

International Federation of Dental Hygienists

PARTNERS IN

SOCIAL RESPONSIBILITY

Improving Oral Health Worldwide

Social Responsibility Member Project ACTION PLANS

AUGUST 2019



INTERNATIONAL FEDERATION
OF DENTAL HYGIENISTS

International Federation of Dental Hygienists

PARTNERS IN

SOCIAL RESPONSIBILITY

Improving Oral Health Worldwide



**Social Responsibility
Member Project
ACTION PLANS**

August 2019



INTERNATIONAL FEDERATION
OF DENTAL HYGIENISTS

Sponsored by





The International Federation of Dental Hygienists

100 South Washington Street, Rockville MD 20850, USA

• *Phone:* 240-778-6790 • *Fax:* 240-778-6112 • *Website:* www.ifdh.org

Table of Contents

Introduction from IFDH	Page 4
Social Responsibility Projects:	
AUSTRALIA: <i>Dental Hygienists Association of Australia</i> Sun Smiles.....	Page 5
CANADA: <i>Canadian Dental Hygienists Association</i> Gifts from the Heart.....	Page 9
Smiles for Miles Initiative.....	Page 11
ISRAEL: <i>Israeli Dental Hygiene Association</i> Diamonds & Pearls	Page 13
ITALY: <i>Associazione Igienisti Dentali Italiani</i> Oral Health in the Theater of Life.....	Page 15
JAPAN: <i>Japan Dental Hygienist Association</i> Establishing a System for DHs Taking Part in Disaster Relief Activities	Page 19
NETHERLANDS: <i>Dutch Dental Hygienist Association</i> Oral Health Ambassadors for Frail Elderly Worldwide.....	Page 21
NEW ZEALAND: <i>New Zealand Dental Hygienist's Association</i> Menemene Smiles for Life.....	Page 25
PAKISTAN: <i>Naveed Abdul</i> Caries Off	Page 27
PHILIPPINES: <i>Rose Nobbley, RDH</i> Teeth for Health	Page 28
RUSSIA: <i>Professional Society of Russian Dental Hygienists</i> Best Russian Hygienist Contest	Page 31
SOUTH AFRICA: <i>Oral Hygienists' Association of South Africa</i> Integrating Oral Health into Early Childhood Development Programme	Page 32
The Sparkle Brush Program.....	Page 37
UNITED ARAB EMIRATES: <i>Emirates Dental Hygienists Club</i> Maasai Molar.....	Page 39
UNITED KINGDOM: <i>British Society of Dental Hygiene and Therapy</i> Uniting Students in Ethical Professionalism through Soc. Resp.	Page 41
UNITED STATES: <i>American Dental Hygienists' Association</i> The ADHA Institute for Oral Health.....	Page 45



Introduction

This project book has been compiled by the International Federation for Dental Hygienists after a program of recognition of the role of Dental Hygienists as change makers over the last several years.

The Social Responsibility project was started with annual awards for individuals who were recognized for outstanding projects in Oral Health promotion in their local or extended international communities.

Three years ago, the IFDH held a Global Oral Health Session and educational workshop to enable National Dental Hygiene Associations to participate in networking and education in Florence, Italy. This very successful conference produced projects which were presented at the International Symposium in Dental Hygiene in Brisbane, Australia in August 2019.

The IFDH was responding to the World Health Organization (WHO) Oral Health Fact Sheet (*N°318, April 2012*), which stated that:

- Worldwide, 60–90% of school children and nearly 100% of adults have dental cavities;
- Dental cavities can be prevented by maintaining a constant low level of fluoride in the oral cavity;
- Severe periodontal (gum) disease, which may result in tooth loss, is found in 15–20% of middle-aged (35-44 years) adults;
- Globally, about 30% of people aged 65–74 have no natural teeth;
- Oral disease in children and adults is higher among poor and disadvantaged population groups;
- Risk factors for oral diseases include an unhealthy diet, tobacco use, harmful alcohol use and poor oral hygiene, and social determinants.

The Goals of our program were to:

- Develop customized sustainable community interventions targeted to improve oral health within member countries;
- Identify measurable outcomes appropriate to designed community oral health interventions;
- Describe the oral health supplies needed to sustain the community intervention;
- Create a feedback loop to support regular awareness of progress among key stakeholders.

Please enjoy the results of these ongoing efforts by the International Dental Hygiene community to meet these goals, to make an impact and to improve Oral Health globally.

We are very proud of our program and participants! We are very grateful to the sponsors who made this program possible!

Robyn Watson, RDH, BSc, MPA
President, IFDH

International Federation of Dental Hygienists
PARTNERS IN
SOCIAL RESPONSIBILITY
Improving Oral Health Worldwide

Committee Chair

Wanda Fedora, RDH, *Canada*
IFDH Vice President

The International Federation of Dental Hygienists
100 South Washington Street, Rockville MD 20850, USA

Sun Smiles Giving Kids a Brighter Smile

Location

Australian children from priority populations

by IFDH Member

**Dental Hygienists Association
of Australia**

Background

The Australian burden of tooth decay

Despite improvements in children's oral health in Australia from the 1970's till 1990's; 42% of young children and 64% of older children still experience decay. Since 1997 the rate of decay has increased with this trend set to continue and dental conditions are the leading cause of preventable hospitalisations in children (AIHW 2014).

Priority populations in Australia for oral health need (Australia's National Oral Health Plan 2015 – 2024)

CALD Communities (Culturally and Linguistically Diverse)

Surveys of overseas-born people who speak a language other than English, compared with Australian-born, English speakers show that 12 year-olds have 1.5 times more tooth decay; they have a higher usage of emergency dental care; more tooth extractions; lower rates of preventive services; lower levels of dental insurance and greater difficulty paying a \$100 dental bill (NSW Department of Health 2006).

Aboriginal Communities

Aboriginal people experience poor oral health earlier in their lifespan and in greater severity and prevalence than the rest of the population. Many Aboriginal children experience extensive destruction of their deciduous teeth. Trends indicate that the high level of tooth decay in deciduous teeth is rising. The rate of potentially preventable dental hospitalisations for Aboriginal people is higher than other Australians (COAG 2015).

Rural Communities

People living in rural areas have poorer oral health compared with those living in cities. Adults living in rural areas are less satisfied with the oral health services they receive and are more likely to report having difficulty paying a dental bill compared with urban dwellers. Even after adjusting for socio-economic factors, children living in rural areas have more tooth decay than children in metropolitan areas (COAG 2015).

Aim

Provide proactive preventive oral healthcare, so disadvantaged Australian children from priority populations can establish healthy behaviours to prevent tooth decay, enabling future improvements in their oral health.

Target Population

1,050 socially and economically disadvantaged preschool and primary school children with high unmet dental needs at Homebush West, Glenroy and Wodonga West Public Schools.

CALD Community:

Homebush West Public School, NSW (614 students) is a culturally diverse primary school, the student population is comprised of both students from non-English speaking backgrounds (97%) and English-speaking backgrounds (3%). Students represent twenty-one languages and cultures including Chinese, Korean, Sri Lankan, Indian, and Arabic. An oral health needs assessment was carried out with 213 Grade 3-6 students. The International Caries



Detection Assessment System (ICDAS) was used. Results showed 72% of students required a dental referral for follow-up dental care. 49% required early dental referral (ICDAS 1-4: early stage decay and established decay) and 23% required urgent dental referral (ICDAS 5&6: severe decay). Students were surveyed to determine their access to preventive dental care, only 29% had received a fluoride varnish and 35% a dental exam in the last year.

Aboriginal & Rural Communities:

Glenroy Public School, Albury NSW (187 students)

The student population is comprised of 23% Aboriginal students and 13% of students from non-English backgrounds. The SEIFA Index of Disadvantage for Albury is 971, indicating a high level of socio-economic disadvantage. An oral health needs assessment was carried out with 127 Kindergarten to Grade 6 students. Results showed that 45% of students required a dental referral for follow-up dental care; 19% required early dental referral (ICDAS 1-4: early stage decay and established decay) and 26% required urgent dental

referral (ICDAS 5&6: severe decay). Students were surveyed to determine their access to preventive dental care, only 19% of students had received a fluoride varnish and 41% a dental exam in the last year.

Wodonga West Public School, Wodonga Victoria (249 students)

The student population is comprised of 11% Aboriginal students and 11% of students from non-English speaking backgrounds, including many children from refugee families. The SEIFA Index of Disadvantage for Wodonga is 977 indicating a very high level of socio-economic disadvantage. An oral health needs assessment was carried out with 224 Kindergarten to Grade 6 students. Results showed that 34% of students required a dental referral for follow-up dental care; 20% required early dental referral (ICDAS 1-4: early stage decay and established decay) and 14% required urgent dental referral (ICDAS 5&6: severe decay). Students were surveyed to determine their access to preventive dental care, only 11% had received a fluoride varnish in the last year.

Project Partners

The University of Sydney

The Sun Smiles program is incorporated into The University of Sydney's Bachelor of Oral Health (BOH) curriculum with second and third year BOH (dental hygiene and dental therapy) students undertaking the school community outreach placements at Homebush West and Albury Wodonga.

Dental Hygienists Association of Australia

The DHAA has provided funding for book printing cost and volunteers for the program.

Australian Dental Health Foundation (ADHF) and Mars Wrigley Foundation

The ADHF and Mars Wrigley Foundation have provided funding to support the program.

Project Goals

- 1) **Strengthen** school teacher's and oral health professional's capacity to provide oral health promotion and preventive dental care, within the school setting.
- 2) **Develop** oral health promotion resources and oral health literacy tools.
- 3) **Build** a partnership with the University of Sydney to support Oral Health Therapy student's rural placements and community outreach experiences and undertake research.
- 4) **Provide** advocacy for improved oral health resources for disadvantaged Australian children.

Smart Objectives to be reached by December 2019

- Increase the number of caries free children to 55%
- Decrease the number of students requiring an early dental referral (ICDAS 1-4) to 30%
- Decrease the number of students requiring an urgent dental referral (ICDAS 5&6) by 15%

- Increase the number of students receiving a fluoride varnish to 95%
- Increase the number of students who have an annual dental screening to 95%
- Increase the number of students brushing their teeth twice daily with fluoride toothpaste to 90%
- Increase the number of students choosing fluoridated tap water as their drink of choice at school to 90%

6 Key Strategies

Oral health education, oral hygiene skills, oral health literacy, healthy eating, dental screening and referral, fluoride varnish application, integrated within the WHO Health Promoting Schools Framework.

1) Oral health education

3 classroom-based presentations have been developed: "It's time to smile", "The science behind tooth decay" and "Plaque detectives" covering age-specific oral health issues including:

- Dental caries and erosion.
- The benefit of fluoride toothpaste and fluoride varnish to prevent caries.
- Nutrition, including the benefits of drinking fluoridated tap water.

A science workshop has been developed to engage children in learning about the decay process, including simulating bacteria growing in saliva (yeast and warm water) to teach about the association of bacteria and sugar and how it causes decay.



2) Oral hygiene skills

A plaque disclosing workshop has been developed to engage children in learning oral hygiene skills. Fluorescent disclosing gel is used by the children to teach about the association of dental plaque with caries and gum disease. Children learn toothbrushing in small group sessions following the disclosing session. Oral health puppetry is used to engage children with varying literacy levels and demonstrate correct brushing and flossing techniques.

Grade 6 Sun Smiles ambassadors take on a leadership and mentoring role as Sun Smiles 'buddies' for younger students

and assist with the roll-out of the program. This provides the students with ‘ownership’ of the program, with younger students aspiring to be Sun Smiles Ambassadors when they reach Grade 6. A Carebear mascot provides entertainment for the children during their healthy eating snack-time. Carebear has a chef’s outfit for healthy eating and a dental outfit. Carebear has become a much-anticipated member of the Sun Smiles team and provides a fun and positive connection to the Sun Smiles program, which children remember from year-to-year.

3) Oral health literacy

‘Who is the Tooth Fairy’s Best Friend?’ children’s picture book was written by Cathryn Carboon to engage young children and their families in learning about caring for their teeth and discovering the magic of fluoride for good oral health. Distribution of the book to local libraries and all Sun Smiles children from Preschool to Grade 2, supports the Sun Smiles initiatives regarding drinking fluoridated tap water, using fluoride toothpaste and having fluoride varnish treatments to prevent decay.

- BIG book (ISBN 9781925386615). Used for circle time and reading aloud in class groups in Kindergarten and Grades 1 and 2. Children take part in the reading, to improve their literacy skills and have fun acting out the book’s fairy and tooth troll characters. The BIG book is used to start group conversations around the magic of fluoride for good oral health.
- Standard size book (ISBN 9781925386592) Given to children to share with their family. Colourful text and rhyming patterns enable collaborative reading with parents or siblings.
- Book reading stage with 4 pop-up book banners, 6 giant tooth stools, 1 giant toothbrush and 30 book character costumes (including fairy wings, wands, tooth troll buckets).
- Tooth Fairy toolkit “Fluoride Fairy” drawing sheets and certificates and “Tooth Troll” brushing timers.

4) Healthy eating

The Sun Smiles program provides children with a nutritious yoghurt and fruit cup and Dairy Australia sticker to raise awareness of the consumption of dairy foods and fruit for good oral health and broader general health. Sun Smiles encourages children to drink fluoridated tap water and supplies students with their own refillable water bottle to encourage this habit at school and home.

5) Dental screening and referral

Children receive a dental screening to collect oral health status data and prioritise children who require follow-up dental care. Children have the opportunity to receive individual oral hygiene instruction during the screening. Screening allows children, who have never had a dental exam, to become familiar with the procedure in their school environment where they feel safe. A dental referral letter is posted by the school to all families who have students that have been screened and need follow-up dental care.

6) Fluoride varnish application

Bachelor of Oral Health (BOH) and Dentistry students from The University of Sydney provide Colgate Duraphat 5% sodium fluoride varnish applications to children with parental consent in the school hall or resource centre.

Program Evaluation 2019: Activities Undertaken

Quantitative & Qualitative data is collated to measure the Sun Smiles program reach and impact.

1050 primary school children (5-12 years) & Pre-school children (3-4 years) received:

- Oral health education PowerPoint presentations and hands-on science workshops.
- Healthy eating sessions: yoghurt and fruit cups.
- Sun Smiles take home dental kits (bag, toothbrush, toothpaste, floss, mouth mirror, oral care brochure)
- “Care for your teeth” refillable water-bottles.

1000 primary school children (5-12 years) & Pre-school children (3-4 years) received:

(97% parental consent rate, 2% school absences).

- Dental screening (ICDAS, MIH, gingivitis and orthodontic screening) and referral
- 5% neutral sodium fluoride varnish treatment

Number of Volunteers

- Sydney University Bachelor of Oral Health & Dentistry students x 58
- Sydney University Academics and Researchers x 5
- Carevan Sun Smiles Dental Officers & Program Manager x 3
- Primary School Lead Staff Sun Smiles Co-ordinators x 4
- Primary School Sun Smiles Student Ambassadors x 16

Educational Materials Distributed

- 1050 Sun Smiles consent forms, screening forms and fluoride varnish homecare instruction brochures.
- 2 Teacher Professional Development Workshops: 1-hour PowerPoint presentation, Q&A sessions.
- 45 primary school teacher kits: fluoride varnish information, first aid sheets, consent protocol.
- 3 Sun Smiles whole-school resource kits: pull up banners, posters, Carevan T-shirts, Sun Smiles Ambassador certificates, 3 school newsletter inserts.
- 22 classroom presentation kits: USB PowerPoint presentations, dental puppets, dental mirrors, toothbrushes, floss, disclosing gel and UV torches, stickers, science experiment kits.

Health Literacy Resources

- 765 “Who is the Tooth Fairy’s best friend?” picture books, drawing sheets, brushing timers distributed.

Picture Book Evaluation

Bachelor of Oral Health student evaluation of the recently published children’s picture book: ‘Who is the Tooth Fairy’s Best Friend?’

- “Interesting and easy for kids to understand where fluoride can be obtained.”

- “Although short, it contained a lot of key important dental messages! Very good for role play.”
- “Really good book to get the children interested in fluoride.”
- “A good storytelling source for the dental setting.”
- “Awesome book! First one that talks about all the important aspects of oral health.”
- “Great! The kids really enjoyed it and understood why we applied fluoride.”



