

End of TOHSS Project Report, Republic of Marshal Islands

Model Oral Health Prevention Training and Delivery for Well Baby Visits and Children with Special Needs: Republic of the Marshall Islands

The overall aim of this program was to build a sustainable State policy and infrastructure that for the first time in the Pacific will:

- 1) Fully involve government and other stakeholders, including parents and families, in the development of appropriate preventive programs and curative services;
- 2) Provide oral health education and care for all pregnant women, particularly those that have risk factors for premature birth and other poor pregnancy outcomes;
- 3) Prescribe an individualized multidisciplinary oral health plan for all children born prematurely, with complex medical needs, or developmental disabilities at risk for the need for special oral health care, with particular attention to the prevention of tooth decay;
- 4) Provide a dental home for all children at age 1 and provide basic preventive services for all children including a “oral health card” that cues parents to seek out the services, and including an individualized plan and follow-up for all children born prematurely;
- 5) Prioritize curative services for children with special needs to avoid costly off-island referrals and includes intensive follow-up not now available; and
- 6) Provide a comprehensive curriculum of multidisciplinary courses and clinical training opportunities for all levels of providers in the RMI and available by scholarship to oral health providers from the other US affiliated island states in the Pacific.

The program was assisted by a Technical Advisory Committee made up of academic and public health experts with expertise related to infrastructure development and the care of children with special health care needs. This committee met in Majuro at the beginning of the project and once per year during the four years of the grant. The committee membership included:

- Laurent Duenas RN. Ms.Duenas was president of the Pacific Islands Primary Care Association, consultant for the American Pacific Nursing Leaders Council. She was chosen for her expertise in infrastructure development and professional training.
- Lee Buenconsejo-Lum MD (Family Med, Univ Hawaii). She was chosen because of her experience with continuing education in the pacific islands as the Principal Investigator for the Pacific Association for Clinical Training at the John Burns School of Medicine at the University of Hawaii.
- Paul Glassman DDS. Dr. Glassman is professor and Associate Dean at the Dugoni School of Dentistry, University of Pacific. Dr. Glassman was chosen for his expertise

in Hospital Dentistry and his extensive involvement in the accreditation of post graduate training in Dentistry.

- Peter Milgrom DDS. Dr. Milgrom is professor of Dental Public Health Sciences and Pediatric Dentistry in the School of Dentistry at the University of Washington. He is also professor of Health Services in the School of Public Health and Community Medicine. Dr. Milgrom was chosen because of his success in working with the RMI dental program and his role as dental consultant for the Pacific Association for Clinical Training at the John Burns School of Medicine at the University of Hawaii. In this role he has conducted training in Majuro and Ebeye in RMI, in all of the FSM states and in Guam, Palau and the CMNI. Dr. Milgrom will chair the committee.

The program to institute the proposed infrastructural and program changes carefully evaluated in order to support continual improvement.

Objectives

- Establish Model Training on Oral Health Care for Well Babies and Children with Special Health Care Needs
- Establish Preventive Oral Health Care Delivery System for Well Babies and Children with Special Health Care Needs

Activities

- Well-babies and CSHCN Registry

Well-baby registry was set up at the Majuro Hospital Well-baby Clinic, Primary Health Care Bureau in Jan 2008. One dental preventive assistant was assigned to work at the well-baby clinic 2 days a week for registration, provision of oral health education to young mothers, giving out finger brushes, and application of Iodine and Fluoride varnish once the first 2 teeth are present. Public Health and well-baby clinic nurses work together with the dental staff on integration of oral health education and care.

- Oral health education and oral health care services for pregnant women and new mothers

Oral health education is also provided at the first pre-natal visit together with dental screening and examination, referral to the dental clinic at Majuro Hospital for treatment as necessary. The co-payment required at the hospital is taken care of by TOHSS funds. Tooth brushes and fluoride toothpaste were also provided for pregnant mothers.

- Primary oral health care services for well-babies and CSHCN
Oral health Services for CSHCN is provided through home visiting and visiting special education classes at the schools. Parents and teachers are trained to conduct oral hygiene practices, and tooth brushes and fluoride toothpaste are provided every 3 months together

with application of iodine and fluoride varnish. Three-monthly Fluoride Varnish application and Tooth-brushing Program in kindergartens for all children attending was implemented for the 4 years of the project covering more than 700 children a year.

•Multi-disciplinary Trainings in the Pacific jurisdictions

Multidisciplinary trainings conducted by the Project Director and the Advisory Committee are very well appreciated in the islands as the curriculum covers family medicine, Special Needs and Care, Dental Preventive Concepts and Procedures, Stakeholders and Family Involvement are also emphasized. The trainees include Policy Makers and other Stakeholders, Administrators from the Ministries of Health and Education, Directors of Special Education, Mental Health, Public Health, Dental and practicing OBGYNs, Pediatricians, MCH and PH nurses, Dentists and other Dental staff, teachers from kindergartens and special education. Volunteers working at Youth to Youth in Health also participated in the trainings.

