed actors, so in each session we had actors who were given different scenarios to present to the students and the students were asked to deliver the health advice according to the evidence and the teaching. As I am passionate about evaluation, after the programme was completed, I decided to get three dental students, to audit the outcomes on our behalf, which was great. This was really led by them and they looked at the 50 clinical notes at baseline, at six-month follow-up and then at one-year follow-up. In the baseline focus groups on preventive behaviours, students felt that they had positive attitudes towards prevention. There were some barriers in terms of their knowledge and skills and they said it's hard telling a patient what to do without telling them off and it's very hard to advise them and telling them to stop something without coming across like a teacher. So that was really important. In the follow-up focus group after they'd had their training, students were really satisfied with the new teaching and they felt that they could actually deliver advice without being too condescending to their patients and they learnt a lot by having the actors there because the actors gave them feedback and they felt that their knowledge and skills had improved.

If we look at the audit results, you can see huge changes in terms of asking about diet, at baseline it was at 40%, by the end of it, it was 100%. In terms of delivering dietary advice, this increased from 56% to 89%. Smoking cessation, yet again saw very positive results, you can see that they've been asking and delivering advice. Oral hygiene advice didn't change very much because they felt that giving oral hygiene advice was quite easy. In terms of alcohol advice, this was at 0 at baseline and it went up to 59% at follow-up, so a huge improvement.

The next thing I had to do was take the students into the community, so we piloted Sugar-Smart Tower Hamlets. Tower Hamlets is a Sugar-Smart local area and they asked for our help in implementing a schools' programme. So I made contact with the local public health department and the healthy schools team. I then made contact with eight local schools and we reached over 1,000 pupils. I developed two presentations; one that was based on younger children aged 5-8 years and another presentation was for children aged 9-11 years. I sought permission from Sesame Street for the use of videos; that was quite challenging. It took about six months to get their permission. Then our third-year dental hygienists and therapists were trained for an hour and a half by me and the healthy school's team, to deliver the intervention. We weren't allowed to take pictures in schools because of consent issues but I can show you pictures of our students outside the schools and delivering the interventions. In terms of evaluation, yet again I made contact with the global health unit within the university and we're going to be doing an evaluation with the BSc students who will be doing the data collection this November. The evaluation will consist of four key themes, one is interviews with the teachers, to know about their attitudes and knowledge and skills, mapping out the food and physical environment around schools, do we have lots of shops selling chocolates and sweets and fizzy drinks. The third element is to assess changes in pupils' knowledge of healthy living, the whole programme is not focused on oral health. I made sure we didn't just focus on oral health, it was called 'Healthy Living' so we talked about physical activity, we talked about sugar intake, we talked about healthy diets and there was a small element about fluoride and tooth-brushing. And the fourth element is our students, the global health students, who will be going out to schools and observing the classroom activities, the physical activities based within the school and what happens in the canteen in terms of food. So the next steps are for the evaluation to be completed by March 2020, the report will be published by July 2020 and we will be co-publishing the results with the students; they will be leading on

the publications. We will also extend this programme to nurseries. I've already made contact with the local health visiting teams, who work with parents with young children, to extend the programme to nurseries. So in conclusion, we know that there's been improvement in students' knowledge, skills and behaviours. Students gained experience and skills in conducting clinical audits and they've also gained some experience in working with communities. So if I can show you, this is one of the videos that we used.

Kenneth Eaton: Huda, thank you very much for your presentation, we're going to try and get that video running at the end of the session because we don't want to waste any time, so we'll carry on. So our next speaker is Debbie Reed. Debbie is an old friend of mine and is a dental nurse who has progressed to great things. She's now the Head of Department at the Centre for Professional Practice of the University of Kent and she will be telling us all about the inter-professional Master's programme which involves a great range of different professionals, including dentists.