Quote from Project Partner

‘The Carevan Foundation provides an invaluable health service in my Federal Electorate of Reid. The Foundation’s dental program, Sun Smiles, has successfully been implemented in Homebush West Public School and the initial results of the

dental screening prove that such a service is needed in areas where there is a concentration of new migrant families. I have seen firsthand the professionalism employed by the Foundation and their ability to cater to students of all cultural backgrounds. They are aware of sensitivities and adequately plan for them. The volunteers are always well trained and well supervised. Cathryn’s work for our community is amazing.’ Hon. Craig Laundry MP

Participant Evaluation

Dental volunteer evaluations showed 100% of the BOH 2nd and 3rd Year University of Sydney students surveyed stated that involvement increased their capacity to carry out oral health promotion activities.

The volunteers personally gained:

- ‘Experience of community service and social responsibility’
- ‘Experience in examining children’s teeth and occlusion’
- ‘Experience in teaching oral hygiene to children in large group oral health promotion settings’

Program Sustainability

The Sun Smiles program training and program roll-out has been embedded into the University of Sydney’s Bachelor of Oral Health Curriculum for ongoing sustainability.

Schools have embedded the program into their yearly curriculum planning and increased their capacity to engage students and their parents in school-based oral health promotion, consent protocols and procedures and the logistics involved in rolling out the program within their school. Sun Smiles program resources (ie: Teacher manuals, volunteer manuals, Sun Smiles brochures) are all digitised for ongoing sustainability.

Sun Smiles is currently developing sustainable options for the book “Who is the Tooth Fairy’s best friend?” 2019 project

funding is being sought to develop a digital version of the book, which will include video, animation and stop motion technology to bring the book alive. This will provide a more sustainable resource.

Program Barriers

The main barrier Sun Smiles faces is the lack of long-term, sustainable funding for the program. No Government funding has been forthcoming. Accessible funding is always of a short-term nature, generally for less than 6 months duration, which does not allow for long term planning or implementation of the program.

Program Outcomes

Improvement in oral health attitudes and behaviours

Children receive positive oral health and nutrition messages in their familiar school environment, which are reinforced by the teachers as part of the school’s health curriculum.

Improvement in oral health skills

Children learn age appropriate toothbrushing and flossing skills and are able to identify plaque formation on their teeth with the aid of plaque disclosing techniques.

Improvement in oral health literacy

Families learn about how fluorides work to prevent decay and how they can access fluoride varnish preventive treatments within their school. Parents are able to make more informed decisions about their children’s oral health and seek ongoing dental care, through implementation of the dental consent, screening and referral processes.

Improvement in oral health status

Duraphat 5% sodium fluoride varnish treatments enable reversal of early, white spot lesions and prevention of future decay.

Development of an innovative Model of Care

The Sun Smiles program provides an innovative model of oral health promotion and preventive care which has been developed and implemented by a dental hygienist. The program provides insights into how the Health Promoting Schools Framework can be used to develop a proactive model of care within socially and economically disadvantaged primary schools in both rural and urban Australia.

Dental hygienists play a pivotal role in providing preventive dental care to underserved communities. School fluoride varnish programs provide a great opportunity to strengthen this role. The Sun Smiles program has demonstrated the ability to be scaled up and replicated across different rural and urban communities. The success of the Sun Smiles program can serve as a model-of-care for other dental hygienists to implement the program in their own community.

Gift from the Heart

Location
Throughout Canada

by IFDH Member
Canadian Dental Hygienists Association

Background

We have all experienced members of our communities who come into our lives that cannot financially afford basic dental hygiene care. They are the under-served, the neglected, those without dental insurance or those on a fixed income. In 2008, Bev Woods RDH founded the “Gift from the Heart”, a one day event which enables Registered Dental Hygienists to give back to their communities by providing no cost dental hygiene care. The response was overwhelming then, and still is.

The GFTH was founded as an event to introduce Independent dental hygiene business owners in Ontario as an alternative choice for vulnerable peoples to access affordable dental hygiene care. Today, dental hygienists from every aspect of our profession, including dental hygiene students, welcome the opportunity to get involved and give back through the GFTH project. Social Responsibility has no borders and affects us all equally. Corporations, communities, and individuals must commit to giving back to affect change.



The GFTH event is unique, as it allows the profession of “dental hygiene” to come together from every corner of our country, in unity, to work towards one common goal.

Registered dental hygienists across Canada are opening their doors, and their hearts, to provide no-cost preventive dental hygiene services as part of the CDHA national campaign.

After attending the IFDH Social Responsibility Conference in 2017 the GFTH was inspired to evolve and initiate change. The GFTH organization formed and elected an executive, bylaws were developed, and a board of directors were chosen to represent each of the provinces of Canada. The GFTH is now incorporated and is working on its charitable status distinction.

The biggest change is our logo, which was once a red heart to symbolize valentine’s day (where it all started) and has now changed to purple to celebrate the profession of dental hygiene. Together with National Dental Hygienists Week, dental hygienists can all put their purple on, show their professional pride and their social responsibility by giving back to their communities. The GFTH and CDHA are united in promoting the profession of dental hygiene.

The GFTH project has partnered with Henry Schein/Purolator



to distribute 140 gift boxes throughout Canada that contain generously donated products from companies like Supermax, Crosstex, CrestOralB, Colgate, Micrylium, Dentsply, Wicked White, and PDT to name a few.

The GFTH is thrilled to announce that we have partnered with the Oral Cancer Foundation to supply everyone with educational materials as well as client information handouts. Our goal is to encourage as many RDH’s to offer free oral cancer screening clinics as part of the GFTH event.

Project Aims

The GFTH is a social responsibility organization the aims to promote oral wellness, increase public awareness that oral disease can be prevented, and encourage dental hygienists and corporate sponsors to give back to our communities in any way. The Gift from the Heart strives to enhance overall wellness of Canadians by providing dental hygiene care without limitations.

Project Objectives

The GFTH hopes to connect, inspire and motivate dental hygienists throughout Canada to volunteer and give back to their communities, towns, cities that they call home. Reach out on one day, share knowledge and skills with vulnerable people, and save a life.

Objective #1 - Increase event registration through public awareness

Objective #2 - Build relations with corporate partners

Objective #3 - Fundraising

Project Evaluation

The GFTH is currently working with a company to develop a survey to collect data.



Project Stages

Objective #1

- Write articles to be published in CDHA “Oh Canada” magazine
- Increase presence on social media
- Board members to engage and collaborate with health care professionals in their provinces and beyond to share GFTH mission, vision and values

Objective #2

- Arrange meetings with corporate leaders to discuss the GFTH Mission, Vision and Values and how they can support and participate

Objective #3

- Elect a Fundraising Director and committee
- Design and implement Fundraising Goals and activities
- Put plan into action

Project Timeline

The GFTH is an ongoing project. Our goals are to have corporate sponsor donations and distribution dates confirmed between April-October each year. We are continuously developing corporate relations and take every opportunity to share our organizations mission, vision and values.

Fundraising is a vital component of our organization that needs constant attention. Registration for our event opens May 01 of each year. Our small group of dedicated volunteers seldom take a break. They are committed and passionate about their roles and take every opportunity to share the GFTH project with everyone and anyone who will listen.

Project Budget

The GFTH goal is to raise \$20,000. through fundraising and corporate donations. This is our first year developing a budget for our organization. Previously the operational funding was from a few donations and the generosity of our founder.

Project Barriers

Our barriers are financial assistance and volunteers. In April 2019, the GFTH, will launch their first online Canada wide auction. We have come to realize that our corporate sponsors are more willing to donate products than provide the necessary

dollars we require to sustain our operational costs. Our second barrier is to find like-minded people who support our organization’s vision to volunteer their time and skills. There are always challenges, but nothing that can’t be solved.

Having a healthy budget will allow the GFTH organization to hire skilled people to develop a marketing campaign to meet our public awareness objectives. There are still too many people who suffer in silence because they cannot afford or access basic dental hygiene care. We will not be defeated. We, as GFTH volunteers and participants will forge ahead to help as many as we can.

Project Outcomes

At the end of the day, when all our GFTH participants and volunteers reflect back on the day of giving back, we all have that same warm feeling in our hearts that we have made a difference. We have probably saved at least one life by taking the time to provide a free oral cancer screening to someone who otherwise could not afford or access the care or services we provide as oral health care professionals.

Together we are making a difference...One Smile at a time.

Smiles for Miles Initiative

Location

The University of Manitoba,
School of Dental Hygiene

by IFDH Member

Canadian Dental Hygienists
Association

Project Background

The School of Dental Hygiene at the University of Manitoba created a new initiative called Smile for Miles. This initiative provides newcomers to Manitoba an opportunity to receive free dental hygiene care that they typically do not qualify for.

Our hope is that newcomers will experience a boost to their self-esteem as we provide them with a healthier mouth, the tools and know how to properly manage their oral care. Some newcomers may not be familiar with how oral health care is typically provided in Canada, the techniques and products available to care for our own mouths, or the benefits that they will experience to their overall health through improved oral hygiene.

Through Smiles for Miles, our senior dental hygiene students provide care while encountering possible language and cultural barriers. They may face more difficult mouths to assess and debride, providing a level of clinical experience in a structured, supervised environment that they may not have encountered otherwise. Most importantly, these experiences reinforce the role we play as dental professionals and as an institution in the community, and the importance of giving back. These sessions have been both informative and eye opening for newcomers, and our students experience firsthand the impact that their skills and efforts can have on their lives.

In considering your selection of your project please consider

1. What is your priority and has it changed at all?

- As stated above, our priority has not changed, it still is to provide culturally competent and appropriate dental hygiene care to newcomers

2. Is this a do-able project?

- Has it been do-able within the resources available – funding? timing? expertise? stakeholder support? We have been able to be creative in our fundraising efforts. We continually look for new opportunities to raise funds to provide free dental hygiene care.

Have you worked with an academic institution or other institutions? Yes, with-in the University of Manitoba, Rady Faculty of Health Sciences External Relations

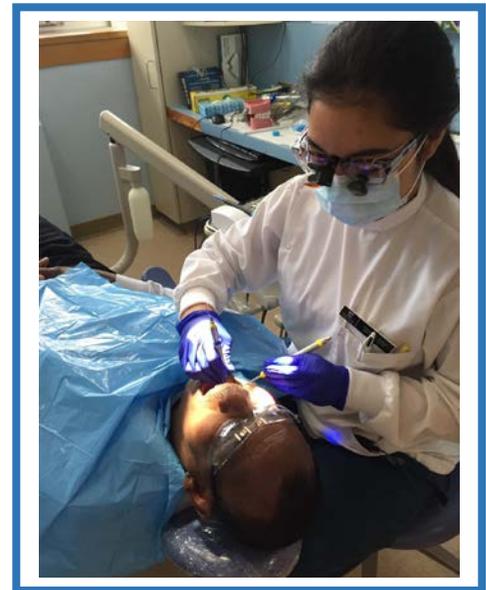
Has your project included development of educational materials, delivery of educational interventions and increasingly complex project types such as provision of care to high risk groups and clinical trials? We have not created specific resources at this point. But we are providing dental hygiene care to high risk group.

Identify any project funders, partners or stakeholders:

The Smiles for Miles initiative have received funds from: the practicing dental hygiene community, U of M alumni, industry, faculty, and from creative fundraising activities.

Project Aims

What do you aim to achieve through this project? Through Smiles for Miles, our senior dental hygiene students will provide care while encountering possible language and cultural barriers. Most importantly, we expect this to reinforce the role we play as dental professionals and as an institution in the community, and the importance of giving back.



Project Objectives

The key benefits that we hope to achieve with the Smiles for Miles initiative are:

- To provide dental hygiene care to those who normally may not receive this important care
- To enhance the student experience with exposure to higher care needs
- To further demonstrate to our institution's and our profession's commitment and connection to the community that we share.

Project Evaluation

How will you evaluate your project?

- *Quantitative methods e.g. number of occasions of service?*

We track how many Smiles for Miles clients have received free dental hygiene services, how many students have provided care, and track funds

• *Qualitative methods e.g. surveys, interviews?* Our next step is to develop a survey of the clients and students' experiences

• *Mixed methods?* Yes.

Consider, is this research? Do you need ethics approval?

Not currently, its scholarly activity.

Project Stages

This will usually align with objectives. Describe each stage and activities within each stage.



Before Smiles for Miles

- Clinical services limited for newcomers
- Lack of DH care to newcomers
- No coverage gov't assistance for dental hygiene care
- Curriculum changes needed to address growing knowledge around cultural safety for clients
- Didactic static
- Traditional clinical student assessment

Now

- New Partnership with the Manitoba Dental Hygienist Association and the School of Dental Hygiene mentorship program is focusing on focus on social accountability of dental hygiene students and mentor.
- Curriculum changes to adapt to provide culturally appropriate care
- Increased student project that involve newcomers

- Planning phase of curriculum scan re: cultural safety continuum

Future

- Monitoring & expansion of clinical services
- Mixed method evaluation re client experience of cultural safety & student growth of cultural competence

Project Timeline

The Smiles for Miles initiative is entering its fourth year of dental hygiene students providing free dental hygiene services to newcomers. We continue to grow in numbers of clients seen per year. We have no end date.

Project Budget

All money raised is entirely used for client care. All other costs are provided in-kind by the School of Dental Hygiene and Dr. Gerald Niznick College of Dentistry.

Project Barriers

Budgetary concerns are the only barrier to continuing our Smiles for Miles initiative.

Project Outcomes

- The Smiles for Miles initiative has provided dental hygiene care to over 50 newcomers.
 - The students experience better communication, empathy, critical thinking and clinical skills.
 - Graduating students value the Smiles for Miles so much that two previous classes have in-turn donated to the program to pay it forward for future dental hygiene classes
-

Diamonds & Pearls

Promoting oral health for children of the foreign refugee community

Location

Israel

by IFDH Member

Israeli Dental Hygiene Association

Project Background

Thousands of refugees, men woman and children from northern African countries such as Eritrea, and Sudan fled for their life from violence and war. They actually walked their way through the desert to Israel seeking refuge.

This population does not have any recognition or formal status thereby leaving them with no health coverage.

Whether their parents are seeking work or lucky enough to have found a job– the children are left in so called "kindergartens" for many hours. The crowded conditions put them in a vulnerable situation physically, mentally & emotionally. The issue of oral health is largely ignored. Neither health education nor welfare is part of the framework of the children's day care programme.

Children with severe tooth decay and gum disease is very common, and remains untreated due to, lack of awareness of oral disease prevention such as tooth brushing. Parents are unable to take time off to address their children's dental needs, as well they lacking financial means to care privately for oral health. Since they have no government recognition of refugee status, a process that takes some time, no formal affordable medical/dental care is available to them.

Our aim with this project is to have Dental Hygienists visiting these kindergartens and teaching the staff and children how to brush their teeth, to apply fluoride varnish and refer to volunteer dentists when and if needed.

This is a particularly vulnerable population. It is of great importance to be able to make a change for this community. A change that will improve not only their oral health but their overall health, giving them a chance at a brighter future. We feel promoting oral public health in this setting is part of a humane mission.

Is this a do-able project?

We have partial corporate funding in the form of a limited monetary donation, as well as donations of toothbrushes, toothpastes and educational materials. We have several dental hygienists willing to volunteer and dental hygiene schools interested in their students experiencing providing oral health education to the underprivileged.

Project Aims

Our aim is to raise awareness of the need for better oral health as well as raising the oral health status for of the children and their families. We hope to instill a program of tooth brushing in the kindergartens.

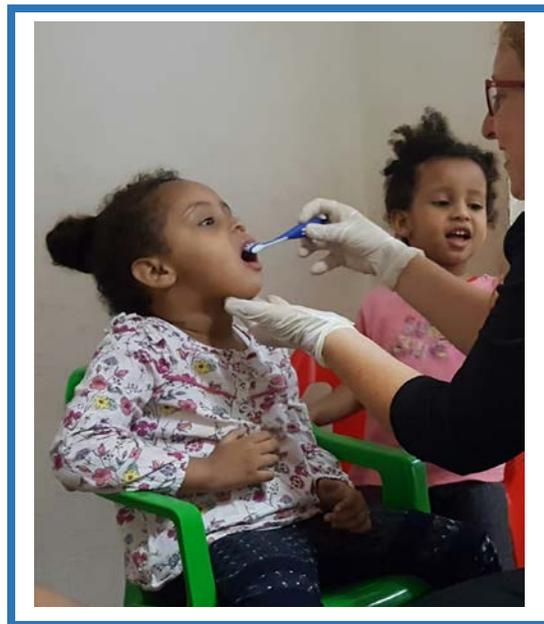
Project Objectives

To evaluate needs, document number of participants, provide oral hygiene instructions to the staff and children, to evaluate results within a one-year period.

