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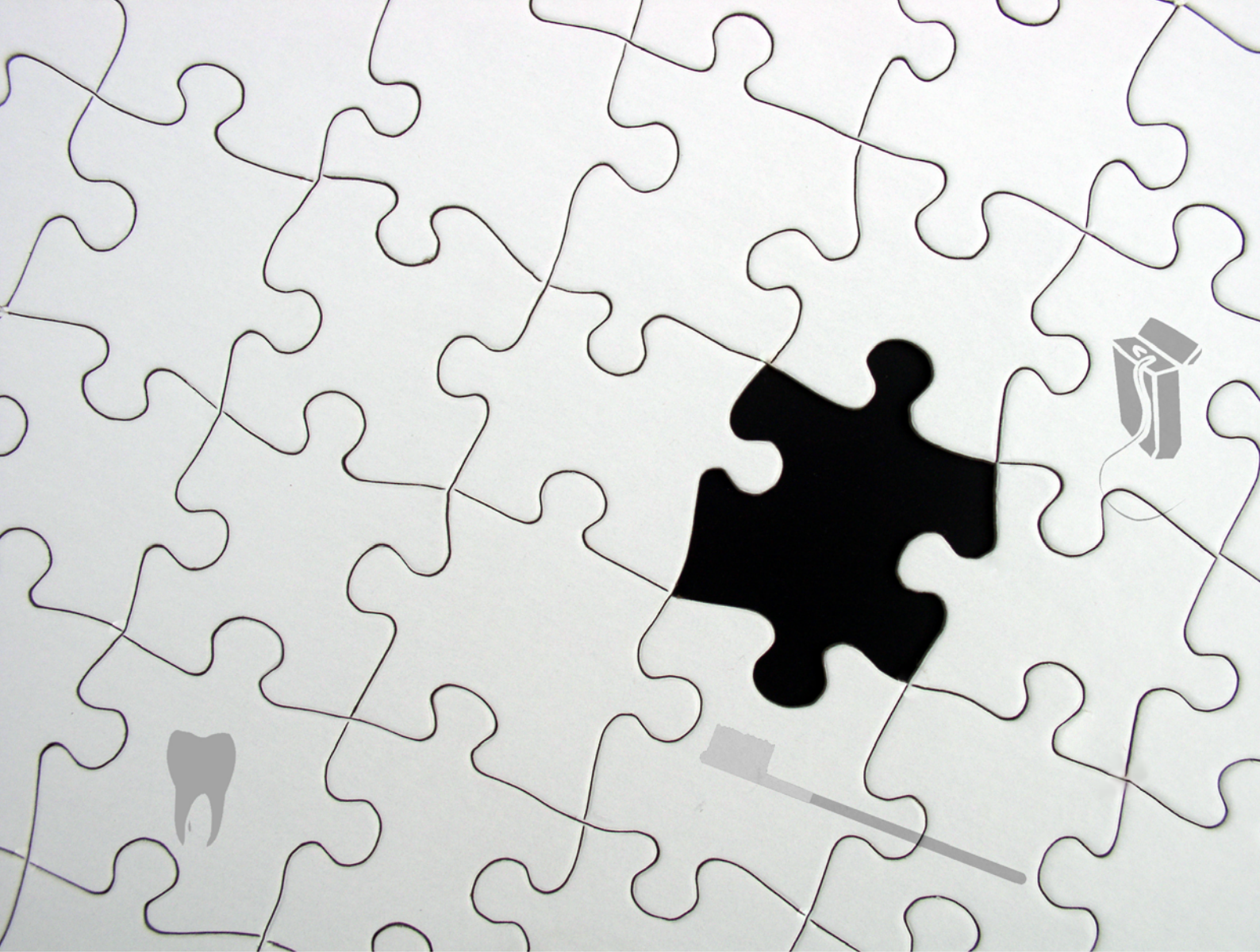
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**UNDERSTANDING AND PROMOTING ORAL HEALTH OF  
INDONESIAN DOMESTIC HELPERS IN HONG KONG**



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ORAL HEALTH *of*  
INDONESIAN DOMESTIC HELPERS  
*in* HONG KONG

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*by* GROUP 4.6

**UNDERSTANDING AND PROMOTING ORAL HEALTH OF  
INDONESIAN DOMESTIC HELPERS IN HONG KONG**

**MAY 2011**

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## 1. ABSTRACT

As the largest foreign domestic helper group in Hong Kong, Indonesian domestic helpers compose a significant proportion of the local workforce. Information is lacking on the oral health of this community. For various reasons, domestic helpers face difficulties in accessing dental services. This project aimed to profile the oral health status and related behaviours of Indonesian domestic helpers in Hong Kong and provide basic dental care services to them.