MULTI-PROFESSIONAL EDUCATIONAL OPPORTUNITIES FOR ENHANCING TEAMWORK IN THE MANAGEMENT OF DENTAL CARIES AND PERIODONTAL DISEASES

Debbie Reed

Hello, I'm Debbie Reed from the University of Kent and it's a pleasure to be asked to come and speak to you today. I'm going to talk to you about our MSc programme. What I've done is I've taken the opportunity to extend the definition of inter-professional practice and use the term multi-professional practice to allow you to understand some of the ideas that we've had behind the programme at Kent. Our programme at Kent is an MSc programme. It's not just for dental professionals but it's for all areas of health, but we have got a pathway within the programme that is suitable for our colleagues that work within dentistry. We wanted to make sure, when we were putting the programme together, that the pathway was suitable for all registered dental professionals, so dentists, dental hygienists, dental therapists, dental nurses, clinical dental technicians and also other members of the team. We've had a number of people who have come to join the programme and have done the programme over the period that it's been running, which is for about six years and those people have included those working in public health areas.

The MSc pathway is in applied dental professional practice. It's a pathway model because we had some constraints and we had to make sure that the programme was viable and the way that we were able to make the programme viable, was to make sure that there were some modules which were shared with a number of other groups who brought them together for modules on evidence-based practice, research skills and for the dissertation module. So why did we want to bother to put together a dental pathway? Well, first of all we wanted to encourage a broader range of perspectives within dentistry. Typically, within the UK, the majority of postgraduate education that is done within universities with dental schools and is aimed at our colleagues who are dentists. We felt that was actually missing out a whole group of other professions working within the dental sector, so we wanted to be able to facilitate the development of a broader range of perspectives and also to encourage a range of other professional voices.

So why postgraduate? Well, we wanted to ensure that all the dental professions had got an opportunity to gain research skills and enquiry skills, so allowing them an opportunity to be able to enquire into their own practice and to build up a greater understanding about practice-based enquiry, with relation to the dental care professions in particular. That particularly includes enquiry into preventing and minimising dental caries and periodontal diseases and all the other work that our colleagues who are dental therapists and dental hygienists and some of the dental nurses, to give them, if you like, a platform to be able to take some of their interests and their work forward. Taking this concept forward and building that larger body of knowledge about the effectiveness of what those dental care professions do, to ensure that it was actually reflecting the whole dental workforce, not just a part of the dental workforce.

So what about the programme? As I have said it is a Master's level programme, that's a Level 7 programme and it's part-time, over three years. We deliver it in three stages. Year one is a postgraduate certificate, and that's got three modules adding up to a total of 60 credits. In the first year and we start off with evidence-based practice, so building those key capabilities about being able to identify, search for, locate, retrieve and then critically appraise and analyse literature. Going on to other areas. They include things like professional standard setting, which is building up an understanding of how to conduct practice audits. The third module in the first year is about dentistry in a contemporary context, some of the big health issues but also some of the political issues that are going on within the sector.

Year (stage) two, has two core modules, which are inter-professional working and that is not just inter-professional working in dentistry, but across a whole range of other areas, it's very multi-disciplinary. The other core module is research skills, so building up a deeper understanding about how to put together a research proposal and about methodologies and methods required to conduct research. That particular module provides a platform to the third year when the participants carry out a dissertation project. In the second year the participants are also offered an opportunity to conduct a project, a small project if they take one of our optional modules called special area of study.

We've also got some other modules and students are also able to if they wish, choose from across the university catalogue if there is something else that particularly takes their interest. We've had people that have gone on to do some teaching awards and so on and also chosen modules such as anthropology and a whole raft of ideas of how they want to take forward their particular professional area. We allow accreditation of prior learning. All our students are mature students, they're all in the workplace and they're doing this part-time and many of them have carried out and completed successfully, a whole range of other continuous professional development, high-quality courses and so if they come to us and they've got this experience of these professional courses, whether they are academic credit-bearing or not, we'll look at them in terms of trying to get some acknowledgement of that. So that's the second year.