Project Evaluation

Distribution of a questionnaire and interviews of parents and kindergarten caregivers

We are considering having this as research project. Parents' consent is needed, a validated questionnaire and approval/support from ministry of health representatives.



Project Stages

We need to assess and document the needs of most of the children according to oral status. A clear guideline insuring that all our volunteers are synchronized in the instructions given must be implemented. A practical and feasible timetable must be scheduled. A final re-evaluation must be made at the end of a one year period.

Project Timeline

Looking at a one-year duration of time with the hope of being able to continue after re-evaluation results are analyzed.

Project Budget

Since we are relying heavily on volunteers it is difficult to project a budget. Obviously the higher the project budget the greater our ability to providing more and better service. We are approaching major dental companies in the region.



Project Barriers

Sadly, there is a segment of the local population opposed to helping the refugee population who they feel have taken over their jobs and neighborhood. Since the parents and the children's caregivers are overworked and stressed it may be difficult to get their cooperation.

Project Outcomes

We truly hope to succeed in raising awareness of the need for better oral health as well as raising the oral health status for of the children and their and their families. We further hope to instill a program of tooth brushing in the kindergartens.

Oral Health in the Theater of Life

Location
Bari, Italy

by IFDH Member
Associazione Igienisti Dentali Italiani

1. Oral health in the theater of life is the title we have chosen for this prevention and care project and it was chosen not only because Theater is one of the activities proposed to children to whom the project is dedicated, but also based on the fact that there are several actors who are involved in the implementation of this invaluable program, and who work in harmony and synchronously, to ensure its success.

2. The pilot project was conceived and self-financed in Puglia by a group of Italian dental hygienist volunteers and supported by the University of Bari "ALDO MORO". The volunteers of AIDI, have joined this initiative and, working together with other professionals from the institutions and the school have not only given life to the intervention but they still guarantee its implementation today.

3. The project was carried out within the "daytime social education and rehabilitation center for children with disabilities «Nella Maione Divella» situated at Bari in Puglia. The main purpose of the Center is to provide host and support to the families of the patients, through the collaboration with the social services of the Municipalities and educational institutions, in order to ensure educational support throughout school and non-school activities, in addition to supporting growth and orientation. The center is under the regional law and it is defined by law as a social assistance structure with a daily cycle, aimed at maintaining and recovering the levels of personal autonomy and at supporting the families through the implementation of socio-educational, cultural, recreational and sports activities and services. It is therefore a place where people can interact with each other and in which the performance of the activities or the simple recognition and socialization becomes in fact an opportunity for education. The reason we decided to develop a prevention project in this context is due to the need of dealing with the oral health of these people with disabilities. The scientific evidence of recent years has shown that, in particular in subjects with special needs, there has been a high incidence of caries and

periodontal diseases linked to poor oral hygiene. The strong limitations in the maneuvers of oral hygiene due to their motor, sensory and intellectual disability, heavily affects the level of oral health, which is almost always very scarce and insufficient, and this is also due to a diet mainly based on cariogenic foods or, on the contrary, to food deficiencies or metabolic disorders. The oral health condition also appears to be worse than the general population, both because of the obstacles that delay or even prevent access to dental care, and because of the low number of health professionals and not, able to deal with the behavior of specific patients.

Furthermore, at regional level, there is the absence of an epidemiological detection system on the percentage of carious and periodontal pathologies and on the effects of an incorrect diet on dental health, especially in adolescents, for which we haven't got available data that can give us indications on guests' health of these facilities.

4. Analyzing the context, it was necessary to plan a prevention program to cope with the following main issues:

- a) there are minors with disabilities (subjects with autism, brain deficiencies, problems affecting the sensory apparatus) therefore subject to higher risk of oral diseases
- b) there is a condition of marginalization and social maladjustment due to the limited socio-economic conditions and low cultural level of the parents that inevitably influence the behavior of the children
- c) absence of family support that disregards any hygiene operation both on the body and in the oral cavity
- d) poor awareness of the importance of oral health on the well-being of the body, in the parents and consequently the children.



In light of these factors, it has become essential to develop a project that includes both the collection of clinical data, to assess the state of oral health, and the promotion of educational methods, aimed at improving the quality of life, through the observation of the subject's abilities, essential to formulate strategies capable of providing adequate answers,

starting from disability but focusing on the potential inherent in each person.

5. The reference target was identified in:

- 30 subjects with chronic disabling diseases between the ages of 12 and 25 living in the Municipality of Bari and guests of the Center;
- parents of the kids;
- social workers and educators.

The project started in January 2018 and will be completed in December 2019 so the activities are still ongoing. The pilot project, as already mentioned, is self-sustaining but has included expenses for the purchase of educational material, brochures, material for theatrical activities, single-use dental tools, reimbursement of expenses for volunteer personnel. The audio equipment, video projector and giant screen were made available by the dental hygienists themselves.

The activities were carried out directly in the Center, this allowed us to familiarize ourselves with the kids, to observe their actions and to witness possible successes or failures, also thanks to the help of educators and social workers who are actively collaborating in the program.

6. The general objectives have been defined, consisting in the enhancement of the self through the care of the aesthetic aspect and the relationships, together with the promotion of oral health and the acquisition of correct behaviors on oral and food hygiene.

The specific objectives planned in the deployment of the project are:

- illustrate the basic operations necessary to ensure proper oral hygiene;
- recognize oral hygiene tools;
- reduce the formation of bacterial plaque on tooth surfaces;
- recognize healthy foods for teeth and those that are harmful;
- identify the taster and non-taster subjects for the TAS2R38 gene.

7. Cross-cutting objectives have also been established regarding the project itself and the promotion of our figure in these contexts, such as:

- test the project;
- extend the project to other centers within the Bari hinterland;
- test the number of volunteers needed for large-scale implementation;
- promote the inclusion of the figure of the dental hygienist within these socio-welfare structures.

8. The project has been developed in three phases: a first meeting with families and social workers; a second screening phase for the evaluation of oral conditions; a third moment dedicated to training and education.

The project started with a preliminary meeting between the staff of the Center and dental hygienists to determine the disabilities and the different peculiarities of the facility's guests. Everyone's individuality was considered. We asked ourselves for each of them: who is the patient? We tried to understand the family context, health conditions, character and environmental factors. Subsequently a first meeting was scheduled with the parents aimed at increasing their awareness of the essential and specular role that their behaviors assume in raising children. Family members actively participated in an oral hygiene lesson which was intended to inform them about the role that the dental hygienist plays in the prevention of oral cavity disease, after which they were shown the project in detail. In this phase a questionnaire was administered to them and to the staff of the center, consisting of 22 questions, on hygiene and food habits, in particular on the excessive consumption of sugars and fats, of their children and patients. The double distribution made it possible to compare the data with each other to obtain a more in-depth overview of the habits of the subjects under examination.

9. The data obtained were analyzed and then a second meeting was set, this time with the children, in order to carry out the second phase of this project: oral hygiene screening and evaluation of sensitivity to stimulation with PTC. The evaluation of the state of health of the oral cavity was carried out with the help of a form provided by the Italian Dental Hygienist Association (AIDI). Inside the card there is a short questionnaire with 18 questions related to eating habits (3 questions out of 18), the remaining questions concern the habits of oral hygiene at home and the general health conditions of the person visited. This section represents the cognitive part of the patient. The screening form is then divided into two parts: one dedicated to preventodontic history and the other to physical examination (clinical evaluation).

Intra-oral clinical evaluation was performed on the basis of validated indices such as:

- the OHI-S plaque index;
- the DMFT;
- the presence of dental fixed or removable prostheses and orthodontic appliances;
- the presence of dental erosion through the BEWE index.

An additional parameter was also introduced to evaluate the perception of the taste of bitterness by determining the subject's "PTC status" "phenylthio carbamide and thiourea", classifying it within the three groups: non taster, medium taster and super taster. For the determination of the "PTC taster status", each subject has been tested twice. The first evaluation was carried out through the use of a litmus paper which is nothing more than a cellulose strip able to allow the kids to compare the perceived flavor at the first evaluation, which was null, and the one perceived at the second one. The second evaluation, in fact, was carried out through the use of the "PTC Test Paper" produced by PL (Precision Laboratories). This litmus paper soaked in "phenylthio

carbamide and thiourea", resting on the subject's tongue for about 30 seconds, generate a feeling of different intensity that has been assessed through the use of a qualitative scale. The scale is anchored down to the "barely perceptible" descriptor and above to the descriptor "the strongest imaginable". The latter must be referred to the strongest oral sensation that the subject has ever had as an experience in his life: a spicy food, a strong toothpaste, a candy. When necessary, the test was carried out several times to have a definite and definitive answer from the subject, so as to be able to insert it in the right class to which it belonged. The graph shows the percentages of subjects who intensely perceived the bitter (super taster 35%), moderately (medium taster 25%) and 40% (non taster) did not perceive this sensation at all. The evaluation of eating habits was very important as, as claimed by scientific evidence, it was shown that those belonging to the class of "non-tasters" consume much more sweets (understood as highly sugary foods) than those belonging to other classes. This data was also found in our food analysis, and was used to support the health and hygiene conditions of the oral cavity of the subjects visited. An excessive consumption of sweets consumed throughout the day, leads to a lowering of the pH and simultaneously with an accumulation of plaque. Crossing the acquired data, the non-taster subjects presented a mean OHI-S with a score 4.51 (insufficient oral hygiene) very high compared to 2.79 (sufficient oral hygiene) of the super tasters. Furthermore, non-taster subjects had a DMFT > 5, with a high risk of caries.

10. On the basis of the results of these data obtained from the screening phase, the educational-training phase was set up, with the involvement first and foremost of the various professional figures with whom the intervention strategy was agreed and shared.

The following have been planned:

- theoretical-practical lessons
- slides and demonstration models
- experimental activities
- development of themed theatrical activity to encourage learning and cooperation
- preparation and arrangement of communication tools

The BASIC ID of each patient was examined (Arnold Lazarus 1982). This name comes from a nice acronym formed by the initial letters of the English words: Behavior, Affective processes (emotional processes), Sensations (sensations and functioning of the sensory organs), Images (imagination), Cognitions, Interpersonal relations, and finally Drugs and diet (in other words the organic aspect).

For the operator who has been interested in the subject with a disability, it was useful to keep these seven different items in mind in order to evaluate, in the recovery attempt, if all have been adequately considered and if, by chance, an intervention on one of them has may be produced regressions or negative interference on some of the others. Therefore, a type of

experiential methodological approach was used, aimed at increasing awareness of individual skills and competences through a phase of acquiring theoretical knowledge and an internalization phase that was achieved with play, research and comparison. through group and individual work.

Short-term primary objectives have been set, with few obstacles to achieve small but steady progress. Attention has been focused on the content to be transmitted, following the MASTER LEARNING model based on "mastery" in learning, which allows moving on to subsequent objectives only after verifying the level of acquisition by the subject. The educational-motivational part has been divided into different phases depending on the type of children, starting with passive activities moving gradually into increasingly engaging and interactive actions, so as to guarantee gradual exposure to the stimulus. For the most collaborating subjects some slides were initially presented with a pleasant and amusing graphic, in which it was explained in very simple words how our mouth is made, the importance of teeth and gums, their function, because it is important to brush them , plaque tartar and caries, showing them real clinical images that aroused amazement and therefore involvement. Video modeling was used to simplify teaching and learning, by playing sequences to facilitate memorization in chronological order.



Subsequently, using games questions were made regarding what had been previously explained, all through open-ended questions, riddles, and through the choice of drawn images that depicted the right answer. In kids with severe autism, in the first activities after having familiarized with the operators, an acetate mouth of a large size was used on which the teeth had been colored to simulate the presence of plaque, which could be cleaned with a toothbrush, moreover a plaster model was used to obtain an ocular-manual stimulation. The positive reinforcement was fundamental, in this case a star, to be used as an incentive to increase the frequency of a behavior. With subjects who showed detachment and refusal, action was taken by eliminating obstacles and facilitating help. These techniques consist in helping the subject to participate in the game, then gradually withdrawing the aid to allow the

autonomous exercise of the learned task. The game consisted of combining the happy face with healthy food and the sad one with the unhealthy ones. With the subjects who showed indifference, we insisted, with patience and kindness, to obtain the involvement always through the aid of positive reinforcements represented by a final prize. It was interesting to observe how these techniques have established a virtuous circle, in which the strongest helped the weakest, also creating a helping relationship.



In the practical part, the plate detector was used to identify the plate and eliminate it with the knowledge acquired in the theoretical part. Also, in this case, after several attempts with manual and electric toothbrushes, positive reinforcement was fundamental, namely the use of the incentive. Another game to strengthen the knowledge gained.

11. The project is still in the execution phase.

Other meetings are planned in which we will proceed with the interaction in order to help the people who attend the center to gain a minimum of autonomy and confidence in their abilities, contextually preventing, as much as possible, some complications at the level of the oral cavity, due to the motor and cognitive difficulties. But the aim is also to help families to become aware of the importance of their role with respect to their children's behavior and to feel supported in the difficult path that they face every day with courage and many difficulties. The key word of the project is "aid relationship" understood as a means to reach the heart, as well as the mouth, of kids who, despite starting out at a disadvantage, have the right to health and a future worth living.

Establishing a System for Dental Hygienists Taking Part in Disaster Relief Activities

Location
Japan

by IFDH Member
Japan Dental Hygienists Association

Project Background

In recent years, Japan has been plagued by frequent disasters such as earthquakes and torrential rains. In each case, there have been significant damages. Many victims suffer from oral health problems, which has led to active discussions over how best to take part in relief efforts. It is imperative to have a system in place to provide aid in the event of emergencies.

When large scale disasters unexpectedly hit, issues involving eating and dental hygiene inevitably arise over time. There is also an increased risk of aspiration pneumonia among the elderly who require oral health care. Dental hygienists work alongside physicians and other health care professionals to provide integrated emergency relief.

We are currently building a network to provide emergency assistance in the event of disasters. This includes establishing a system to register disaster relief volunteers, offering educational training, creating a standard operating manual, providing disaster-relief vests, preparing oral health care kits, and raising awareness through posters and brochures as part of our readiness efforts.

Our goal is to establish a disaster relief network to provide timely support.

The Japan Dental Hygienists Association and its 47 prefectural associations strive to build needed partnerships aimed at developing an integrated emergency response plan. We also strive to better prepare dental hygienists for disaster relief efforts.

This is done through manuals, as well as holding forums and providing training. As a result, the number of registered volunteers has increased from 120 in 2014 to 263 in 2017.

- The disaster-relief vests and other goods can be prepared with the help of outside resources.

- Increasing the number of registered volunteers will lead to more dental hygienists available to actively participate in relief efforts.
- In many cases, schools serve as evacuation shelters; hence, we work closely with local authorities and local dental associations.
- JDHA's partners include 47 prefectural associations across Japan.

Project Aim - Objective

Our main objectives are to:

- 1) Assess dental hygiene needs in the aftermath of large-scale disasters, and
- 2) Support disaster relief efforts by striving to increase the number of dental hygienists taking part in disaster relief efforts aimed at:
 - providing oral hygiene products,
 - explaining their usage in order to cut back on problems caused by bad oral hygiene,
 - taking measures to prevent aspiration pneumonia and dental disease.



Project Evaluation

We will periodically evaluate the progress of our project through numbers indicating the total of:

- Dental hygienists
- Training Courses
- Types of Posters and Brochures

Project Stages

Phase 1: System Development (2011-2013)

Distribution of manuals and posters, registration of dental hygienists, implementation of educational training programs.

Phase 2: Raising Awareness (2011-2020)

Spreading the word about upcoming academic conferences and holding disaster relief forums/leader development programs.

Phase 3: System Launch (2016-)

Phase 4: System Evaluation (2017-2020)

Phase 5: System Review - Revision (2021)



Project Timeline

Phase			
1	System Development	2011-2013	<ul style="list-style-type: none"> Subsidize oral health relief efforts in disaster hit areas. Print oral health care instruction manuals, brochures. Panel discussions and workshops at academic conferences and forums. Dental Hygienist Disaster Relief Forum (Leader Development Program) Disaster Relief Activities: Practical Manual for Dental Hygienists Establish Disaster Relief Volunteer Registration System and Safety Confirmation System for Members
2	Raising Awareness	2011-2020	<ul style="list-style-type: none"> Upload educational materials, brochures to website Introduce disaster relief activities carried out by associations in disaster-hit areas in JDHA newsletter. Disseminate information at academic conferences, etc.
3	System Launch	In response to disaster	Set up disaster relief HQ
4	System Evaluation	2017-2020	Measure quantitative numbers
5	Review • Revision	2021	Review effectiveness and revise accordingly

Project Budget

Phases 1-5 are currently covered by the Japan Dental Hygienists Association. Additional expenses directly related to relief efforts, such as travel costs, are subsidized by the national and local governments.