A random sample of 163 Indonesian domestic helpers (females aged 20-59 years) was recruited. A questionnaire collected information on their socio-demographic profile and oral health behaviours (knowledge, attitudes, practice and self-efficacy). Tooth status, periodontal health and oral hygiene status were assessed. Basic dental treatments were provided, including scaling, topical fluoride application and atraumatic restorative treatment (ART). An oral health talk was given. Participants' feedback on this project was collected anonymously.

Over 90% of Indonesian domestic helpers were affected by dental caries. The mean (SD) DMFT was 5.04 (3.79). None of the participants had healthy gingiva; 45% were found with periodontal pockets. Although participants possessed sound oral health knowledge, attitudes and self-efficacy, many held a fatalistic view on oral health and perceived tooth loss as a natural process of ageing. Despite the reasonable diet and toothbrushing habits, flossing was rarely practiced, though domestic helpers tended to start flossing after settling in Hong Kong. Socialization and good living condition were associated with favourable oral health behaviours and better oral health. Scaling, topical fluorides treatment and ART were provided to 19%, 86% and 19% participants, respectively. Positive feedback was received on the usefulness and effectiveness of this project.

In conclusion, the oral health of Indonesian domestic helpers was unsatisfactory. Oral health education is much needed and should be focused on promoting the use of dental floss and expelling fatalistic conceptions on oral health. Participation in social activities and improvement in living condition are conducive to domestic helpers' oral health. The outreach service is a practical way of delivering basic dental cares to this community.

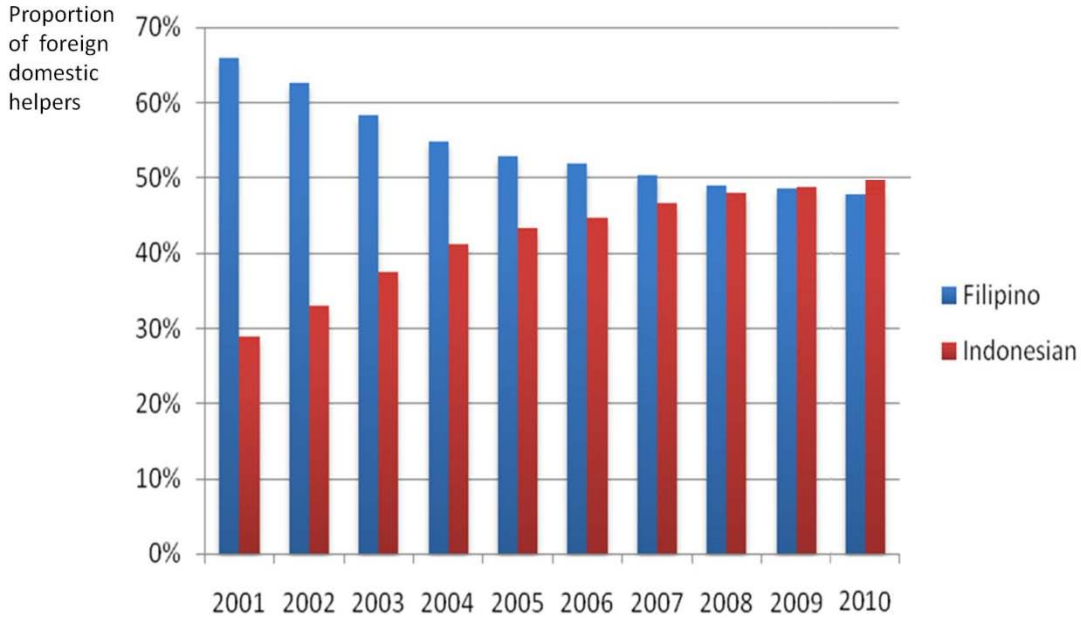


## 2. INTRODUCTION

Hong Kong, Asia's world city, has long been an economic and commercial based metropolitan. To support the prosperity and continuous development of the society, the majority of the Hong Kong population chooses to join the workforce. In 2003, the government conducted a Thematic Household Survey to investigate the time use pattern, sharing of housework and views on home-makers of Hong Kong residents (*HKSAR Census and Statistic Department, 2004*). The result showed that interviewees could only allocate limited time in handling housework and care-giving for household members as constraints (*e.g.* work for pay, education, social activities) exist. Over 80% of people aged 15 and over perceived that housekeepers are important to their households. Therefore, hiring a foreign domestic helper is very common in Hong Kong families, mainly to help with most of the housework, whilst some are required for babysitting and/or caring for elders and other dependent people in the family. Domestic helpers form one of the largest migrant groups in Hong Kong and are responsible for bringing a constant input to the productivity and sustainability of the society.