The third year (stage) is the dissertation. It's a 60 credit module and is made up of a small research project that the students carry out and then write up over the course of one academic year. When we were putting together the design of the course, we had to think about the cost and the cost implications, that's costing for all sorts of things so cost in terms of time. As I said, they are all professionals in the workplace and so we deliberately thought about how we would minimise the disruption to their work and encourage participation. One of the decisions was that we would, other than during the induction, conduct the teaching over weekends, so typically we teach on a Friday, Saturday and Sunday or a combination of those weekends. We also were grateful when the UK Government changed the student loan system and included part-time, postgraduates because a number of our students then were able to participate, as cost in the past had been an issue. We do have some very, very small pots of money, we're able to secure some scholarships but they're very, very small pots so not life-changing amounts, but enough for people that need to buy textbooks and so on. We charge at the EU standard rate for postgraduate students so we don't add an additional charge because it's dentistry and again, that was intended to encourage participation. If we are able to demonstrate some accreditation of prior learning against any of those modules, then the students don't pay for those modules either, so that again is an opportunity to reduce cost. Of course one of the other things was about the additional cost or the hidden cost to students, and so we had to think about making sure that what we did allowed for cost-effective travel. Another reason to teach in blocks at the weekends. We also made sure that we established relationships with local hoteliers and other local providers of accommodation so the students who participate in our programme are able to take advantage of reduced accommodation bills. Weekend delivery has proved very, very popular and certainly enabled a number of participants to take part who may not have otherwise been able to so. As did the recognition of prior learning. Some of the other things we had to think about was that, our some of our students, when they're coming into Master's, and part-time Master's study have anxiety about academic writing, so we put together an online package that can be done as a CPD course before students participate in the programme. It's a way of either establishing academic writing skills or for those that have been arrested if you like, out of academic study, for them to go back and review these skills in the comfort of their own home before they participate.

Some of our modules are also offered as short courses and for CPD, which again helps to make them viable. Our students actually were very interested about what would happen after the MSc, so again we were giving this issue quite a lot of thought and we have established our own journal, the Advanced Journal for Professional Practice, which is an open-access journal and our students were very interested in being able to get some of their better work published either as abstracts or as articles. We've had quite a number of people participating now and in the future what we've done is look for different types of pathway and we're looking at the moment at Level 7 apprenticeships and that's proving very, very interesting, particularly around the area of special care dentistry. We're working with the Local Community Healthcare Trust to establish an apprenticeship pathway for their workforce, as well as professional doctorates as an option for those who have successfully completed their Level 7 award. We've also opened up some more pathways, so we've got one that's in applied dental professional practice and we've been approached by the Royal College of Surgeons and the Faculty of General Dental Practice and two years ago we launched another pathway in advanced clinical practice and we have a collaborative partnership with the Royal College and we've had about seven or eight students come through on that route over the last 18 months.

We also opened up the MSc because the underpinning MSc is in advanced and specialist healthcare and we've been working with our National Health Service, Health Education England, and we've been working with the general medical practitioner trainers, the people that train their young doctors in practice and we've established a collaborative pathway for them with research skills in the second year, and in the dissertation, they are educated in a multi-disciplinary group with professionals from a range of professions.

So in summary, I have described the development of professional practice MScs which are accessible for all the dental care professions and a wide range of others and how we've managed to make sure they are viable in the current times of constraints within academic institutions. Thank you.

Kenneth Eaton : Debbie, thank you. What Debbie didn't tell you, was the interesting other professions who have taken the MScs. They have included: a prison governor, probation officers, university administrators and very many schoolteachers who want to get promoted. So this is really where much more inter-professional working comes in because for research skills and the critical appraisal, all these professions are being taught together. I've learnt an enormous amount about the problems of prison governors, probation officers and schoolteachers in the last six years (laughter). Well, the good news or the bad news is, we're now on to our last formal presentation and it's great that Yvonne Nyblom has come to tell us a little bit about what's going on in the world of dental hygiene in Europe.