Project Barriers

It is impossible to predict when disasters will occur, and everchanging circumstances require cases to be handled on a case-by-case basis, depending on whether the victims are being relocated, as well as their emotional states. Also, there is no set time limit, so the project has no end date.

Project Outcomes

Forums and training courses are already being held. Manual and revisions have been printed, awareness posters have been printed and posted on our website. The number of dental hygienists who have registered as volunteers has gradually risen to 263 and useful partnerships have been formed between the Japan Dental Hygienists Association, its prefectural associations and relevant partners, helping to develop an integrated emergency response plan.

Oral Health Ambassadors for Frail Elderly Worldwide

Location
Nijmegen, the Netherlands

by IFDH Member
Dutch Dental
Hygienist Association

Project Background

In the Netherlands, as in many other countries, Oral Health is neglected in nursing homes and homecare. The lack of attention for oral hygiene care can lead to poor oral health, as well as poor general health and quality of life. It has been shown that dental infections and periodontal diseases correlate significantly with pneumonia, diabetes, cardiovascular disease and rheumatoid arthritis.

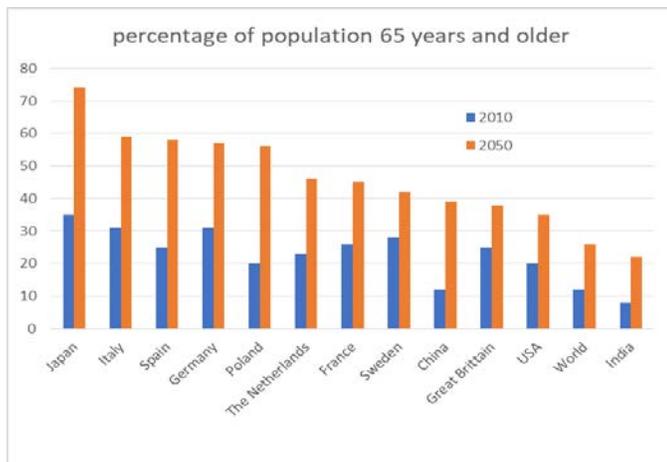
Studies compared in many countries the people above 65 between 2010 and 2050. In 2050 the group above 65 will double worldwide. (see figure 1).

The seniors and frail elderly will be the greatest group of oral care-takers in the future. The costs of oral care will increase as well.

My statement

The daily or regular oral hygiene care of frail elderly can be done by care-providers and is more efficient and less expensive than done by dental professionals.

Figure 1 Source Dutch newspaper Trouw



Twelve years ago I started visiting nursing homes and observed the excellent efforts of care-providers to take care of the frail elderly. The nurses/care-providers routinely and professionally provided daily care to the dependent elderly. But I didn't see much attention to oral hygiene and sometimes I didn't see any provision of oral hygiene care at all.

When I asked the care providers when and how frequent they provide oral hygiene care, I often received the answer that they lacked time for that. But when I asked how they would proceed if they had enough time, their responses were revealing: "The mouths are often so dirty; I am scared to brush their teeth; I might hurt them; they don't want me to brush their teeth; or I don't know what to do in those old mouths." The responses clearly indicated that the care providers lacked the knowledge and skills to properly provide oral hygiene care.

On the basis of this realization I decided to teach them what they can expect in the mouth, how they can inspect the mouth, and how they can clean the mouth. That is why twelve years ago I started designing courses that focused on 'training the trainers' and 'teaching the teachers,' for better oral health care for the dependent elderly. Since then I have provided shorter and longer courses in more than 50 nursing homes (courses of 25 hours and 6 hours). Besides that a course for students of schools of nursing and care-providers.

The importance of providing care-providers with appropriate knowledge and skills about oral care for the elderly has become increasingly vital, not least because oral hygiene care has itself become more complicated than it was in the past. People are getting older, they keep their own teeth longer, they have more complex dental structures like implants, and people have more often dry mouths and they use more medicines than they used to do thirty or forty years ago.

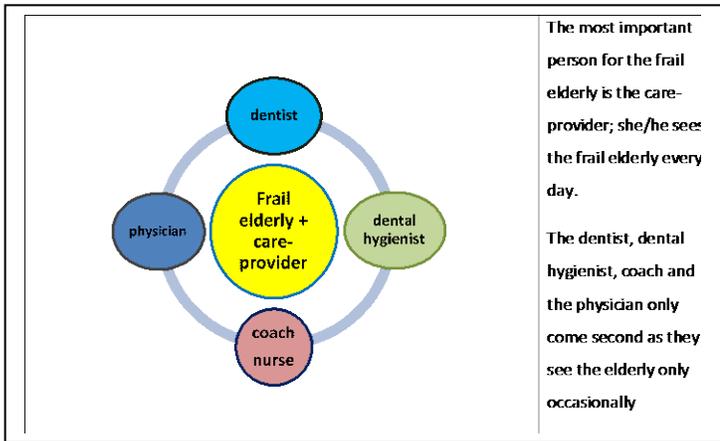
The care-provider is the most important person for the frail elderly. They take care of them every day like bathing, getting dressed, feeding, etc. They are the persons who should be able to give oral hygiene care. The persons who can teach the care providers are the dental hygienists. They are able to inform and instruct them. (see diagram 2).

It is important to point out that there is a difference between oral care and oral hygiene care.

Oral care is prevention, diagnostic, oral treatment and is done by the dentist, the dental hygienist and the physician.

Daily oral hygiene care is necessary to keep the oral cavity of an elderly healthy and clean. This is done by the nurse or care-provider.

Diagram 2



Do-able Project

Over the last twelve years I have devoted myself to improving the oral care of the frail dependent elderly. For this purpose, I have developed courses on dental hygiene care for different target groups in the Netherlands.

1. An extensive course for nurses in which I taught and trained them to become oral hygiene coaches. (25 hours)
2. For the Ivory Cross in the Netherlands a course for dental hygienists in which I trained them to give as a volunteer a clinical session of one hour to care-providers (6 hrs.)
3. Work-shops for elderly care physicians.
4. Additionally, a course on oral hygiene care for students in schools of nursing and care providing, which consists of 10 modules of each 1.5 hours.

From experience, I know that a course that combines technical and theoretical skills, and includes training on the job, tends to be most successful. My starting point is the formula “tell– show–do–apply” to instil embodied knowledge among participants.

Another precondition for success is that in the nursing homes in which the trainings have been provided, a trained nurse continues to monitor and provide guidance to the care workers. It is essential that the management of the relevant homes or organizations provide the possibilities and the means for such supervision.

Trained nurses stand at the centre of the proposed model, as they will deliver courses on oral care in care homes (at appropriate intervals depending on personnel turnover rate), develop relevant policies, and provide guidance to care workers.

Project Aim

To raise awareness about the importance of daily oral hygiene for frail elderly and to provide strategies for improving their oral health.

This requires ambassadors, that is dental hygienists, who promote and coordinate concrete initiatives to improve this care.

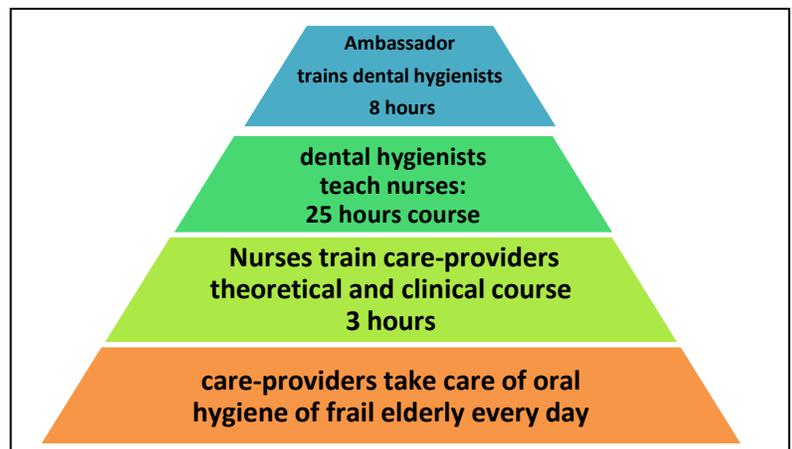
In every country the health care is organized differently. The instances and authorities to contact with are for example: national and local health care, home-care, health communities, nursing homes, schools for nurses and care-providers.

Project Objectives

In order to achieve this aim, it is essential to recruit ambassadors from the target countries or regions. Ideally these would be dental hygienists with educational experience. After having been trained they should be able to teach the 25-hour course to nurses and care-providers in their respective regions.

The trained nurse or care-provider can in turn train and coach their fellow carers, so that they are able to provide adequate oral care to each of the care dependent elderly. (see diagram 3, roll out project).

Diagram 3



Courses

1. The 25 hours course for nurses and care-providers is on the last page. This course can easily be adjusted to be relevant to the disabled and other vulnerable groups, and be made relevant to a range of health organizations.

2. The symposium of Ivory Cross of 6 hours for dental hygienists who as a volunteer trained a group of 8 care-providers for 2 hours, subjects were: Oral care and oral hygiene in nursing homes; oral diagnostics, oral health and illnesses, organization in nursing homes, cases, practical session. For the care-providers here was a clinical session.

3. Course for schools for nursing and care-providers (theory and clinics) - Each session was 1.5 hours. In between the sessions there was a training on the job in a nursing home.

1. The healthy mouth and mouth inspection
2. Tooth plaque and oral hygiene
3. The mouth of frail elderly and mouth inspection.
4. Oral care frail elderly
5. Oral rinsing agents and cleaning aids

6. Oral hygiene care program and cases
7. Swallow problems and dry mouths
8. Terminal oral care
9. Individual presentation
10. Exam and evaluation.

Project Evaluation

Evaluation 25 hours course

The first 5 years I educated nurses and care-providers from an institution with 20 different nursing homes. I followed them and it worked. On the end oral hygiene was on the daily list and belonged to the daily care.

Evaluation measurements:

1. Baseline measurement preceding the course focusing on knowledge and skills
2. Final measurement to document knowledge and skills at the end of the course.
3. Written test after every meeting
4. Skill test during on-the-job training.
5. Oral evaluation; half a year after the training

Evaluation Ivory Cross 6 hours course

In one year, we had 15 meetings and trained 450 dental hygienists. After a year 350 of them gave as a volunteer a clinical lesson (2 hours).

Evaluation School for nursing and care-providers

After a year of developing with teachers and teaching, oral hygiene care for seniors was included in the curriculum.

Project Stages

(see diagram 3)

- Step 1: Training ambassadors
- Step 2: Implementation, coordination and organization in targeted countries
- Step 3: Realization and evaluation through field studies

Project Timeline

Activity	Timeline
1 Review and adjust manual guide, power point presentations, clinical lesson, develop teacher's guide	3 month
2 Translation of the materials	2 month
3 Layout	1 month

Project Budget

Description	Hours
1 Revising the existing manual guide	80
2 Developing a teacher's guide	100
3 Translation	100
Total	280 hours

Project Barriers

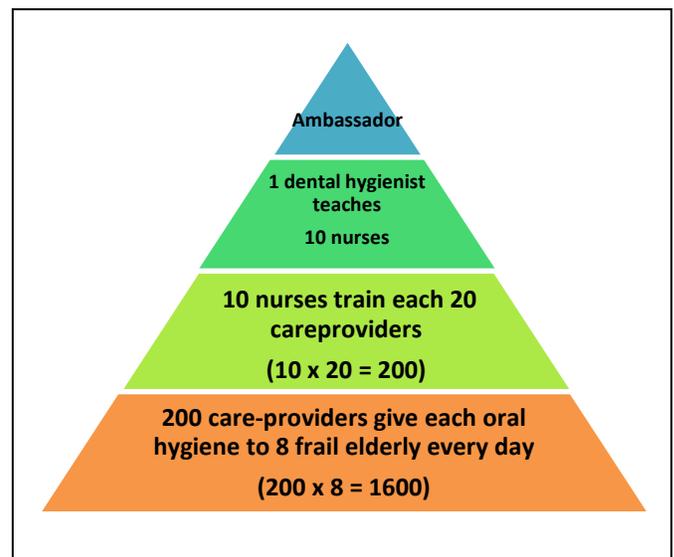
- The management doesn't provide the possibilities and the means of supervision.
- The trained nurse quits her job
- Continuity

Project Outcomes

Ambassadors from different countries adapt this project to the institutional and cultural context of their country and roll it out.

They train oral hygienists to become oral care coaches who in turn train the nurses and caretakers of institutions. Diagram 4 shows the potential result when starting with one trained dental hygienist.

Diagram 4



Aim with the 25 hours course

Awareness about the importance of daily oral hygiene for frail elderly and to provide strategies for improving oral health of seniors and frail elderly.

If the ambassador trains 10 dental hygienists you get

- 10 dental hygienist each x 10 nurses = 100 nurses
- 100 nurses x 20 care-providers = 2.000 careproviders
- 2000 careproviders X 8 elderly = 16.000 healthy mouths

Aim with the short course of 6 hours of Ivory Cross
Awareness about the importance of daily oral hygiene for frail elderly (this is a free-lance project in the Netherlands).

If the ambassador trains 40 dental hygienists you get:

- 40 d.h. x 8 care-providers = 320 care-providers
- 320 care-pr. x 8 frail elderly = 2.560 clean mouths

Submitted by
Wil Pelkmans

Programme

25 hours course for nurses and care-providers

First session: the healthy mouth and oral inspection (4 hours)

Theory: The healthy mouth: anatomy and function. Oral examination: lips; cheeks; palatum; tongue; mouth bottom; salivary glands, teeth, gums.

Practical part: the course participants inspect each others mouth with a mirror and light

Theory: oral hygiene and plaque

Practical part: oral hygiene care

Home-work

One week later

Second session: the oral cavity of the (frail) elderly and extensive oral inspection (4 hours)

Theory: The mouth of frail elderly; what you can expect mostly in the mouth of residents.

With a PowerPoint presentation the course participants learn to recognise what they can expect in the oral cavities of the elderly.

Practical part consists of an oral examination, once again with each other, during which they list what they see and whether or not it is ok.

Theory: dental structures and how to take care of them; a DVD which shows how to clean the dental materials;

Practical part: with models of dental structures they apply what they learned.

One or two weeks later

Third session: Oral health, illnesses and organizing oral care in nursing homes (4 hours)

Theory: The influence of the illnesses in the mouth f.e. CVA; dementia; Parkinson; heart diseases; diabetes and psychiatric patients. Also, the influence of medicines on oral health.

Theory: Policy oral health and oral hygiene care; how to make an individual oral hygiene care program and how to use the standardised cards.

Practical part: patient cases in groups: first with 2 persons, later the whole group. They make an individual oral hygiene plan and interpret the case and present it.

Group test: This session ends with a (interactive) group test about pathology and about giving advice to colleague nurses and assistants.

One or two weeks later

Fourth session: Training on the job (3 hours)

The teacher/coach goes with 2 nurses/care-providers to 4 frail elderly.

The course participants make oral inspection and according to what they see they make an individual plan and clean the oral cavity.

After each patient follows an evaluation.

Three weeks later

Fifth session: Swallow-problems; palliative and terminal care, cases and practical sessions (4 hours)

Theory: swallow-problems; coma patients; palliative and terminal care.

Practical part: patient cases: During the training on the job cases are sampled by the teacher/coach These cases are made in couples. After that they present them to the entire group. This way they learn from each other.

Theory: clinical session:

Home-work (3 hours): each student is asked to prepare a clinical lesson. They can call the teacher for advice.

Four or five month later

Sixth session: a practical session and evaluation (3 hours)

A practical session of oral hygiene in which course participants take on the role of trainer and give a lesson to their colleagues, while being evaluated by others; additionally, we discuss how oral hygiene care is dealt with in each unit or department of their facility.

Menemene Smiles for Life

Location
New Zealand

by IFDH Member
**New Zealand Dental Hygienist's
Association**

Statement of the Problem

Dental caries and periodontal disease are the most prevalent of the oral diseases. Oral disease has been linked with specific systemic health conditions. In addition, an individual's oral health related quality of life can significantly impact on their immediate community and society in general.