2007 - Majuro, RMI

2008 - Ebeye, RMI

2009 - Chuuk and Kosrae States, FSM

2010 - Pohnpei and Yap States, FSM

The trainings consist of two parts, didactic training on Special Needs, Pregnancy and Peri-natal Health, Latest Technology and Methods of Primary Oral Health Care and hands on training with well-babies, CSHCN, effective tooth-brushing, and application of iodine and fluoride varnish in community settings.

Activity	Period			
	Year 1	Year 2	Year 3	Year 4
Advisory Committee conference calls & meetings	X	X	X	X
Policy Development, stakeholder input	X			
Identify, hire, train personnel	X			
Purchase preventive supplies	X	X	X	
Purchase equipment for OR	X			
Development of expanded curative care capability for CSHCN	X	X	X	X
Monthly multidisciplinary case conferences for CSHCN		X	X	X
Expanded clinic visits for pregnant women and new mothers		X	X	X
Home visits for CSHCN		X	X	X
Distribution of fluoridated toothpaste to families of CSHCN	X	X	X	X
Develop service learning opportunities for	X	X	X	X

students at the College and at high schools				
Delivery of fluoride varnish to CSHCN		X	X	X
Course planning	X			
Instructional program (Locals only)	X	X	X	X
Instructional program (Scholarships)			X	X
Evaluation	X	X	X	X

Evaluation Matrix

Objective 1: Gain stakeholder support for new approaches to oral health care for pregnant women, infants and children with special health care needs

Objective 2: Improve coordination between the Ministries of Education and Health for the delivery of dental services and articulate new policies and protocols to improve care for pregnant women, infants, and children with special health care

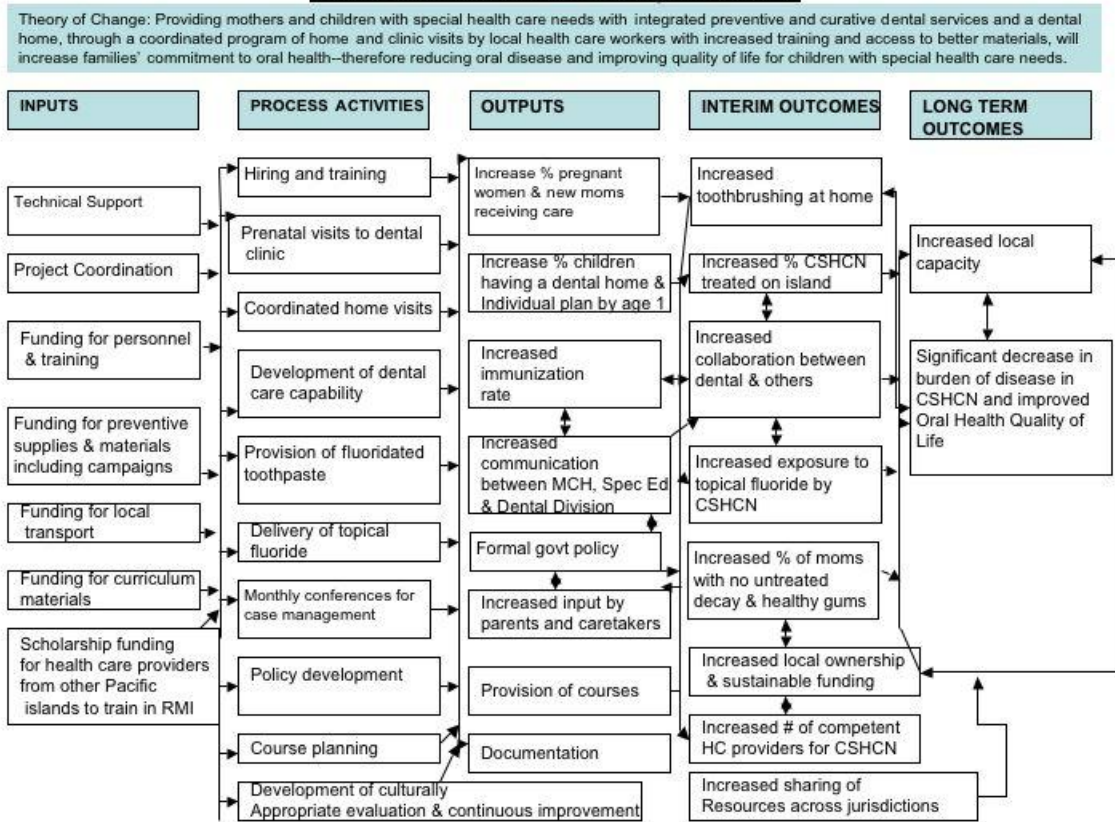
Objective 3: Provide screening, oral health education, and basic curative care for pregnant women at the prenatal clinics in Majuro and Ebeye

Objective 4: Develop a model training for community members and health professionals in the Marshall Islands and FSM States that emphasizes population-based prevention activities and individualized dental treatment programs for children with special health care needs

Objective 5a: Increase age-1 dental visits for children most at risk for dental disease including children identified as having special health care needs.