THE WORK OF THE EUROPEAN DENTAL HYGIENISTS FEDERATION

Yvonne Nyblom

Thank you. I hope you are not too disappointed now, you thought it was all over, it has been a really, really nice afternoon so far, thank you for hanging out. It's a pleasure to be here. My name is Yvonne Nyblom, I'm a Swedish dental hygienist and I am the President of the European Dental Hygienists Federation and also for many years, the President of the Swedish Dental Hygienists Association. I am here to talk about a couple of projects that the European Dental Hygienists Federation has conducted during the last years. First of all, I'd like to acknowledge some of the partners who have made this possible. Without good partners we don't make any progress at all, so thank you to them. As we have discussed today and as you all know, the importance of oral health has many, many layers and many aspects. Oral health is an integral part of general health, that's no doubt about it and poor oral health has an impact for quality of life and in the society in terms of health systems' costs. It has an impact throughout the lifespan from childhood to older adulthood and it is highly important that we really try to address this in new ways. It links poor oral health to decline in physical and also in cognitive functions and we actually know that very many of the oral diseases are mainly preventable and we also know that the dental hygienist is the key provider of the preventive oral healthcare. So, the European Dental Hygienist Federation, started to discuss how could we as a Federation contribute to strengthen oral healthcare in Europe and at the same time strengthen the profession, harmonise education and spread awareness about what a dental hygienist can contribute with. So, we started to look at the role of dental hygienists, the inter-professional and the intra-professional team. We talked about the clinic - the dentist, the dental hygienist, the dental assistant, the dental nurse and if we really use all those resources effectively or is there a possibility for improvement here? The dental hygienist could be a resource not only in general practice but also in a specialised team with special skills. In the clinic, the dental hygienist is mainly working with prevention, of course. Examination is an essential part in prevention and protocols based on individual risk assessments require a good education. An education that gives a broad basis of insight in how to understand and interpret science and how to keep updated on the latest research and evidence practice. Dental hygienists work with early-stage caries control, non-invasive caries therapy, periodontal non-surgical therapy and we work with all age groups in society. In inter-professional collaboration, dental hygienists have a huge role in the society, this is an area where we can see that our role is growing. A dental hygienist can work inter-professionally with the healthy patients, but also the once at risk - with health promotion, outreach activities such as meeting with parents, maternity care, childcare, pre-school, in schools and also in all sorts of patients' associations the dental hygienist can play a major role. In primary care the dental hygienist role is also growing. Healthcare, elderly care and terminal care are areas where the dental hygienist can support, but, that also requires a good education, skills and competences. Within the Federation we have worked specifically in two parallel projects on education; the Common Education Framework for dental hygienists in Europe, I will come back to what that is, and also, we have worked with an Oral Health Professional Training (OHPT) platform for continuing education for dental hygienists. The structure of the Common Education Framework, the CEF, is based on the same principles as the undergraduate curriculum for graduating European dentists, which Professor Gallagher spoke about earlier this afternoon. For dental hygienists we have developed this curriculum at Level 6 (Bachelor level) with 180 ECT points.

The CEF is built on four domains, exactly as those for dentists. It describes learning outcomes. The contents of the first domain, on Professionalism, are more or less the same as those for any healthcare professionals, the second domain, which describes safe and efficient clinical practice and patient-centred care, is also quite general. The third, patient-centred care is maybe the area where we can define the role of dental hygienists more specifically. The fourth domain is oral health in society and you see the difference here, instead of "dentistry in society" we use the term "oral health in society". Tomorrow in another presentation, I will go more into detail about the four domains.

Today I would like to give you a short introduction on what a Common Education Framework is. It's a definition of an education level and learning outcomes for dental hygienists. It's a way to harmonise dental hygienists' education. It must be possible to understand what a dental hygienist is. Everyone more or less knows what a dentist is, but for dental hygienists it could vary, some dental hygienists have a six-month course, in other countries there are four-year studies, so it differs a lot and also the regulations for the profession. The CEF can be an opportunity for upgrading existing education for dental hygienists and also for new countries and new programmes, who like to start dental hygienist education. It also contributes to student exchange possibilities, it will be much easier for students to go to other European countries' programmes for exchange studies. It also provides a platform for continuing education. With a harmonised education it will be easier to define the areas where it's necessary to provide continuing education.

To move freely as a dental hygienist in Europe is difficult until the differences in their education have been reconciled. At present, it's difficult due to the differences in our education, so it could also be a possibility to define dental hygienists' education in another way. And of course, it gives access to a highly qualified and educated resource in preventive oral care. The Common Education Framework is not a sort of a European curriculum and it's not a European diploma or a specific qualification, nor is it a replacement of national training programmes. It's very clear that

every country has their own laws and regulations and supervising bodies for their education. The Common Education Framework does not interfere in national regulations of professionals.

So where are we now? We are doing the final adjustments of the Common Education Framework document. We have sent in the manuscript to the Journal of European Dental Education. It will be reviewed and hopefully be published at the beginning of next year. Of course, after dissemination, there will be discussions on the dental hygienist programme and educators all around Europe. Updating and adjustment will be continuously required.