Free dental and oral health care is available to all New Zealanders until their 18th birthday. Despite this, oral disease remains one of the most prevalent, preventable diseases in New Zealand (NZ) communities. This may be, in part, due to research having shown that:

1. Young NZ adults, for whom oral and dental care is not a routine or habit, are less likely to access or utilise any service once ineligible for free care (Broadbent et al., 2006; Schluter et al., 2015) and
2. In 2014-2015, less than half of NZ adults with natural teeth had visited a health care worker in the past year (Ministry of Health, n.d.).

The most recent national oral health survey (2009) reported considerable unmet need amongst young NZ adults, particularly Māori (Ministry of Health, 2010). The cost of non-subsidised oral health care had been cited as the reason for young adult's lack of engagement with the oral health sector in NZ (Ministry of Health, 2010). However, Turner (2017) suggested that there may be additional barriers. These barriers include poor knowledge of oral disease and its impacts, a lack of understanding of oral disease prevention, poor oral hygiene self-efficacy, negative impressions of oral health care professionals and deficient oral health literacy skills.

The Proposed Project

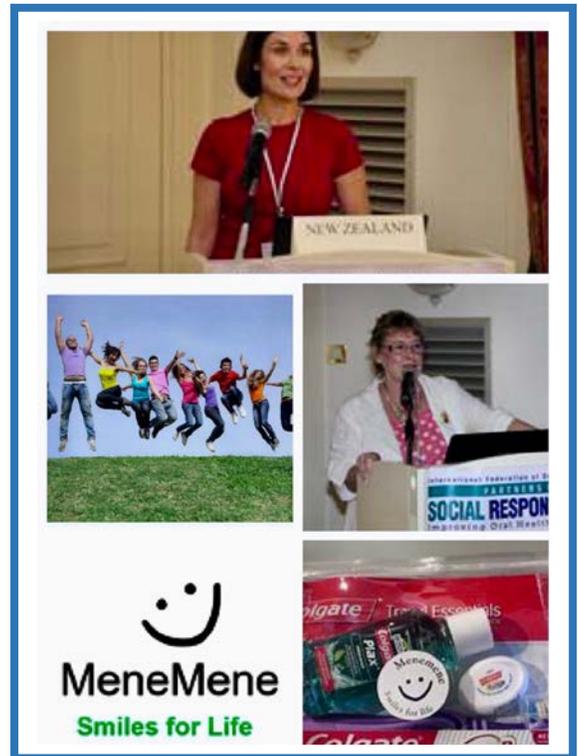
There is currently no formal transition service for adolescents/young adults (18-24 years old) from the 'no-cost to user' oral health care service to the 'user pays' service in NZ. Adolescents/young adults are generally considered to be a high risk group for oral disease prevalence due to their lifestyle choices. This coupled with low incomes (many being

enrolled in tertiary study or in low paid employment) means that access to a free preventive oral health care service for this group could have a positive impact on disease prevention, maintenance of oral health and increased oral health related quality of life over their lifespan.

The 'Menemene* Smiles for Life' (MSFL) project proposes that New Zealand private practice based oral health professionals (and in particular dental hygienists and oral health therapists) would provide this service as part of their social responsibility to the NZ community. Oral health professionals would be asked to:

1. volunteer one hour of their time per week/fortnight (minimum commitment one year) and
2. have their practices donate the materials/disposables needed for that appointment.

* "Menemene" (pronounced many, many) means smiles in Te Reo Māori



All participating clinicians will provide a standardised care appointment to MSFL recipients that MUST include:

- The use of 2 tone disclosing solution as an educative tool
- Personalised oral hygiene education/instruction focused on tooth brushing and interproximal care
- Provision of at least one new toothbrush and dental floss for home use
- Debridement as needed
- Full mouth application of fluoride varnish

The MSFL project team will follow-up with each young adult recipient three months after their appointment. Each recipient

will be contacted via SMS on their mobile phone (numbers provided by the participating practice/clinician with the recipient's consent) asking them to complete a short online survey. A hyperlink to the survey will be provided. Recipients will remain anonymous to the MSFL team as no names will be provided to the team by the participating practices/clinicians. Recipients will be asked to use a code that will identify their geographic region when providing survey feedback.

Project Funding

Seed funding (US\$500) from the IFDH has been used to promote the MSFL project to individual oral health professionals (in private practices and DHBs), corporate dental companies (Lumino group, Bupa dental) and professional associations (NZDOHTA/NZDHA/NZDA). Promotion materials include the use of print and social media.

MSFL Project Aims

This project aims to provide a rudimentary transitional model of oral health care for young NZ adults with the following aims:

- Developing lifelong habits related to oral disease prevention
- Building positive relationships with oral health professionals
- Valuing oral health
- Increased oral health literacy amongst participants

MSFL Project Objectives

- Market the MSFL programme appropriately to increase participation (clinicians/practices and recipients).
- Maintain on-going relationships with clinician/practice participants and MSFL recipients to meet the project aims.

MSFL Project Evaluation

The project will be evaluated quantitatively. Data will be gathered from participating practices/clinicians on numbers of participants and frequency of service provided. The MSFL will survey each recipient via online questionnaire three months after their appointment.

Project Stages

Seek ethical approval from HDECS	Not required
Develop communication/marketing framework	By June 2018
Actively promote MSFL project and seek further funding (June – March 2019)	<ul style="list-style-type: none"> • NZDOHTA/NZDHA conference July 2018 • Social media • Meet with corporate dental/DHBs/professional associations • Recruit participants and recipients
First MSFL recipient appointments	July 2019

Project Budget

The funding (\$NZ762) provided by the IFDH has covered the costs of the project thus far. The exchange rate was very favourable that day! We have had donations of supplies for participants from Colgate and 3M. Colgate has provided 100 Travel Care kits with toothbrush, toothpaste, floss and mouthwash in a plastic toiletry bag. 3M has provided 100 doses of Clinpro Fluoride varnish.

Expenditure:

Printing & marketing materials (including logo) - \$367
 Disclosing tablets - \$113
 Postage anticipated - \$250
Total - \$NZ730.00

Project Barriers

- Ensuring standardised care provision by clinicians.
- Apathy of the oral health professional community to participate/donate their time/incur costs.
- Lack of uptake of service by young adults.
- Limited clinicians/practices in areas of high need.
- Maintaining relationships with MSFL recipients to gather feedback survey data.

Project Outcomes

- Increase the number of participating practices/clinicians and MSFL recipients year on year.
- Improve young adult's perceptions of oral health professionals.
- Increase young adult's engagement with oral health services.
- Improve young adult's understanding and participation in preventive oral health practises.

Respectfully submitted

Sharmyn Turner RDH MPhil

NZ Social Responsibility delegate and Project Manager

Reference list

- Broadbent J, Thomson W, & Poulton R. (2006). Oral health beliefs in adolescence and oral health in young adulthood. *Journal of Dental Research*, 85(4), 339.
- Ministry of Health. (2010). *Our Oral Health: Key findings of the 2009 New Zealand Oral Health Survey*. Wellington, N.Z.
- Ministry of Health. *Annual Update of Key Results 2014/15: New Zealand Health Survey*. Wellington, N.Z. Retrieved from Ministry of Health website: <http://www.health.govt.nz/publication/annual-update-key-results-2014-15-new-zealand-health-survey>
- Schluter, P., Lee, M., Hamilton, G., Coe, G., Messer-Perkins, H., & Smith, B. (2015). Keep on brushing: A longitudinal study of motivational text messaging in young adults aged 18-24 years receiving Work and Income Support. *Journal of Public Health Dentistry*, 75(2), 118-125. doi:10.1111/jphd.12079
- Turner, S. (2017). Communicating the 'smart' way to improve and support oral health amongst young adults in New Zealand: A mHealth in oral health study. Auckland University of Technology, Auckland, NZ. Retrieved from <http://aut.researchgateway.ac.nz/handle/10292/10627>

Caries Off

Location
Pakistan

by IFDH Member
Naveed Abdul
Pakistan

Background

Lack of awareness about the oral cavity is a main negligence of our population. There are multiple factors of ignorance which leads to destruction of oral health. The first priority of Government should be an individual's health but not yet in my Country. Unfortunately, this inspired me to do something for my people; to give them awareness of dental health. Currently there are no programs providing oral health care education in private or public sectors in Pakistan. These programs could address poor daily oral hygiene habits, and choices in diet and snacks

Worldwide children are affected by oral diseases most notably dental caries. This condition causes pain, difficulty eating, and hours lost at school. Prevalence of dental caries is raising in most countries. As well, sugar daily intake is rising worldwide.

As preventive oral health specialists, dental hygienists have an opportunity to change this situation by using one of the most powerful tools: a toothbrush.

Children are neglecting oral care, primarily the simple task of tooth brushing.

School is a place where you can train kids proper brushing habits to improve their oral care.

Children are the future of every Nation therefore my focus was on school going children.

We started our project (ECHTB) from 23-04-2018 to 11-05-2018. We selected girls attending a government school. These children ranged in age from 5 to 11 years and were chosen from 4 separate grades. We examined about five hundred students in two weeks and tooth brushes were given to the all students which were examined. We delivered lectures on both

brushing techniques and best brush timing. Education on diet and oral health were also provided to the groups.

On examination of children's oral cavity, we found 95% students were suffering from dental plaque, periodontal disease, calculus deposits and dental caries due to lack of brushing or no brushing at all.

After distribution of brushes and education we observed the students for almost 3 months. After 3 months we once again examined the students that had been given the toothbrushes and instructions from 03-09-2018 to 12-09-2018.

We were not surprised to find a marked improvement in the student's oral hygiene.

40% of all students realized improved oral hygiene after receiving the necessary toothbrushes and oral health education.



The Future

The future of our project is very positive. We plan to examine the children's oral cavity twice a year to continue to encourage and reinforce the education they have received.

We also hope to see Oral health integrated as a part of the school curricula and this will ensure children will be encouraged to develop a daily toothbrushing habit for life.

As partners in our program teachers have become disseminators of good toothbrushing habits and oral care educators.

Joining us in our quest for improved oral health are the children as they will become ambassadors for good oral health by spreading proper brushing habits at home.

Teeth for Health Save a Tooth, A Life, A Nation

Location
Adpie, Philippines

by IFDH Member
Rose Nobbley, RDH
Philippines

Background

Dental hygiene is an emerging profession in the Philippines. There are 36 dental colleges but only one dental hygiene program in the 7000+ island archipelago nation. Of the 110 million Filipinos living there, 90% never see a dentist in their lifetime. The Philippines ranked #1 in Asia for dental caries according to a 2014 report by Federation Dentaire Internationale. There is no credible oral health database nationally, nor have private or government practices embraced a dental electronic health record. Paradoxically, the Philippines has a unique dental mission culture with missions occurring in great frequency; however they primarily focus on surgical extractions, paper collection of unaccounted data, and are a one-time service. The key elements missing from the program are oral health education, preventive services, comprehensive traceable data collection, and sustainability or follow up. Dental hygiene is a certification and is considered a low level vocational skill. There currently is not an academic degree in dental hygiene. Dentists utilize these valuable professionals as assistants, rather than skilled oral health educators as well as care providers for millions of Filipinos suffering daily from the effects of a disease which is both treatable and preventable.

The Teeth for Health campaign was created to elevate the impact dental hygienists have as prevention specialists and educators, not just teeth cleaners. The program design is a public health approach through school-based intervention to establish early positive behaviors in an atmosphere that is easily accessible and on a wide platform that is consistent. The program provides hands on training in ADPIE, gathering quantitative data through a cloud based oral health information system dentalcharting.com. Students then execute a community oral health program that provides evidenced based care and affordable quality Rx fluoride toothpaste and tooth brushes for daily in school brushing. They also collect qualitative data through parent and child surveys and provide support curriculum for teachers. A memorandum of agreement

is given to ensure communities receive a follow-up visit the following year for all services to be repeated and documented.

This project is of utmost importance as 97% of the Filipino population currently suffers from oral disease with toothache being the primary cause of absenteeism among school children. Although studies have documented that poor oral health and untreated infections can have a significant impact on systemic health and even lead to death, as of today no new dental public health model has been introduced to address the current oral health crisis.

With only 25,000 dentists and 300 dental hygienists nationally, there are many who say any hope for a solution is impossible. However, as the oral health crisis in the Philippines slowly comes to light, stakeholders are becoming increasingly aware of the importance of improved oral health knowledge and showing interest in early intervention programs for the community. Stakeholders are supporting Teeth for Health with 'adopt a school' sponsorships and in-kind donations to further our project goals. This unique and impactful program is not only do-able but replicable and is supported by the following individuals locally and abroad; *Robin Rome, Tanya Doyle RDH, Troy Doyle, Jacqueline Crossman RDH, Wouter Put, Brian Skinner, Rick Sobrevinas, Joi Aquino Cutter, John Cutter DDS, Joe Maristela III, Toni Urrutia, Melissa Cox RDH, Tami Doyle RDH, Nicole Fisher RDH, and Sue Medley RDH.* American Association of the Philippines has sponsored one adopt a school program and has pledged to be the main fundraising source for the Teeth for Health program. British Women's Association of the Philippines hold specific fundraiser's to purchase fluoride varnish. Channel of Hope Foundation Philippines, Golden Z Club 737, and Upskills Foundation have raised funds and in-kind donations for consumables to sponsor community oral health programs in their barangays.



Aim

Create a paradigm shift in the delivery and execution of dental hygiene services improving mission ethic, education, and data collection to create sustainability while elevating the dental hygienist into a recognized licensed partner in the Philippines dental profession.

Objectives

- Demonstrate dental hygienists have a role in public health and are the ideal auxiliary to address the imminent need for oral health interventions
- Establish a standard of care model for dental missions to include electronic data acquisition, oral-systemic education, and non-operative prevention and caries services
- Demonstrate Teeth for Health can positively impact communities within a school year for the cost of a gourmet venti coffee per person
- Establish community health for the dental hygienist to be a standard course offering and curriculum requirement enabling the Teeth for Health program to be a continued service to communities for follow-up and practical experience for students

Evaluation

- **Quantitative** - tracking number of community programs carried out, number of individuals served, how often individuals seek dental care, how many times people brush daily, how many own a toothbrush, how many brush with toothpaste, record before and follow-up plaque scores
- **Qualitative** - utilizing surveys to discover current oral health knowledge before and after participating in the community oral health program

Stages

Organization:

- I. Acquired funds for portable dental equipment
 - J. Kirby Simon Foreign Service Trust Grant 3k USD (157,350 pesos)
- II. Purchased necessary portable equipment to bring the dental clinic to the people
- III. Outlined program execution and guidelines - *in accordance to local laws and National University College of Dentistry*
 - Health certificates for all volunteering dental students
 - Community extension paperwork registered with NUCD
 - Script to be used by hygiene students for oral health education
 - Short field medical-dental history form, consent form, data privacy form, SDF educational handout
 - Dental mission flow chart
 - Surveys for parents and children
 - Support handouts for teachers
- IV. Collection of In-kind consumable donations

Execution:

- V. Launch of Teeth for Health community oral health program
- VI. Partnered with Dr. John M Cutter at National University College of Dentistry

- 2 years teaching e-charting for both dental and hygiene students
- 30 field seasoned SRA's (student research assistants)

VII. Collection of In-Kind re-use donations

VIII. Execution of Community Oral Health Dental Missions 2018-2019

IX. Program data evaluation for Phase I

X. Launch of Follow-up Community Oral Health Dental Missions 2019-2020

XI. Program data evaluation for Phase II; comparison of statistical analytics benchmarks

Timeline

July 2018 – April 2020

Phase I - NUCD Academic school year July 2018-April 2019

- 1,588 recipients (dental missions are noted in italic)
- Grant award purchases ordered July 2018
- In-kind consumable donations received July 2018
- In-kind instrument donation received August 2018
- *Community Oral Health Dental Mission August 25, 2018*
Barangay 108 Tondo, Manila
- Received start-up equipment August 31, 2018
- *Community Oral Health Dental Mission September 22, 2018*
Barangay 108 Tondo, Manila
- *Community Oral Health Dental Mission October 11, 2018*
City Gates Academy – Antipolo, Rizal
- In-kind program access to dentalcharting.com active October 2018
- *Community Oral Health Dental Mission November 17, 2018*
Jehovah Rapha Preschool and tutoring Center –
Cement City, Rizal
- In-kind portable steam autoclave equipment pledged December 2018
- *Community Oral Health Dental Mission January 31, 2019*
Mithing Preschool and Alternative Learning Center –
Tondo, Manila
- Order of 1st sterilization chamber received February 2019
- *Community Oral Health Dental Mission March 1, 2019*
Barangay Eden Court – Malinta, Valenzuela
- *Community Oral Health Dental Mission March 19, 2019*
San Isidro High School – Antipolo, Rizal
- Order of 2nd sterilization chamber received March 2019
- *Community Oral Health Dental Mission April 9th, 2019*
Bulilit Preschool and Daycare Center –
Laguerta, Muntinlupa

Phase II Follow-up –

NUCD Academic school year July 2019-April 2020 (in process)

Budget

Dental equipment: total 3k USD (157,350 pesos)

Personal Investment: total 1,140 USD

- Second hand Cavitron Select SPS with reservoir (x1) = 700 USD
- Ultrasonic Inserts (x9) = 556 USD
- P1, P3, G2, G5 Ultrasonic piezo tips (5/pk) 10 USD x8 = 80 USD
- Tooth decay models 14 USD x5 = 70 USD
- Pit & Fissure Sealant 4 x 1.2g = 14 USD
- Etch 37% Phosphoric Acid 60g x 1 = 12 USD
- Pre-Bent Applicator tips (100) 25 gauge = 4 USD
- Pre-Bent Applicator tips (100) 22 gauge = 4 USD

In-kind Donations: value total 4,072 USD (213,600 pesos)

Consumable in-kind start-up donations: value total 4,350 USD (228,158p)

Consumables per Community Oral Health Program: 3.81 USD per person

Total 381 USD (20k pesos) per 100 people.