Objective 5b: Assure continuity of dental care from infancy into early childhood, particularly for CSHCN

FIG. 3 Marshall Islands Oral Health Improvement Plan



Presentations and Publications

1. Poster Presentation on TOHSS activity at World Congress on Preventive Dentistry, Phuket Thailand, 2009
Prevention of Early Childhood Caries through Integration of Dental Preventive Services into Well-baby Clinic, Majuro, Marshall Islands (Ohnmar Tut BDS MPhil, Kennar Briand MBBS, Peter Milgrom DDS)
2. Poster Presentation on TOHSS Activity at International Association of Dental Research, Barcelona Spain, 2010
Combined Therapy for Tooth Decay with PVP-Iodine and Fluoride Varnish (Milgrom P, Tut OK, Mancl LA)
3. Concurrent Session Presentation on TOHSS Activity at NOHC 2010
New Technology for Prevention of Tooth-Decay—Combining New Agents with Fluoride (Peter Milgrom DDS; Ohnmar Tut BDS; Robert Berkowitz DDS)

Most public health workers recognize that topical fluoride treatments alone are insufficient to prevent tooth decay in children at high risk. New treatments modalities are needed. The goal of this session is to update participants on new findings that can be applied directly in public health practice. Speakers will address the rationale and provide examples and evaluation data on the new approaches

Publications

1. Journal of Public Health Dentistry 2010

Topical Iodine and Fluoride Varnish Combined Is More Effective Than Fluoride Varnish Alone for Protecting Erupting First Permanent Molars: A Retrospective Cohort Study (*Milgrom P, Tut O*)

2. Journal of Dentistry for Children 78:3, 2011

Topical Iodine and Fluoride Varnish Effectiveness in Primary Dentition: A Quasi-experimental Study (*Peter M. Milgrom DDS, Ohnmar K. Tut BDS MPhil, Lloyd A. Mancl PhD*)

Materials produced

Posters and brochures in English, Marshallese, and other local languages were produced and distributed to MCH, Public Health and Well-Baby Clinics in the Marshall Islands as well as in the FSM States.



Ni im Nad ko Rejjimourur nan ajri eo Nejim



NAN KORA EO EJ BORORO

- * Lolok jikin komman ni eo
- * Buraje niim ruo alen ilo juon tan kin fluoride tooth-paste
- * En emakijik am kojerbal floos ak kein ni arai ko
- * Kadiklok am mona tonaj
- * Lolok takto ro nan kak-olkol ko an bororo
- * Mona mona ko elap on in calcium ko ie



Mokta jen an ajri eo lotak mae 2 ilo drettan

Nan Ajri Eo im 0-6 allon drettan

- * Karreok niin im nadin ajri eo kin mottan erieo aolep iien
- * Kabwijrak an ajri eo kojerbal bato in ninnin ilo iien an kiki
- * Kajitok ippen takto ak ri komman ni ro kin ajej in uno in fluoride nan ajri eo ilo iien eo ej jilino an allon drettan



Nan Ajri Eo 6-18 allon drettan

- * Jino komman bwe ajri eo en kojerbal cup ko "sippee" ijelokin am lelok bato in ninnin ko ilo iien eo ej 6-12 allon drettan
- * Kabwijrak lelok bato in ninnin ilo iien an ajri eo itoktak im itikure.
- * Jolok an ajri eo kojerbal bato ilo iien eo ej 12 allon drettan
- * Boklok ajri eo nan jikin komman ni eo nan kakkolkol ilo tore eo ej juon an ilo.



Nan Ajri Eo 18-24 allon drettan

- * Kommane juon drettan eo im ajri eo ej mona snack ko kajojo taan
- * Buraje niin ajri eo elkin an mona in jibbon im mokta jen an kiki
- * Kojerbal jidik bouta in ni im buraj im komman bwe ajri eo en jela nan emmojelok bouta eo im jab woranloke mekerta ennon nemen.



Health Promotion & Human Services
Dept. of Health Education
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In conclusion, TOHSS funding help the islands with the most needed trainings, setting up oral health integrated MCH and well-baby programs and also to reach out to the CSHCN. The on-site multidisciplinary trainings and involvement of the policy makers have made it possible for the Primary Oral Health Care Program targeting pregnant mothers, well-babies and preschool children, and CSHCN to be sustained after the TOHSS project funding expired.

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