The other area we as a Federation are developing is continuing education, we heard about the excellent programme in the UK, I was very impressed with what you presented. The EDHF continuing education programme has been developed together with a partner, Pierre Fabre Oral Care, a unique opportunity for continuing education. The courses are developed from the modules the EDHF has completed within the ERASMUS+ project EuHyDens in Europe. The courses are adjusted to dental hygienists' demands and scope of practice in general. The aim is to have easy access to the courses and you should be able to take the courses in your own time and pace, strengthen professional development, giving opportunities to upgrade your education and strengthen oral health provision. As health care professionals we have to continuously update our education to be more attractive to employers. It also essential for patient's safety and quality in daily practice.

The first course is an overview of oral pathology, with an emphasis on the dental hygienist's role in recognition of oral diseases and it will also focus on assessments of normal and abnormal conditions and classification of oral mucosal lesions. Additional courses will be introduced step-by-step. They will be work-based and will be accessible from the national dental hygienists' associations' websites. In some countries they will be validated, so that you could have credit points from those courses. They will be regularly quality-assured and updated. In some countries the courses will be provide in the national languages, this is optional, and in some countries, it will be in English. There will be no fees for the courses. These (pointing to a slide) are examples of courses which will be introduced step-by-step. As you can see, many of the courses are very strongly linked to inter-professional collaboration, oral health and general health, community oral health, tobacco cessation etc. This platform will be launched later this month after the EDHF annual meeting in Helsinki. Thank you for your attention.

Kenneth Eaton : Well Yvonne, thank you very much indeed. The marathon of presentations is now over and we're about to start the small group discussions. Are there any immediate questions that people want to ask any of the speakers? Okay, well we are exactly on time. Now the first small groups will be three in this room and one in the next-door room.

Points Arising from the Small Group Discussions

Kenneth Eaton: Well, welcome back everybody. I was very impressed going round the groups at the breadth of discussion going on in all the groups and that's really good to see. We're getting near the end now and a representative from each of the four groups will summarise what they found. This is going to be audio-recorded and the transcriber will hear the recording, plus the feedback here will be used to write up the proceedings, which will subsequently be published, as I've explained. However, before we hear the reports from the small Huda Yusuf will play the Sugar Smart video which should have been played at the end of her presentation. The video was played.

Report from Group One Dr Paula Vassallo

The first thing that came out from our discussions was most importantly that it (curriculum change) can be done. Today we have seen good examples of good practices and that being innovative is effective. Dentists have the knowledge, but they need different skills with evolving work, and with the new challenges we are facing, we need different skills, as we have new roles for dental professionals and the different members of the dental team.

Another point which came out was that despite integrated teaching is possible, integration in practice is more of a challenge because of the healthcare system within a country. So those were the important messages which we had and if we look at the public health challenges, which each country is facing, the one big issue which comes up is that the inequalities, the gap between the rich and the poor is increasing, and in fact in some of the countries, the middle class simply does not exist.

The issue of the NCDs is always there, with obesity being one of the major problems as well as tobacco and alcohol consumption, so the risk factors, are present, even though we have some countries who are addressing some of these risk factors, if they have the political will. The lack of recognition of certain professionals is one of the challenges as well. Another problem is the lack of workforce control, in terms of no control of the number of universities and no control in the number of students, resulting in an increased dental workforce with consequent unemployment and potentially a decrease in terms of the quality of care and standards.

Then we looked at opportunities and challenges. One of the challenges that we face, is having integrated training and including a dental public health module. Other challenges are the lack of a skilled workforce, not only in terms of numbers but particularly in the lack of the competence of the current workforce in dealing with the new public health challenges. Further challenges include inequalities with the migrant groups, the gaps getting larger, problems with access and the high cost and a further workforce challenge in terms of brain-drain you know, people are going to different countries. There's the financial aspect and there's lack of support for people to stay in their home country, for people to work in the area in which they were trained, in the town in which they trained, there is lack of incentive and a lack of support.

These challenges are the economic realities. Some dental courses are not modular so it's difficult to actually introduce a dental public health module, the lack of political will, which comes, we always hear that health is politics. A lack of regulation, lack of collaboration, the power game, there's no specialisation in dental public health in most countries and also a lack of integration of the health systems. One or two points in between as challenges and opportunities. European harmonisation will be a challenge for some and an opportunity for others. In our group, empowerment again was highlighted as being an opportunity and a challenge.