This is a standardized list of items needed to serve 100 individuals. It is provided to organizations who are interested in the Teeth for Health campaign that would like to sponsor a community oral health program.

- Silver Diamine Fluoride (5mL) = 3,000p
- 5% Sodium Fluoride Varnish (100/pk) = 5,000p
- Essential Health Care Package World Health Organization Rx Fluoride Polly Paste gel pump (500mL) good for 8 children for one school year - 205p each x 18(case) minimum +500p delivery = 4,190p
- Toothbrushes from DIVISORIA cost 12p per piece = 1,200p
- Surgical Masks 50 per box = 200p x4 = 800p
- Gloves (50 pair) 150p x 20 boxes varying sizes = 3,000p
- Cotton balls (50pc.) 18p x 2 = 36p
- Alcohol hand sanitizer (1L) 88p x 6 = 528p
- Decosept hospital grade disinfectant 1L = 1,250p
- Sterilization pouches (200/pk) = 1,000p

FOR EXTRACTIONS:

additional 116 USD (6,088pesos)

- Local Anesthetic Lidocaine 1:100,000 (50/pk) 2 boxes x 600p = 1,200p
- Short Anesthetic Needles (100/pk) 300p x1 box = 300p
- Long Needles (100/pk) 750p x 1 box = 750p
- Cotton swabs (100/pk)for 88p x 1 = 88p
- Liquid Children's Paracetamol (60mL) 75p x50 = 3750

Student Provisions (16 dental hygiene students):

One time consumables cost total 27 USD (1,400 pesos)
Re-occurring costs per dental mission 3 USD (150 pesos) x7 = 1,050

Personal Provisions: 56 USD (2,950 pesos) per program

- Stickers (100/pk) 100p x2 = 200p
- Give-away prizes 10 X 100p = 1,000p
- Transportation of equipment (fuel) = 500p
- Tarpaulin Banner = 300p
- Cavicide hospital grade wipes (160 sheets) 600p x1 = 600p
- Saliva ejectors (100/pk) = 350p

Barriers

- Feasible transportation for students to/from outreach location
- Funding for instrument replacement and dental equipment repairs
- Timely sponsorship to offer services other than oral prophylaxis and oral health education
- Ability for students to raise funds on their own as a student hygienist organization to obtain educational props or support materials
- Lack of prioritization to permanently adopt e-charting for all community outreach
- Lack of prioritization to permanently insert dental hygiene community health into established curricula

Outcomes

- Increase oral health awareness in the minds and attitudes of the public, education, and government
- Bring the Philippine dental hygienist from "On the Job Training" status into licensed parity
- Deliver positive program impact with CAST analytics over time
- Deliver evidence-based care improving overall health for better quality of life
- Equip dental hygiene students with the skills necessary for public health RDH service

Each community health program varied in the services provided according to what we could get in sponsorship for consumables. After the first three programs all communities received a minimum of full mouth charting and referral, oral prophylaxis, silver diamine fluoride, varnish therapy, oral health education, tooth paste and a personal toothbrush.

Best Russian Hygienist Contest

Location

Russia

by IFDH Member

Professional Society of Russian Dental Hygienists

Background

- As there is no systematic program of postgraduate education in Russia dedicated to professional hygienist, personal skills and knowledge development rely on individuals.
- To keep high level of expertise, follow the progress in treatment and secure dental hygienists' status, constant postgraduate education is a must.
- Best Hygienist Russia project – is an outstanding, free of charge initiative, dedicated to all dental professional hygienists.
- For all volunteers, participants, association provide free access to masterclasses and opportunity to verify the skills under supervision of the best specialist in the profession and compare with the others as well.
- Thanks to healthy competition, first of all we encourage participants to constant improvement. Moreover, we create the pressure on others in order to raise the level of best in class.

Project Aims

- to increase the level of expertise in frame of healthy competition
- to ensure dental hygienist profession status
- to provide constant postgraduate education
- access to best in class professionals
- to create local and federal leaders and ambassadors of the best practices

Project Objectives

- to choose 7 local winners
- 1 national champion

- year by year
- in frame of contests
- followed by masterclasses

Project Evaluation

- statistics of number of participants
- follow up of the professional progress and career development
- environmental feedback

Project Stages & Timelines

January: *Announcement of annual schedule*

Application
Masterclasses
Regional contests
National annual conference
Masterclasses

September: *National contest*

Reward: participation in the international congress



Project Budget

- Sponsors
- Partners

Project Barriers

- Logistic costs

Project Outcomes

- Increase level of expertise
- Empowerment of the professionals
- Improved status of dental hygienist profession
- Encouragement & incentive for self-development
- Creation of national & regional leaders

Integrating Oral Health into an Early Childhood Development Programme (ECD)

Location

Ikamva Labantu, South Africa

by IFDH Member

**Oral Hygienists' Association
of South Africa**

Background

I am a lecturer in the Oral Hygiene Department, University of the Western Cape (UWC), South Africa. I have an interest in public health and present the oral health promotion modules in the BOH programme. Community engagement and being socially responsive to surrounding communities is core to the UWC institutional operational plan.

As a lecturer it is important to model to students the contribution that the profession can make in improving oral health on a community level. This project is thus an initiative for the service aspect of my work as well as the service learning aspect of the oral health promotion modules that I teach.

Overall this initiative fits the UWC operational plan of community engagement, exposing students to the needs of vulnerable communities and their role in this regard.

Ikamva Labantu:

the organisation where the project is located

Ikamva Labantu is a non-profit community based organisation committed to equity and community empowerment. This organisation, founded in 1963, is located in one of the poorest communities in the Western Cape Province in South Africa. The organisation works towards social and economic empowerment of the community. One of the core focus areas of the organisation is early childhood development (ECD) - also a focus area identified within government structures. The ECD initiative includes 1) year-long learning programme offered at no cost to staff (principals and teachers) of ECD centres in the community and 2) an on-site ECD facility (accommodating 60-80 children) that offers experiential learning for staff attending the educational programme. The organisation therefore provides the necessary knowledge and skills appropriate to their respective roles in order to promote early childhood development in this community.

ECD programme: 70 ECD centres are targeted annually reaching approximately 3000-4500 children aged 6 months to 6 years. The principal and teacher practitioners from each ECD centre attends an educational programme, aimed to equip them with the knowledge and skills, to support early childhood development of children. These centres are community based, mostly private, do not necessary have government funding and most attendees do not have formal qualifications. In addition to the educational programme, annual wellness days offer comprehensive primary health screening for attendees.

Ultimately the organisation looks at promoting the health and wellbeing of these practitioners, who are generally from this underserved community. Many of these individuals have not had access to health care or are not aware of the services available to them. The premise is that access to and the potential for improving their own health will create an environment conducive to promoting the health and wellbeing of children at ECD centres. Oral health is integral to this process and this project aims to embed oral health within every aspect of the programme offered by Ikamva Labantu.

Kwakhanya ECD centre: Located within the Ikamva facility - approximately 80 children aged 6 months to six years attend this facility daily.



Oral health is integral to health and wellbeing and the purpose of this project is to put oral health on the agenda and embed oral health within every aspect of the ECD programme offered by this organisation.

Why is this a high priority project?

South Africa is now placing huge emphasis on early childhood development, both in the formal government structures as well as among community based structures. Historically children, particularly in poor communities had limited access to facilities focusing on ECD and as a result started their primary schooling at a disadvantage – which was perpetuated throughout their educational progress.

Information literacy on oral health is limited or often omitted in these initiatives. Dental caries is a public health problem with a National Survey done in 1999 reporting a dental caries prevalence of 82% among 6-year-old children in the Western Cape Province, with 72% of this being untreated. Anecdotal evidence suggests that the caries prevalence, particularly in poorer communities is increasing. The impact of poor oral health on quality of life, particularly vulnerable communities has a ripple effect at every stage of their development.

The oral disease profile puts a huge burden on the public health sector in balancing the curative and preventive aspect of oral health care. Therefore, with most South African oral hygienists working in the private sector, it can be argued that we have both an ethical and social responsibility to join community based organisations in a voluntary capacity and so share our professional expertise.



Is this a do-able project?

This project is a partnership between the Department of Oral Hygiene (Faculty of Dentistry) and the NPO Ikamva Labantu. This project serves as a service learning opportunity for 2nd and 3rd year oral health students; provides an opportunity for the lecturer to perform a community service; creates an opportunity for the lecturer to model to students the potential of the oral hygienist to promote oral health on a community level and share the principles and ethics around community engagement. Although the organisation has a number of focus areas, the scope of the oral health project is limited to the resources available.

The project is growing as more resources are becoming available. These include students, oral hygiene and dental colleagues, the Colgate Bright Smiles initiative.

Project funders, partners or stakeholders

University of the Western Cape, Faculty of Dentistry (Department of Oral Hygiene); Dental companies (Colgate Bright Smiles project, GSK – this is ongoing)

Aims of the Programme

1. To introduce an oral health promotion component into the existing education programme offered by Ikamva Labantu to ECD teacher practitioners/principals.
2. To provide an oral health promotion intervention at the on-site ECD centre (targeting children and parents)
3. To develop a service learning opportunity for oral hygiene students at UWC.

Project Objectives

SMART Objectives: Specific, Measurable, Achievable, Realistic, Time-bound

1. By the end of the oral health workshops, teachers/principals should have the oral health literacy and skills to take care of their own oral health.
2. By the end of the training programme, teachers/principals should have introduced initiatives to promote oral self-care practices and general dental care at their ECD centres – as appropriate to their context,
3. By the end of the year, children attending the ECD centre should practice daily tooth-brushing, should be on a fluoride varnish programme, and should not have carious that may affect the quality of their lives; parents would be informed about basic oral health care for their children.
4. By the end of the academic year, oral hygiene students should understand and apply the principles of service learning appropriate to their study programme; identify and apply the UWC graduate attributes embedded in this project; describe to role of the oral hygienist in a community based programme.

Project Evaluation

Objective 1: Teachers/principals oral health literacy and self-care practices: the new group will start their training in January. We plan on doing a pre-test questionnaire in IsiXhosa (primarily quantitative), the mother tongue of most participants. Participants understand English, the medium that most of the programme is presented in – however there are miscommunications when a questionnaire has to be completed in English. This is the reason why there was not a formal pre-test in the past. With the new group, an isiXhosa speaking individual will be asked to translate a basic English questionnaire. A post-test questionnaire will be done one month after the workshops on personal oral health practices.

Objective 2: A self-administered questionnaire will be made available towards the end of the year (two months before completing the training programme) to determine initiatives, if any, introduced to the centres, enabling factors and barriers faced in this regard. Focus interviews will be held during the year on the progress and experiences in this regard – the social context of these centres have a huge impact on the possible initiatives intended (some of these centres do not have running water).

Objective 3: The daily brushing programme will be monitored by means of a chart in the classroom; the oral

health of children will be monitored by means of their screening forms; children who have signed consent for fluoride varnish would have been treated; no child should have active caries or at least not have pain or discomfort relating to their teeth; all children who need dental treatment would have been referred to the community dental clinic; feedback from parents at the school meeting around oral health of their children.

Objective 4: Students will be asked to keep a log of activities, experiences and critical incidents.

Is this research? Do you need ethics approval?

A research project is registered in the Oral Hygiene Department on community based teaching and service learning. As a service learning project, we have ethics approval for student feedback from the Faculty and University research committees. The organisation has given approval for us to gather data but this is also dependent on the consent and of participants.

The project has now been registered as a formal research project titled “An evaluation of an early childhood development (ECD) oral health promotion programme at a community based organization in the Western Cape”. This allows for reporting on the impact of the project on participants. This evaluation will take place over a five year period.

Project Stages

Planning meetings with the facilitator is ongoing and started in 2016 followed up early in 2018. The scope of the project is reviewed, principle decisions made and a plan that suits both partners are discussed in details. The following is based on such a detailed discussion.

Objective 1

By the end of the oral health workshops, teachers/principals should have the oral health literacy and skills to take care of their own oral health; teachers/principals should be able to introduce initiatives to promote oral self-care practices and general dental care to their ECD centres – as appropriate to their context.

Activities

- A workshop will be held with teachers and principals respectively. These workshops are generally interactive with short presentations interspersed by group discussion. Participants are asked about their interests/questions at the beginning. The lecturer does the presentations to the group, students join the group discussions and are part of the feedback process. Students then do one-to-one oral health education sessions.
- Short video clips are shown – this is usually in English. Ideally students should be able to do short clips in isiXhosa – time and resources are usually a problem in this regard.
- A pre-test questionnaire will be made available one week before the workshop. After the workshop a post-test question-

naire will be done. Three months after the workshop a follow up questionnaire will be done to enquire about the impact of the workshop on the individual, their family and ECD centre.

- Wellness days are planned by the organisation. At these events different professional groups and organisations provide their services at no cost where attendees have the opportunity for health screening and referral. Staff from the UWC dental faculty who have elected to join this project and student volunteers do one-on-one consultations with attendees; students and staff (including a dentist) do screenings and referrals. In 2018, a partnership with Colgate resulted in two mobile clinics being available for treatment at the wellness days.

Dental treatment done at the wellness days in 2018

OH advise	Screening	Scalings	Restorations	Fluoride varnish	Extractions
97	97	16	2	39	1

Objective 2

By the end of the year, children attending the ECD centre should practice daily tooth-brushing, should be on a fluoride varnish programme, and should not have carious that may affect the quality of their lives; parents would be informed about basic oral health care for their children.

Activities

- Students will visit the centre twice a year to do oral health education and the brushing programme. The facility starts the brushing at the beginning of the year, students follow up on this. They do puppet shows, games, teaching children songs around tooth-brushing. Students work in groups with class groups.
- A questionnaire will be sent to parents to enquire about oral health related practices of the family. Consent will also be requested for children to be screened and have preventive treatment provided at the ECD centre (this now forms part of the formal research project).
- The lecturer will do the dental screening - students are involved in assisting. Ikamva has an arrangement with the public health clinic for referral for children with dental problems.
- If we are able to start the fluoride varnish programme (at least three times per year as these children are high risk for dental caries) students will visit more often with 2nd year students doing the first application in semester 1 and 3rd year students doing the second application in semester 2. A final screening will be done at the end of the year – one month before the centre closes to review the dental status of children against the initial screening done at the beginning of the year.
- Students will also do an information sheet for parents based on the feedback from the questionnaire sent to parents. A questionnaire about the home care of children (in isiXhosa) would have been sent to parents and this would inform an

information sheet provided to parents. A follow-up information sheet will be sent to parents once a quarter on an aspect of oral health relating to the needs of children at the centre.

Objective 3

By the end of the academic year, oral hygiene students should understand and apply the principles of service learning appropriate to their study programme; identify and apply the UWC graduate attributes embedded in this project; describe to role of the oral hygienist in a community based programme.

Activities

Oral hygiene students will be engagers in classroom based activities such as tutorials, feedback sessions, reflective journals and this is ongoing.

Project Timeline - 2019

This project is ongoing with a new cohort of teachers and principals every year. The school project is ongoing as this group is constant. The teacher/principal group changes yearly and communication thereafter is a challenge due to addresses not being registered telephone numbers not being constant.

