Dental Public Health: Our Approaches for Thailand

USCF Dental Public Health Seminar
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Nation University, Thailand

Contents

- Dental public health system and oral health situation in Thailand
- Dental and dental public health curriculum
- Training 6th year dental student community dental practice
- Training dental student to raise awareness to care for disabilities people and older adults
Dental Public Health System and oral health situation in Thailand
The Public Health Care System

- **Regional/General Hospital**
  - Total 116

- **Community /District Hospital**
  - Total 780

- **Health promoting Hospital/Health Center**
  - Total 9775

Health Center/
Health Promoting Hospital (HPS)

- 3-5 nurses & paramedics
- Some have dental nurse
- Cover 3,000-5,000 people
- A dentist visits HPS once a week
District hospital or Community Hospital

- 3-4 GP,
- 30 nurses,
- 2-3 pharmacists,
- 1-5 dentists,
- 1-2 dental nurses
- and more than 20 paramedics

- 30-150 beds
- Cover 30000-50,000 people

Dentist : Population 1: 12000

University Hospital
Private Hospital

Dentists enjoy working in
- an urban area
- In a big city

8th National Oral Health Survey 2017

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Dental caries status</th>
<th>Periodontal status</th>
<th>Edentulousness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age Group</td>
<td>Caries free (%)</td>
<td>Prevalence</td>
<td>DMFT</td>
</tr>
<tr>
<td>3 years</td>
<td>47.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 years</td>
<td>24.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 years</td>
<td>48.0</td>
<td>52.0</td>
<td>1.4</td>
</tr>
<tr>
<td>15 years</td>
<td>62.7</td>
<td></td>
<td>2.0</td>
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<tr>
<td>35-44 years</td>
<td>6.6</td>
<td></td>
<td>28.4</td>
</tr>
<tr>
<td>60-74 years</td>
<td></td>
<td></td>
<td>18.6</td>
</tr>
<tr>
<td>80-85 years</td>
<td></td>
<td></td>
<td>10.0</td>
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</table>
### National Oral Health Survey 1984-2017

**WHO indicators**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Goals</th>
<th>Year of Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 year</td>
<td>% caries free</td>
<td>25.6</td>
</tr>
<tr>
<td>12 year</td>
<td>DMFT</td>
<td>1.5</td>
</tr>
<tr>
<td>15 year</td>
<td>% having 28 teeth</td>
<td>65</td>
</tr>
<tr>
<td>35-44 year</td>
<td>% having at least 20 functional teeth</td>
<td>92.7</td>
</tr>
<tr>
<td>60-74 year</td>
<td>% having at least 20 functional teeth</td>
<td>47.2</td>
</tr>
</tbody>
</table>

### Trends over Time in Dental Caries status in urban and rural Thai Children


<table>
<thead>
<tr>
<th>Age Group</th>
<th>Dental caries prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-year olds</td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>n/a</td>
</tr>
<tr>
<td>Rural</td>
<td>n/a</td>
</tr>
<tr>
<td>5-year olds</td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>95.0</td>
</tr>
<tr>
<td>Rural</td>
<td>74.5</td>
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<tr>
<td>12-year olds</td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>75.6</td>
</tr>
<tr>
<td>Rural</td>
<td>47.3</td>
</tr>
</tbody>
</table>
Population 69 million
Life expectancy at birth, total (years) = 75

Dentist per population ratio
1: 5,686 (2017) (Jaichuen, 2018)

Dentist per population ratio
In rural area could be
1: 16,000 or more (Jaichuen, 2018)

How to fill the dentist in a rural area?
One way to address the rural paucity

students undergo

a compulsory three-year rural service upon graduation

A high subsidy tuition fee

From the government
Dental graduated may not want to work in a rural area

Dental students
- most of them came from middle class families
- most of them live in an urban area,
- if they were from the rural area, 6 years in a dental school has an influence on them

Dental and dental Public curriculum
Dental Education in Thailand

6 year program

1st year
general education
2nd and 3rd year
pre-clinical education
4th-6th year
clinical practice
What have been done?