If we then look at the opportunities from the examples that we listed, these are opportunities for other countries to take on and to adopt them. The students who have now absorbed the knowledge and are asking for these skills and also patients, there are patients who have increased awareness you know, "We want our dentist to give us this", "I want a hygienist", "I want a dental team" so there is patient empowerment, the patient is asking for new approaches and this can stimulate changes in dental training. Changes in legislation also offer opportunities, as for example the new legislation for dental hygienists in Belgium. Another good example, as you heard today, is the increasing possibility to undertake postgraduate studies such as a PGCert or an MSc.

This was the overview from our working group, thank you.

Kenneth Eaton: Paula, thank you very much and I'm very impressed, such a lot of points in a short time that's very good. Could the representative from group two come forward now please.

Report from Group Two Professor Roxanna Oancea

We came up generally with the same conclusion as group one.

So, related to the messages, the important messages, first the dental curriculum has to adapt and track changes in dental practice. We have to adopt some new policies in some countries, we also have to implement practical projects and students must see the reality. Dentistry has to become more multi-disciplinary. A student-centred approach, it is very important and also not of any less importance, special care dentistry, it is very important and we realise that some of the schools do not teach this topic.

So, what are the dental public health challenges in the countries that we had in Group Two? Let's just say that dental public health does not exist as a specialty in some countries and I think that I am talking in maybe half of the Eastern European countries. So even if we teach our students dental public health as a topic we are fighting hard and we are participating to congresses to be up-to-date, the questions remain, what will and should they do after they graduate since this discipline does not exist. For the other countries, there are some problems arising from an ageing population or a very young population, so it means we need to address the health and oral health needs of different ages, in the population, hard to reach communities and raise awareness about establishing good oral health routines.

Another thing that we focused on is that the students focus more on clinical treatment rather than prevention, so they are often prefer instrumenting teeth rather than talking and raising awareness of the things related to public health. The private healthcare system is another thing, maybe it's not so much orientated to dental public health aspects and that's what motivates students' away from prevention.

Related to the projects that we heard about today. They were very nice projects, and the question is: which of the projects can we actually apply back home, so what was the message to take home, let's just say. There are already some programmes, for instance, Erasmus programme implemented in Romania, oral health promotion in school. The lady from Nigeria told us that they have lack of these kind of programmes, oral health promotion in care homes involving patients in treatment and oral health promotion programmes and she asked for practical advice on how to implement them. So we had a discussion on this topic.

We then discussed the challenge of collaboration with other professionals. Maybe as dentists we could be more much focused if we collaborated more with nutritionists as well as with other professions. We went on to discuss the need for adequate resources and the attitude of care home staff to other oral care and the need for more expertise.

There seems to be little standardisation and calibration of the dental curricula so this needs to be addressed. Improvements as a result of clinical treatment are usually immediate but if you're going to see improvement in dental public health you have to have commitment for a long time, so that could be a real challenge. And facilities, national regu-

lation of course, the intervention of the policy-makers is always, it's always important. Examples of good practice may not be replicated, so sometimes there are very good results in some places but because they are not well-known, they are not distributed, maybe that could not be applied in some other places. Growth, mindset, motivation, attitudes of the staff and a good heart are also key factors and should be behind every action in dental public health. Aligning priorities with a business case for prevention is another key issue. So perhaps the Dean of dental schools should be in charge of this aspect.

These were the points which arose from group two's discussions. Thank you.

Kenneth Eaton: Can I congratulate group two, you've covered an awful lot of points there so well done. We're on to group three now.

Report from Group 3 Professor Andreas G. Schulte

In our group we had the situation that the participants came only from two countries, from the Netherlands and from Belgium. Perhaps this had an influence on the type of problems and possibilities. What was regarded as impressive from the lectures, was that so many examples of outreach teaching were presented, that inter-disciplinary teaching and education takes place, as well as inter-professional teaching and education and that cultural competences are part of the education. However, it seems also that there are huge differences between the countries, even the countries where the presenters of the lectures came from. The challenges, include that dental care is not available to everybody, even in countries like the Netherlands and Belgium. Not all children are presented to a dentist and not all dentists accept all patients, which could also be a problem. The reimbursement system does not encourage preventive care, patients do not feel responsible for their oral health and policy-makers do not take into account oral health, they are presented with some examples, where health promotion had been initiated but oral health was not part of such a programme.