February- July	Brushing programme at the school; Questionnaire for parents, information sheet to parents, complete dental screening
June/July	Pre-test questionnaire for teachers/principals; source educational materials for ECD centres (this is a work in progress Colgate was approached in 2017) Start fluoride varnish programme (still exploring the possibility); 2 nd information on oral health literacy sheet to parents First wellness day for teachers/ principals
June- July	Pretest of current practices at their ECD centres Workshop for teachers (dates set by Ikamva) Workshop for principals (dates set by Ikamva)
August	Post-test evaluation (teachers and principals) regarding knowledge and self-care Second fluoride varnish application; 3 rd information sheet to parents
October	Post-test questionnaire to find out about initiative started at ECD centres, challenges
October	Final screening of children

**the timelines above refer to the 2019 project implementation.
**A questionnaire was completed in 2018 where teachers and principals reported on their learning regarding the workshops presented in 2018. Data was collected in 2019 from the 2018 cohort on the impact of the workshop on individuals, their families and their ECD centre. Dental treatment was provided, mostly scalings, desensitising of teeth, and a number of restorations at the wellness days.*

The brushing programme was initiated and monitored in 2018. Children were screened, fluoride varnish applications and fissure sealants was done on children where parents consented to treatment.

This is an ongoing project where oral health input is aligned to the structured education and health programme of the organisation. This in itself limits the scope of the programme. Up to this stage the project was a community service project. In June, 2019 the project was registered as a research project with the Biomedical and Ethics Research committee of the University of the Western Cape. Although still a social responsibility initiative, this registration allows for the project process and outcomes to be published. The organisation fully supports the research initiative.

Project Budget

This can be considered in terms of budget for activities for each stage.

Identify project costs: personnel, administration, communication, travel, publication of materials, clinical materials,

Travel to the project and human resources (students and staff) is provided by the Dental Faculty. Dental aids for teaching is available in the department.

Ideally we would want to provide every attendee with dental products (brush, floss, mouthrinse and pamphlet) at the wellness day – this has been subject to availability from dental companies. Colgate and GSK to some extent has been consistent in providing product for this purpose.

The faculty provides toothbrushes to the centre twice a year (80x2). Colgate has also supported this project.

Budget that would be most useful in order of priority (but not complete):

1. A senior student or dental assistant to assist with the administration of the project preferably an isiXhosa speaking student that would also assist with the interpretation of the data (3hrs per week for 20 weeks @ R120/hour=R7200 (60hours).
2. Printed information sheets – this will be provided by the faculty in black and white. Having some of these sheets enlarged in colour for the facility may be useful.

Project Barriers

- The project focus is on teachers and principals initiating change within their organisation. As this is an extremely poor community, oral health is not the main priority. Funding for dental aids is a challenge as ECD centres cannot necessarily commit to tooth-brushing programmes at their centres. Although there is an interest, adequate safe water, sanitation and the general physical environment is a challenge. Colgate

has been approached for toothbrushes and paste for these centres and has done so in 2018 through the Bright Smiles initiative.

- The project is dependent on staff and student availability – administration of the project is time consuming in addition to my role as lecturer and head of the Oral Hygiene Department
- Language is a barrier – as we have a diverse student population, students are able to overcome the language barrier. However, their involvement is limited by their programme.
- Access to the dental clinics in the community is a challenge due to a shortage of clinics and limited staff at these clinics.

Project Outcomes

- There should be a well-structured oral health component included in the general education and health programme by Ikamva offered to ECD centres in the community. This should be appropriate to the context of the community. In the longer term an appropriate educational manual should be developed to be used in the training programme.
- Participants of the training programme should have the knowledge and skills to initiate change within their ECD centres, their homes and communities.
- The on-site ECD centre should model best practice in terms of oral health care (daily, supervised tooth-brushing, access to dental care (daily handwashing and limiting sugar intake is part of the current programme of the organisation).
- Teachers, parents should be aware of their/their children’s dental status and should be able to access the community dental clinics.

What impact will the project have?

This is a case of integration of oral health into an ECD programme, the collaboration between a community-based non-profit organisation, a university and professionals in the dental field is demonstrated. It further demonstrates that a small social responsibility project by an oral hygienist developed into a larger project through collaboration with huge potential. A community of practice was formed that also resulted in a research project.

Between 30 and 50 ECD centres are reached annually. Teachers and principals as referent individuals in their communities have the knowledge and skill to promote oral health at various platforms.

Table 1: A summary of a screening done at Kwakhana ECD in November, 2017.

Age*	Plaque deposits	Gingival Inflammation	Calculus	Dental caries	Areas of demineralisation	Pain
2yrs=5 3yrs=13 4yrs=6 5yrs=10	No visible plaque= 8 (23.5%) Visible plaque around the gingival margins=19 (55.9%) Gross plaque=7 (20.6%)	Healthy gingiva=15 (44%) Inflammation =19 (56%)	Presence of calculus=1 (3%)	Presence of dental caries=15 (44%)	Demineralised areas/white spots=11 (33%)	Pain reported -1 (3%)

* children where parents gave consent for treatment.

This is a progress report only.

Screening	Fluoride varnish	Fissure sealants	Polish
27*	23	4	8

The Sparkle Brush Program

Location

Provinces of KwaZulu-Natal and Western Cape,
South Africa

by IFDH Member

Oral Hygienists' Association
of South Africa

Project Background

Dental care has been acknowledged as one of the leading unmet health care needs amongst the special needs population, (National Maternal and Child Oral Health Resource Center, 2005). This community engagement program is founded on the notion of enabling the oral diseases prevention, education and oral care maintenance in special needs children. This project has now culminated into an oral health programme that is a collaborative community engagement programme between The University of KwaZulu-Natal (UKZN) and The University of Western Cape (UWC). The existence of oral health inequalities amongst different population groups globally is further confounded by South African health care services being unaffordable or difficult to access, especially services that are provided by government departments (Department of Social Development Strategic Plan 2010-2015). An important avenue that can serve as a platform for providing a foundation for good oral hygiene skills and healthy living patterns, is schools. THE SPARKLE BRUSH PROGRAM anticipates the development, implementation and evaluation of a robust school brush program that will reinforce the commitment to a holistic approach to oral health by acknowledging its role in the general health and wellbeing of an individual.

The current beneficiaries of this program are 551 special needs learners, 105 educators, 56 teaching assistants, 45 nurses and 8 therapists in the provinces of KwaZulu-Natal and Western Cape. The programme will be coordinated by the program coordinator (Dr Magandhree Naidoo) from the University of Western Cape and managed by designated academic personnel from UKZN and UWC.

Project Aims

The main aims of this program include:

- I. To improve and maintain an optimum oral health status in special needs children.
- II. To adopt an all-inclusive approach to health care, by including handwashing procedures, dietary advice and risk

factors such as smoking as a component of the school oral health program.

III. To educate and impart key skills for the maintenance of the program.

IV. To impart key skills to key personnel to empower these individuals to initiate health programs in their respective schools.

Project Objectives

I. To conduct an oral health workshop to nurses, teachers and teaching assistants on concepts in oral and general health care regarding the oral hygiene program, adapting oral care instructions and tools for special needs, and reinforcing infection control procedure for toothbrush storage and care.

II. To identify key participants within the school system to serve as a point of reference for the daily monitoring and training of the program.



III. To implement a daily tooth brushing and handwashing program, conduct a topical fluoride application program for the purpose of caries prevention and develop a story booklet for the purpose of implementing the program with the learners.

IV. To establish a referral system with the local health services and develop a partnership with key stakeholder (Colgate, Johnson & Johnson, Wright Millner's, UWC and UKZN),

Project Evaluation

The evaluation of this brush program will employ a mixed methods design drawing data from both a qualitative and quantitative approach. A focus group will be conducted, but will not function as an isolated data collection method but as a part of a series of data collection techniques, such as the quantitative questionnaire for the workshop and the implemented brush program.

Ethical Considerations

Authorization from the University of the Western Cape and The University of KwaZulu-Natal in the form of a Memorandum of Understanding (MOU) was accordingly obtained. Permission from the participating schools was obtained from the school principal, parental consent in a

written format was obtained before the child participated in the program. The parent consent also included consent for photographs. In addition, assent was obtained from the children using picture communication schedules. Ethical Clearance for the evaluation, is in progress with the Department of Education in KwaZulu-Natal and the Western Cape, and the Biomedical Research and Ethics Committee at UKZN and UWC.



Project Stages

Phase 1: Oral Health Training Workshop

We can logistically only implement this program at one school in each province. We have therefore developed a Continued Professional Development (CPD-DTO/001/P000030/2019 /021) accredited oral health training workshop that was implemented in phase 1 of this program. To educate nurses, teachers and teaching assistants to enable their active participation and monitoring of the program was implemented. Topics included an overview of a school-based oral health brush program, introduction to oral health, health safety guidelines for dispensing fluoridated toothpaste, the contextualization of oral health and general health, the risk factors for oral care concerns, the role of handwashing and infection control, ethical considerations, and adaptive instructional techniques for special needs children.

Phase 2: Learners

Visits to the schools by the program participants to implement the story booklet and practical demonstration, a picture schedule to facilitate comprehension and practice of oral care and handwashing procedures was provided, meeting with key personnel to finalize the time of day for the daily brushing, reinforcement on toothbrush care and storage

Phase 3: Part 1: Implementation of the Brush Program

Materials: Toothbrushes, toothpaste, plastic cup or water bottle, toothbrush storage containers, water supply, towel, soap, access to washing basins, picture based schedules.

Procedure: After consultation with the personnel at the school dates for implementation was finalized, a review of guidelines and protocols was followed by the allocation of the stipulated materials. Thereafter the program coordinator, designated

personnel, 3rd year oral hygiene students, representatives from Colgate and the trained school staff used the picture based schedules and dental models to demonstrate the hand wash and tooth brushing procedures to the learners, who were allowed to practice and then proceeded to the wash basins to brush. Supervisors provided assistance to children experiencing challenges during the procedure.

Phase 3: Part 2: Topical Fluoride Application

Learners were allowed to visit the Colgate mobile unit. Many learners had the experience of sitting on a dental chair for the first time. Topical fluoride (Clinpro Fluoride Varnish) was applied to all the learners with the assistance of the personnel from UWC, UKZN and the Colgate team. Post fluoride application instruction were provided to the learners, teachers and assistants.

Phase 4: Monitoring of the Brush Program

Monthly visits by academic personnel and undergraduate staff in each province of KZN and WC will be followed by 6 Monthly visits by program coordinator, academic personnel and undergraduate staff.

Phase 5: Evaluation

Evaluation of the training workshop by means of a self-administered quantitative questionnaire to the attending delegates. Evaluation of the brush program by means of a self-administered quantitative questionnaire to the participating school staff and by means of a focus group discussion with senior school and therapy staff.

Project Barriers

- I. Staff Rotation: This will require retraining and motivating of new staff.
- II. Budget Constraints: Consumables have been provided by Colgate, however costs for travel, accommodation, cups and storage equipment has been personally funded.
- III. Special needs children with deteriorating conditions will require further assessments and adaptations.

Project Outcomes

Achievable outcomes anticipated for THE SPARKLE BRUSH PROGRAM include:

1. The use of organizational skills and oral care knowledge by nurses, teachers and teaching assistants to work effectively within a team promote the notion of oral health and general health practices.
2. The sustaining of health skills (oral health and general health) to maintain healthy living.
3. The use of picture-based instructional material to perform routine oral health and hand washing procedures.
4. Reduction in risky dietary practices.
5. Reduction in risky behaviours such as smoking.
6. Improved oral health to reduce the community health care burden.

Maasai Molar Promoting dental health and happy smiles in the Maasai Mara

Location
Aitong, Kenya

by IFDH Member
**Emirates Dental Hygienists Club,
United Arab Emirates**

Background

Maasai Molar exists to bring dental care and culturally appropriate health education to Aitong, in the West of the Maasai Mara.

Dental disease can be prevented and treated with ongoing dental care, yet in Kenya 46.3% of 5-year-old children have dental decay and 99% have signs of early gum disease. In adults 34.3% have dental decay and 98.1% suffer from periodontal disease. Almost 100% of people surveyed have suffered a dental issue in the last year (4). This is due to not only the absence of a country-wide oral health message, but the lack of access to care. Kenya has just 700 registered dentists for a population of approximately 30 million, with 80% working in urban areas, leaving rural areas with an urgent treatment need (5).

Aitong is located in the West of Kenya, approximately 226km from Nairobi, close to the Maasai Mara National Reserve. The nearest dental clinic is located in Siana Springs – an 8 hour walk away from Aitong.

Project Aims

- Provide access to dental treatment for the residents of Aitong and the surrounding area
- Provide dental health education and dental aids to St John Paul II Mission School and St Andrews Primary School, Aitong.

Project Objectives

- Show a 15% reduction in decayed, missing, filled teeth by 2020.
- Provide regular dental care to Aitong and the surrounding area by building a dedicated clinic by 2020.
- Provide employment opportunities for local people: receptionist, dental assistants, and caretaker.

Project Evaluation

- Quantitative methods will be used to assess reduction in DMFT
- Qualitative methods will be used to assess social and psychological impact of the outreach clinic

Project Stages

Stage 1: Carry out DMFT screening in St John Paul II Mission School and St Andrews Primary School. Qualified dental professionals will be recruited to carry out screening during the visit to Aitong 18-27th July 2019.

Stage 2: Team of trained dental personnel will provide routine and emergency dental care utilising a mobile dental clinic set up within Aitong Medical Centre.

Stage 3: Provide dental health education to students and teachers. Empower teachers to continue training in our absence. A day will be dedicated to working with the school to create a sustainable dental health education programme, which will continue throughout the school year.

Stage 4: Plan and execute annual visits with dental and medical volunteers to Aitong.

Stage 5: Continued fundraising to build dedicated clinic. Volunteers will fundraise to support the building of the clinic, alongside grant writing to organisations.



Project Timeline

Stage 1 – 18- 27th July 2019, 3 volunteers will continue screening of school children.

Stage 2 – 18 – 27th July 2019, 11 trained dental professionals will provide dental care.

Stage 3 - 20th July 2019 – Project manager will work with school teachers to develop and implement dental health training.

Stage 4 – Ongoing

Stage 5 – January 2019 – January 2020 – ongoing fundraising and grant writing to reach target of \$43,310. Once build is completed engage year round volunteers, globally and from Nairobi Dental University.

Project Budget

Stage 1, 2, 3 and 4: \$2260 per volunteer for flights, accommodation, vaccines, insurance and malaria prophylaxis.

Dental equipment and materials \$75 per volunteer, participants to self-fund and seek assistance from dental suppliers.

Funding sources: Volunteers to self-fund travel costs, support from Colgate, Beverley Hills and Jordan.

Stage 5: \$43,310 + annual running costs of \$6780

Volunteers are required to donate \$500 each to the building of the Maasai Molar dental clinic, ongoing grant writing to seek corporate sponsorship.

Patients at the clinic will be required to pay a nominal fee of \$2 per visit to cover the running costs.



Project Barriers

Finding sufficient volunteers to ensure the project will continue year on year. Raising enough funds to cover the cost of building the dental clinic.

Project Outcomes

- Reduction in DMFT
- Provision of dental care, reduce need to seek untrained professionals to provide treatment.
- Provide employment opportunities for local people within the clinic (receptionist, dental assistants, and caretaker)

Uniting Students in Ethical Professionalism through Social Responsibility

Location

United Kingdom and Ireland

by IFDH Member

British Society of Dental Hygiene & Therapy

Background/ Rationale

Despite being largely preventable, non-communicable oral diseases are among the most prevalent globally (Marcenes et al, 2013). Oral diseases represent a significant public health issue as they are common, cumulative and chronic (Sheiham, 1996). Taking dental caries as an example, in an individual it can impair function, disturb sleep, affect productivity, attainment and quality of life (PHE, 2017); in young children it can cause failure to thrive (Sheiham, 2006). At societal level, dental caries has significant economic implications in terms of associated treatment costs and days lost in education and work (PHE, 2017). Dental caries and overweight obesity share common risk factors in sugar and social deprivation (Sheiham and Watt, 2000). Therefore, although often marginalised, oral health is essential to general health, wellbeing and quality of life (Sheiham et al, 2015).

