



# Hualien

## Safeguard Children's Oral Hygiene – Medical Outreach across Twelve Primary Schools in Hsiulin

March 5, 2013

In the eight years that Hualien Tzu Chi General Hospital has been in charge of all elementary and middle school medical exams in Hualien, it was discovered that the ratio of dental cavities among children particularly high. To improve children's oral hygiene and physical health, Hualien Tzu

Chi General Hospital brought together Community Medicine, Family Medicine, Dentistry, and Pediatrics departments and innovated a six-level game: "Eat your way to good teeth," "Brush your teeth after meals," "Know your oral care tools," "Plaque detection," "Stay away from cigarettes and betel nuts", and "healthy physiques." The multi-department team planned to visit all of the 12 primary schools in Hsiulin County, with a mission to instill oral health concepts into the young populace.

In the afternoon of March 5, Vice Supt. Wen-Lin Hsu, Dir. Jih-I Yeh of Family Medicine, and the event host Dr. Tzu-



Pediatrician Yun-Chieh Chang prompts children to build healthy eating habits and regular daily routine to maintain fit physiques.



**Dentist Huai-Kuan Huang applies pink disclosing agent on children's teeth to show where the plaque is.**

Chiang Chen of Family Medicine led the team to Shuiyuan Primary. As the activities began, Chien-Wei Tseng of Community Medicine immediately caught the pupil's attention with his cartoon costume "Big Big Wolf". Big Big Wolf, a wolf who indulges in snacks and hates brushing his teeth, walked around with his round stomach and a cigarette in hand.

### **Good Oral Hygiene through Good Habits**

"Do you see the red on your teeth? Where is it?" Children were looking at their wide opened mouths in the mirrors for the red-spotted plaque. The six stages started

with the commonly seen tooth caries (known as cavity). Dentist Huai-Kuan Huang and Intern Sheng-Chieh Yu began their lecture with tooth caries (commonly known as a cavity), which appeared in all six stages of the game, by applying pink disclosing agent on the dentition-aged children's teeth while others looked in curiosity. Dr. Huang explained in detail that the gums below the teeth are healthy if their color is light pink; when the disclosing agent grows darker, it means the teeth were not brush well!

Many parents and students disregard babies' dental hygiene since they will fall out anyway. Dr. Huang indicated that baby teeth would affect the development and

alignment of the permanent teeth. More importantly, if one does not establish good hygiene practice early on, oral upkeep will often be neglected in the adulthood. With the help of four interlinked graphics, Dr. I-Chen Cheng of Family Medicine illustrated that when foods with high sugar content such as cakes and cookies stay in the mouth for too long, the enamel will be damaged, which would lead to cavities. She also asked children to sort out the type of food that is bad for the teeth and recognize their healthy alternatives.

“How many times do you brush your teeth a day?” Children chattered out ten times, five times or three times. One loud answer, “I do not like to brush teeth” made everyone laugh. The “Brush after meals” gatekeeper Yen-Chia Li of Medical Affairs used an oversized typodont to demonstrate the Bass Technique while holding children’s hands with a brush. “Everybody, hold the floss like me and turn! Turn! Turn!” “Teacher! Is this correct?” Tiny hands holding long flosses followed dental assistant Hui-Fang Chen to practice how to rid food debris from between the teeth. Another assistant I-Yao Li displayed brushes that were too stiff, out of shape, too small, or too big and asked children to tell the good from the bad. Lastly, everyone was reminded to have biannual checkups to keep teeth clean and healthy.

With the experience of providing medical exams to middle school students

of the entire Hualien County for eight consecutive years, Hualien Tzu Chi General Hospital decided to visit all 12 primary schools in Hsiulin to build proper health education so a solid health foundation can begin from an early age. Vice Supt. Wen-Lin Hsu, an avid community health educator, stated that fresh notions and habits should take shape from early on and that Hualien Tzu Chi Hospital not only safeguards children’s health but also impart the correct preventive concepts. On behalf of Hualien Tzu Chi General Hospital, he gave every student a toothbrush to establish a daily brushing routine. Principle Yung-An Wen of Shui Yuan Primary expressed gratitude to Tzu Chi Medical Team in designing the teaching games so everybody could realize the importance of good oral care.

### **Away from Cigarettes, Betel nuts, and Alcohol**

“Wow, it is scary...” Pupils were frightened at the sight of oral diseases and even facial festers caused by chewing betel nuts. In addition to oral care, the educational activities also incorporated the game of “Bye-bye to second-hand smoke and betel nuts.” Children discovered the danger of chewing betel nuts by looking at the change of oral mucus – from white lesions to ulcers and even to facial festers. To enhance memory retention of the



**Smoking Cessation Counselor Chi-Ting Huang uses quizzes with prizes to improve children's memory on the danger of cigarettes and betel nuts. Children incessantly yelled, "Me! Me!"**

information, smoking cessation counselor Chi-Ting Huang slotted in many prized quizzes. Every child raised their hands high in the air and shouted "Me! Me!" Moreover, in their eager answers the children instantly remembered the harms of smoking and chewing betel nuts.

"Raise your hand if you have soft drinks everyday!" Besides good oral health, fit physique is important, too. Each cup of 700 cc drink in the market contains 10 to 15 sugar cubes, Pediatrician Yun-Chieh Chang said, so it is best to "drink only water, have three regular meals, and not eat candies or junk food" in order to

maintain a fit physique.

Present during the entire visit, school nurse Shu-Hui Wu, appreciates the opportunity to join the force with Hualien Tzu Chi General Hospital to promote oral health education. Through fun and lively activities, children learnt properly to care for their oral health and to protect themselves against oral cancers. Hopefully, upon returning to their homes and communities, the children can further what's learned in school and urge their friends and families to steer away from cigarettes, alcohols, and betel nuts. (Text/ Wei-Yun Peng)