Another challenge is that dental care is not provided in nursing homes by the nurses or by the staff of the nursing homes. The nurses are not familiar with provision of oral hygiene measures and do not have enough time for oral hygiene or are not aware of oral health problems. We needed a lot of time to discuss this, so with regard to the possibilities to make changes, we have only two suggestions

One is that dental students have to go into institutions during their education so that they see what is happening in real life and that they also see that dentistry cannot only be delivered in the dental practices (offices/clinics/cabinets) but also in other locations.

The other was that we thought that cooperation with policy-makers to change things is very important. That is the report of group three.

Kenneth Eaton: Well, thank you very much Andreas. I think all those problems are problems in England as well, and I just want to stress that they don't just happen in Belgium, so thank you. And we're on to the final report now, which is from group four.

Report from Group 4 Dr Colwyn Jones

Group members, if I make any mistakes you can shout out and make sure you correct me. I think the important thing emerging from the presentations, the eight presentations, was just how encouraging they are; you can make a change, that was the big thing that came out for us. There was a common theme, we thought that there was direct engagement between people, between the dental students and the special needs patients or whoever it was or between the MSc students and so on, so there was something there about direct engagement, which we thought was important. There was also something about not being in a dental clinic, being outside the dental clinic, something about feeling more human, being more caring? Maybe you're concentrating too much on the technical work inside a dental clinic.

Something about where should dental public health go, something about sharing good practices, exactly as we're doing today, conferences, abstracts, webinars, to enable this to happen, we know about people in different countries, making contact with them and so on. A lot of things came up; we've already covered them in the first few groups.

As far as barriers are concerned; we've heard this already, the workforce, who's going to pay the workforce bill? You know, the people that are working out there, the nurses and the teachers and so on, we should try and get those multi-professional groups involved. They are going to need training and people to provide it, again this issue is not just about technical competence, it's the human side of care that concerns us and we need to think about how to maximise it. You know there are issues about funding, about private care so on, we did talk about non-governmental organisations, charities, the World Health Organisation and so on, it might work in some countries. However, we do ask that we be realistic about some systems, some of them are out-of-date and so on. We talked about how we might provide oral health messages through medical practice through physicians, you know, your blood pressure and other medical screening they are monitored so there should be ways to do that in dental practices as well.

We agree that more facilitators are needed. It is encouraging that there are now dental hygienists in Belgium and other dental health educators in other community groups. We need to look at policy-makers in the health and education systems, mapping needs. There is still the need for epidemiology but we also need to make the story about tooth decay and children personal and highlight how problems such as the large numbers of children, usually from deprived backgrounds who are admitted to hospital for general anaesthetics for tooth extractions. That's how to make it personal and how to influence policy-makers. Linking up general health and oral health, trying to make sure we get the mouth back in the body as Professor Jacques Vanobbergan said this morning. We talked about effective leadership, collaborative research, they've all been covered in the earlier group reports. In some countries they still don't have dental hygienists or other groups, so perhaps there's something about reviewing the regulations in different countries to try and influence policy-makers to make changes. We came up with the phrase "Be the change you want to see." I think that might be, I can't remember who said that, can we remember? (Gandhi perhaps?) That's all from group 4.

Kenneth Eaton: Well, thank you, Colwyn. I think I've covered many very interesting points which can be included in the proceedings so well done to everybody and I draw the workshop to a close.

Reference

1. Eaton K.A., Gallagher J., Jones C., Marsh P., Schulte A., Vanobbergen J., Vassallo P., Yusuf H. (2019) The Boundaries between Caries and Periodontal Diseases. What are the Implications for Education in Dental Public Health? Proceedings of EADPH/SESPO Pre -Congress Workshop held on Wednesday, 17 October 2018 at The Centro Cultural Sa Nostra Congress Centre, Palma de Mallorca, Spain. *Community Dental Health*, **36**: 63 - 86.