Student Workforce

Working with the UK and Irish dental hygiene and/or therapy (DTH) schools (n=22), it was intended that the project would meet the oral needs of high risk groups in their local communities. This provided an opportunity to build on established networks to create a national social responsibility plan within the British Society of Dental Hygiene and Therapy (BSDHT), with the dental schools acting as a hub. Research suggests that medical students benefit from being involved in social responsibility projects. They enable development of key qualities such as reliability, trustworthiness, dependability, altruism and compassion, and increase undergraduate exposure to a population-based approach to healthcare (Faulkner and McCurdy, 2000). By extension, involvement of student dental hygienists and therapists in social responsibility activity raises their awareness of the role dental professionals have, as responsible citizens in society. This civic minded attitude is a key graduate attribute for employability and sustainable, ethical healthcare delivery in the 21st Century.

In 2013, approximately 265 dental hygienists and therapists entered the workforce in England (Centre for Workforce Intelligence, 2014); data for Scotland, Wales and Ireland was gathered in the scoping exercise. The total number of new graduates from the four countries and Ireland resulted in excess of 350; as this number fluctuates yearly, this cannot be considered accurate. We anticipated engaging 30% of the DTH education providers, however this increased to 68% (n=15).

Population/ Setting

The project was set up to meet the oral health needs of high risk groups in local communities who may experience little or no interaction with the mainstream approach. This provided an opportunity to build on established networks by mobilising the UK and Irish dental hygiene and therapy student workforce to create a national social responsibility plan, with the dental schools acting as a hub.

We anticipated the high risk groups to be young children (0-5 years), vulnerable adults such as the homeless, and the elderly, and undertaken in community locations including children's centres, homelessness centres and elderly care settings. The authors anticipated the project would provide insight into the potential facilitators and barriers to projects such as this, facilitating the making of recommendations for future implementation.



Method

An initial scoping exercise was undertaken utilising survey software to explore current social responsibility activity in health education and promotion. 68% (n=15) of the education providers agreed to participate in sharing their anonymised data and working with the authors.

The student workforce delivered three key evidence-based oral health messages and dispensed toothbrushes and toothpaste as advocated by Public Health England, demonstrating a good return on investment (PHE, 2017). Process evaluation tools in the form of two feedback forms were provided by the authors; one provided an opportunity for feedback mechanism for the target groups, but Schools did not utilize this and the reasons for this are unknown. The student feedback form was designed to capture student views on their

involvement in their projects and establish understanding of the responsibility of dental professionals throughout their professional lives through positive, personal characteristics. Outcome evaluation comprised numbers of education providers and students involved, numbers and type of locations accessed and numbers of people receiving oral health education and tools.

Aim

The aim of the project is to unify dental hygiene and therapy students to build sustainable and scalable social responsibility activity within the undergraduate curriculum in the UK and Ireland.

Objectives

The objectives were threefold:

1. To explore current social responsibility activity in health promotion by UK dental hygiene and therapy education providers.
2. To support dental hygiene and therapy educators to mobilise their student workforce in delivering three key evidence-based health messages and dispensing toothbrushes and toothpaste to target groups.
3. To evaluate the process and outcome of the project, and disseminate findings and recommendations.

Evaluation

Process: Thematic analysis using an inductive method was undertaken; this method allowed for the researchers to view the results without any preconceived ideas and explore the themes that emerged throughout the analysis stage. Figure 1 highlights the facilitators and barriers to social responsibility from the students perspective. The strongest facilitators were the graduate attributes that the students gained in undertaking social responsibility, often in an unfamiliar environment, away from a familiar clinical dental environment. The key barriers were around the preparation and planning stages of the intervention, and challenges with the target groups, that included attention span and resistance to engage with the students delivering key oral health messages.

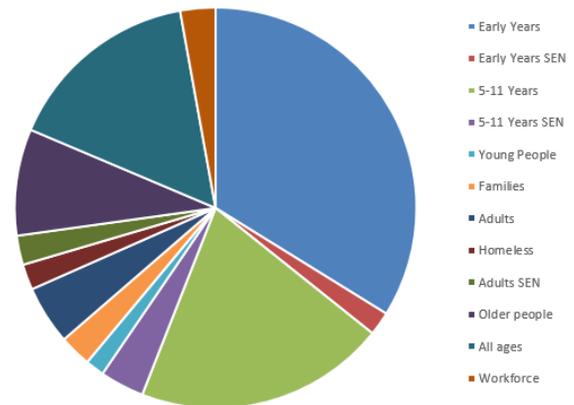
Figure 1.



Outcome: Data collection was undertaken that included reach in terms of numbers:

- 12 education providers were included in the project that involved 204 students, with the majority in their 2nd year of their programme.
- The locations receiving interventions included primary schools and adult education colleges, children and healthy living centres, homeless shelters and residential centres for older people. The most popular locations were undertaken in environments where children were present.
- The target groups that received an intervention are demonstrated in Figure 2. This resulted in 3142 individuals; however this needs to be considered with caution as, in many cases, the numbers of the target group was approximated.

Programme Reach by Lifecourse Point



Project Stages

The proposed project was presented at the national meeting of dental educators, including Programme Leads, of DTH schools in November 2017, receiving positive feedback.

Stage 1: Made contact with UK and Irish DTH schools by undertaking an initial scoping exercise (utilising survey software tool, Survey Monkey) to explore what activity is being undertaken with regards to social responsibility in the areas of health education and promotion. This identified the active schools, what and where this activity is, their willingness to engage with the project and the level of support required to enable school involvement.

Stage 2: Worked with engaged DTH schools to build on existing activity to mobilise their student workforce in delivering evidence-based health messages and dispensing toothbrushes and toothpaste to target groups.

Stage 3: Evaluated the process and outcomes of the project at three months and on completion. It is intended that a mixed methods approach will be used using qualitative and quantitative data collection.

Timeline

Oct-Dec 17: Initial scoping exercise to DTH education providers to establish what is currently undertaken and how they could be involved in the proposed project.

Jan-Dec 18: Roll-out the project to DTH schools across the three terms of the calendar year. Continual process evaluation as data is available.

Jan-June 19: Process and outcome evaluation and final report.

Jul 19: Presentation of findings at ISDH conference, followed by further dissemination.

Actual Budget

(calculated on the basis of 30% buy-in by England and each student engaging with three individuals – addition of Wales, Scotland and Ireland and attrition to be modelled following scoping exercise).

Toothbrushes: 80 students x 3 target individuals x3 interventions per year = 720	£Sponsored
Toothpaste with optimum fluoride level: 80 students x 3 target individuals x3 interventions per year = 720	£Sponsored
Oral health education – printing: 80 students x 3 target individuals x3 interventions per year = 720	£7.20 Provided by the Schools
A part-time project worker (data collection, data entry, data analysis, report writing) for 50 hours at £10 per hour	£500 Undertaken by the authors
Dissemination of project outcomes through conference attendance, initially at ISDH 2019, including transport, accommodation, conference fees, poster production and printing.	£Sponsored
TOTAL	£507.20 £0.00

Project Barriers

The project barriers were predominantly around receiving data, as education providers were slow in the submission of data. Although toothbrushes and toothpaste was sourced, these may have arrived too late for the initial stages of the project. Additionally, 1 education provider submitting the same data twice which was only identified at the analysis stage; this resulted in the analysis being re-run.

Project Outcomes

Data: The existing oral health-focused social responsibility activity in UK and Ireland DTH schools was explored. There was a 68% (n=15) response rate from engaged education providers; of these 14 providers (64%) were willing to engage with the project. It was identified that 2 of the Schools were

unable to provide data due to lack of uptake by students as this is a voluntary activity. 1 School did not respond at the follow up stage and 1 school became engaged during the period of the project. The majority of Schools coordinate their activity on a yearly basis; 2 Schools undertake this with BDS dental undergraduates and 1 School offer social responsibility activity as extra curricula activity.

204 students were involved in the project. These students were predominantly in their 2nd year of their programme, with one School undertaking this during the 1st year of study and one School in the 3rd year of study.



There was a total of 3142 people reached through the project; numbers are under-reported as some Schools were unable to provide accurate numbers. The majority of the activity was undertaken in early years, school children and the older population, as anticipated at the start of the project. There was some engagement with at-risk adults such as those with substance misuse and homeless. 2 schools required assistance in sourcing toothbrushes and toothpaste which was provided through sponsorship; the remaining schools had supplies that they could access. 1404 individuals received a toothbrush and toothpaste as part of the intervention.

Population: It is clear that there was engagement with individuals who may experience little or no interaction with the mainstream approach to delivering dental care, although students reported that engagement was a challenge. What is less clear is whether the targeted interventions undertaken by the students raised awareness of the importance of oral health and whether there was improved oral health and oral health related quality of life, as this was not measured through this project. Although a questionnaire was supplied to the participating Schools, this was not utilised; the reasons for this are not known. Anecdotal feedback from the students reported a positive experience from the target groups.

Student Workforce: Students from 3 Schools completed questionnaires following the project; the student feedback form was designed to capture student views on their involvement and personal growth in their projects, and also included statements of characteristics that may describe a

professional person: caring, compassionate, fair, friendly, generous, helpful, hardworking, honest and kind. Students were asked to consider these characteristics and visualise the kind of person who possesses these, imagining how they would think, feel and act. Almost exclusively these questions received scores of 3 and 4 on a Likert scale, from 1 to 4 with 4 being completely agree, in that the students recognized they should have these qualities for professional life and had opportunities to develop these characteristics.

Figure 1 identifies the facilitators and barriers from the student's perspective, with regards to their target groups. Development of self and skillset was clearly identified as beneficial, however students felt more challenged over the planning needed for these interventions; many Schools interpreted barriers as those the target group presented with- this included cognitive ability, reading and writing skills, English as a second language and a hesitance to engage.

Future Planning: this project provided insight into the acceptability and scalability of the project for future planning and expansion. Support has been received from the Chief Dental Officer for England to build upon the existing provision identified through this project, by targeted oral health promotion activity to be extended to include undergraduate dental students through a curriculum that embeds social responsibility. This project would require agreement from the other 3 Chief Dental Officers if this was to be rolled out across the UK and Ireland. To ensure sustainability, greater consideration needs to be made in how to move to a sustainable growth model for target groups rather than one-off oral health education intervention which has limited impact.

References

- Faulkner, L. and McCurdy, RL. (2000) Teaching Medical Students Social Responsibility: The Right Thing to Do. *Academic Medicine*. 75(4):346–350
- Centre for Workforce Intelligence (2014), Securing the future workforce supply – Dental care professionals stocktake (online). CFWI Available: 2017
https://recipeforworkforceplanning.hee.nhs.uk/Portals/0/H_EWM_LinksAndResources/Dental%20care%20professionals%20stocktake%20-%20Oct%202014.pdf?ver=2016-04-18-111132-677 [November, 2017]
- Marenes, W., Kassebaum, N.J., Bernabé, E., Flaxman, A., Naghavi, M., Lopez, A., Murray, C.J. (2013). *J Dent Res*. 92: 592-7.
- Public Health England (2017), Health Matters: Child dental health [online]. GOV.UK Available:
<https://www.gov.uk/government/publications/health-matters-child-dental-health/health-matters-child-dental-health#summary> [November, 2017]
- Sheham, A. (1996). Oral health policy and prevention. In: *Prevention of Oral Diseases* (ed. Murray. J.). Oxford: Oxford University Press. Pp. 234-49.
- Sheiham, A. and Watt, R.G. (2000). The common risk factor approach: a rational basis for promoting oral health. *Journal of Community Dentistry and Oral Epidemiology* (online). Issue 28, 6, 399-406.
- Sheham, A. (2006). Dental caries affects body weight, growth and quality of life in pre-school children. *British Dental Journal*, 201(10), 625–626.
- Sheiham, A., Conway, D. and Chestnutt, I. (2015). Impact of oral diseases and oral health inequalities. In: *Social inequalities in oral health: from evidence to action* (ed. Watt, R.G., Listl, S., Peres, M and Heilmann, A.). London: University College London. Pp. 4-5.
-

The American Dental Hygienists' Association Institute for Oral Health

Location
United States

by IFDH Member
American Dental Hygienists' Association

Background

In collaboration with the American Dental Hygienists' Association, The ADHA Institute for Oral Health (IOH) provides thousands of dollars each year to advance the profession of Dental Hygiene through scholarship, research and service. These monies have been awarded to dental hygiene students for educational needs (Scholarships), to those expanding the field of dental hygiene (Research Grants) and to dental hygienists to provide oral health care and education to those in their communities (Community Service Grants).

The vision of IOH is to be the philanthropic foundation that advances professional excellence in dental hygiene education and research. The mission of IOH is to support the charitable educational, research and scientific efforts of the American Dental Hygienists' Association (ADHA) which will improve the public's total health by increasing the awareness of and access to quality oral healthcare. The IOH works to empower dental hygienists to improve the public's health by:

- Providing access to care to the underserved through Community Service Grants
- Supporting advancements in the dental hygiene profession through Research Grants
- Developing dental hygienists' access to all levels of educational programs through Scholarships

The leadership of the IOH is a five-member Board of Directors. The Board is composed of ADHA Officers, dental hygienists who have demonstrated competence in business and academia. The Immediate Past President of ADHA also serves as Chair of the IOH. Standing committees, established to address the business of the IOH, support the Chairperson.

Impact

Scholarships - The IOH Scholarship Program supports dental hygiene professionals throughout their careers. IOH offers academic financial assistance to dental hygiene students and

dental hygienists at all levels of their education who demonstrate a commitment to the discipline of dental hygiene. In 2018-2019, there were 23 IOH scholarship recipients.

Research Grants

The Research Grant Program supports advancements in the dental hygiene field through the discovery and application of knowledge which includes original research, developmental prospects and qualitative and quantitative research. The 2017-2018 IOH Research Grant recipient is Ivy Zellmer, RDH, MS, California for her research, "Dental Implant Assessment and Maintenance: Investigating the Knowledge, Attitudes and Practices of Dental Hygienists in the U.S."



Community Service Grants

The Community Service Grant Program encourages dental hygienists to devise and implement community health projects. This grant program was envisioned as a way to empower dental hygiene professionals to respond to their communities' oral health concerns. They include:

- Wrigley Company Foundation Community Service Grants
- Healthy Start for Texas Teeth Community Service Grant
- Rosie Wall Community Spirit Grant

The IOH is especially proud of its affiliation with the Wrigley Company Foundation. This partnership has enabled countless community projects to take place, improving the oral health of the underserved in our communities. In 2019, there were 24 Wrigley Company Foundation Community Service Grants.

Community Service Day

Each year at the ADHA Annual Conference, attendees volunteer their time to give back to the community. With approximately 70 volunteers each year, the underserved are helped via educational efforts that include oral health instructions, tobacco cessation information, nutritional guidance and more. Community Service Day garners attention from local media and provides the opportunity to help the community while raising awareness of the important role of dental hygienists in promoting oral and overall health.



Major Fundraising Effort

The In Motion 5K: Run, Walk, Fun is the premier national fundraising event for the IOH, the only foundation for the important work of dental hygienists. Initiated in 2015, the event takes place each year at the ADHA Annual Conference. In 2019, the 5K took place on Friday, June 21 at 8 p.m. at Waterfront Park in Louisville, KY during ADHA's 2019 Annual Conference.



For the last three years, the IOH has raised funds through 5K registrations and donations to advance the dental hygiene profession. This year, the foundation's aim was to raise \$70,000.

“Our increased fundraising goal this year will help even more dental hygienists advance our profession through scholarship, service, and research,” said 2018-2019 IOH Chair Tammy Filipiak. “By expanding our reach, through the generous support of donors, we are improving oral healthcare throughout the country.”

To tie into the ADHA 2019 Conference being held in Louisville, the In Motion 5K and After Glow Party was Kentucky Derby-themed. Winners were chosen for the best team costume, the top runner and walker, and the team and individual that raised the most funds for the event at the After Glow Party immediately following the race. Participants in the In Motion 5K can join on-site teams or run/walk virtually by joining online. In its 4th year, the event continues to grow and evolve and has proven to be extremely popular.

Thank You to Our Sponsors



International Federation of Dental Hygienists

PARTNERS IN

SOCIAL RESPONSIBILITY

Improving Oral Health Worldwide



INTERNATIONAL FEDERATION
OF DENTAL HYGIENISTS

The International Federation of Dental Hygienists

100 South Washington Street, Rockville MD 20850, USA

• Phone: 240-778-6790 • Fax: 240-778-6112 • Website: www.ifdh.org

Sponsored by:



100 South Washington Street, Rockville MD, USA 20850
Tel: 011-240-778-6790 • Fax: 011-240-778-6112 • www.ifdh.org