More credits in dental public health courses
Field practice in Year 6 in a rural environment

<table>
<thead>
<tr>
<th>Year</th>
<th>Courses</th>
<th>Credits</th>
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<tr>
<td>2nd</td>
<td>Basic Principles of Community Dentistry 1 (2)</td>
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<tr>
<td></td>
<td>Oral Health Promotion (2)</td>
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<tr>
<td>3rd</td>
<td>Basic Principles of Community Dentistry 2 (1)</td>
<td></td>
</tr>
<tr>
<td>4th</td>
<td>Preventive Dentistry (1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Oral Epidemiology and Biostatistics for Dentist (2)</td>
<td></td>
</tr>
<tr>
<td>5th</td>
<td>Community Dentistry Practice 1 (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dental Public Health Administration (1)</td>
<td></td>
</tr>
<tr>
<td>6th</td>
<td>Community Dentistry Practice 2 (3)</td>
<td></td>
</tr>
</tbody>
</table>
Community based training for 6th year student

Learn about health and oral health system at a community hospital

Learn to adjust to live in a rural area

Learn about the rural community

Three years obligation
To serve in a community hospital
Main objectives

- Expose students to a real working atmosphere
- Community approach, community participation
- Learn about lifestyle, social, cultural factors
- Students selected one project to work on in four weeks to accomplish these objectives

Training processes

1. Training of field supervisors (dentists in a community)
2. One week orientation for dental students
3. A visit by academic supervisor
4. Presentation of the learning outcomes, write a report
Training the field supervisors  
(dentists working in A community)

Annual meeting and training of field supervisors
Field training
Supervisor site visit
2-4 days at least ½ day
at each hospital

A visit to our students during their field practices
A visit to our students during their field practices

Field training project

A primary school
Healthy eating project
Interview with the nutrition teacher

Family and student healthy cooking contest
First prize winner menu

‘…protien, good for growth
And development…’

‘…’ I bring the fruit from home.
They have vitamin C…’

Health Promotion Project
In Primary School children
Family interview for social determinant factors

Family interview for social determinant factors
After 4 weeks, They came back and Presented their final learning outcomes and experiences

Learning Through Experience: Dental Students’ Reflection on Community-Based Health Promotion Course

Sasitorn Chaprasitti, Piyanart Chatikhu, Songvuth Tuongraianaphan, Tidawan Winawkumapakan, Patcharanan Srisilapanan, Wichai Winawkumapakan, Atsak Chueangpattananawadee

Department of Family and Community Dentistry, Faculty of Dentistry, Chiang Mai University, Chiang Mai, Thailand

Their critical incident essays showed

an achievement of the curriculum objectives,
illustrated their deep understanding on everyday life of local people and community dentists.

Moreover, engaging with different groups of people provided students to widen their life perspectives and introspection.
How to maintain the dentist in a rural area?

- Extra payment according to the situation of each rural area
- Extra payment according to years of serving in the community
- After serving in rural area for at least a year, eligible to have a pay leave to study at a postgraduate level

Is this enough to maintain them?
Yes and NO

Training community approach

Oral Health Promotion (DCOM393)

3rd Year Dental Student (2017)
Health Promoting Hospital

**Objectives**
- Understand the dental public health system at a primary care level
- Learn about roles and activities of health officers and village health volunteers
- Expose student to rural community in early student’s year

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Ta Ton Kaew Village
**749 Household population 2514**
Village health volunteer
Shared her work

Joined village health volunteers for the home visit
Training dental student to raise awareness to care for disabilities people and older adults

Developing Competency in Oral Health Care for Persons with Disabilities and Dependent Elderly in Dental Student and Dental Public Health Personnel

Project
2014-2018
Funded by Thai Health Foundation
Objective
To raise awareness and expose dental students to people with disability and dependent older people

Student’s Volunteer Project
Dental students health promotion activities for children with physically disabilities
Tooth brushing, apply fluoride varnish, dental sealant To prevent dental caries
Dental student’s volunteer project at the school for the blind
Dental student’s volunteer project at the school for hearing impairment children

A day out to the cinema For visual impairment students

They watched the movie “The Legend of Muay Thai : Nine Satra” and a shopping mall experiences.
A day out to the cinema
For visual impairment students

They watched the movie
“The Legend of Muay Thai : Nine Satra”
and a shopping mall experience
For disabled people, exercise in daily life is quite difficult because of their disabilities. However exercise is the easy way for everyone to keep healthy. Therefore, the dental student together with Disability Support Services (DSS), Chiang Mai University organized “Light the way: let’s run together” activity
In an ageing society, more dependent patient will need care giver. This experienced learning session was organized to help dental student to understand ‘being the disabled’.

Our society need a dentist who not only cure a patient but also need a dentist who care their patients

“Friends Forever Annual Exhibition”

This exhibition composed of
1. Fantastic shows from disabled people, dental students, the Voice Thailand and high school students
2. A forum for sharing experiences
3. Show and share the initiative activities created by dental students
4. Photograph contest in topic: ‘we’re all the same’
5. Other interesting activities
The outcomes

Our dental graduates who have participated in these activities are

- More willing to provide dental care for disabled people in their practices
- Become a leader to create supportive program for disabled youth
- Care more to patient
- Enjoy being a volunteer
Q&A

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