Since the 1970s, full-time domestic helpers from overseas countries have been allowed to work in Hong Kong to cater for local demand (*HKSAR Labour Department, 2011*). In the early years, Hong Kong's domestic helpers were mainly imported from the Philippines under the Labour Code 1974, which formalized the Philippine labour migration programme. In 2002, Indonesia's labour export programme was systematized and institutionalized through a decree issued by the Indonesian Ministry for Labour and Transmigration (*Asia Pacific Mission for Migrants, 2009*). In the past 10 years, there is an increasing influx of Indonesian domestic helpers (Figure 2-1). Since June 2009, Indonesian domestic helpers outnumbered Filipino domestic helpers and became the largest domestic helper group in Hong Kong (*Wan, 2010*). In 2010, there were a total of 284,901 foreign domestic helpers in the city, including 136,723

from the Philippines (48.0%), 140,720 from Indonesia (49.4%) and 7,458 (2.6%) from other countries such as Thailand, Sri Lanka and Nepal (*HKSAR Immigration Department, 2010*)



**Figure 2-1.** Filipino and Indonesian domestic helpers in Hong Kong

While foreign domestic helpers become an important component of the workforce in Hong Kong, several policies have been set up to ensure that they are entitled to the same benefits and protection under the Employment Ordinance (*HKSAR Labour Department, 2011*). As stipulated in the standard employment contract prescribed by the Government, employers should bear the cost for their domestic helpers’ basic medical care, including emergency dental treatment (*HKSAR Immigration Department, 2007*). However, for various reasons, domestic helpers may encounter difficulties in obtaining proper dental cares in Hong Kong (*Schwarz et al, 1990; Lo et al, 2004*).

The oral health and dental care needs of Filipino domestic workers in Hong Kong has been profiled in previous surveys (*Schwarz et al, 1990; Lo et al, 2004*). These studies showed that the oral health status of the Filipino domestic helpers was unsatisfactory and their conditions

needed to be improved. Dental caries and periodontal diseases were common and the needs for dental treatments were high. The utilization of dental care services was extremely low, due to various barriers (time constraints, financial difficulties and lack of information). Based on these findings, several recommendations were made, including delivering oral health education to domestic helpers and expanding the coverage of their medical benefit to include basic dental cares.

Despite the available data on the oral health of Filipino domestic helpers, information is lacking on the oral health of Indonesian domestic helpers. In addition, the changes in their oral health-related lifestyles after settling in Hong Kong are hardly known. Understanding Indonesian domestic helpers' oral health and related behaviours is important for designing oral health promotion programmes, formulating oral health policies and refining employment ordinance.

Currently no health promotion programme specifically tailored for Indonesian domestic helpers has been reported. Although oral health information prepared by the government is available through the Internet and other media, it is mainly in Chinese and English languages and may not be reachable to domestic helpers. Dental care services may be largely inaccessible to domestic helpers with all sorts of their constraints. A programme delivering oral health education and basic dental care services would be able to address the dental health needs of domestic helpers. In addition, the implementation of such a programme would provide useful information for future planning of oral health promotion activities for this population.

### **3. AIMS AND OBJECTIVES**

This community health project aimed to understand and promote oral health of Indonesian domestic workers in Hong Kong.

The specific objectives were:

1. To profile the prevalence and severity of common oral diseases (dental caries and periodontal diseases) among Indonesian domestic helpers
2. To describe their oral health related behaviours (knowledge, attitude, practice and self-efficacy)
3. To analyze the changes in their oral health behaviours after settling in Hong Kong
4. To identify socio-demographic and behavioural factors affecting their oral health
5. To provide oral health education and basic dental care services to this community

## **4. MATERIALS AND METHODS**

### **4.1. ETHICAL APPROVAL AND RECRUITMENT OF PARTICIPANTS**

The protocol of this project was reviewed by the Institutional Review Board of the University of Hong Kong / Hospital Authority Hong Kong West Cluster. An ethical approval was obtained (Reference Number: UW 11-060) (Appendix I).

The target population of this programme was Indonesian domestic helpers in Hong Kong. An “Indonesian” was defined as a person holding Indonesian citizenship. Both genders were eligible to join although the majority of domestic helpers were female. There was no age limit.

Indonesian Consulate General in Hong Kong has lent support in recruiting participants through a non-government organization, Asosiasi PPTKI Hong Kong Limited (APPIH), which is an association of all employment agencies for Indonesian domestic helpers. At a meeting held among the three parties (Consulate, APPIH and our dental team), it was decided to invite both new arrivals (domestic helpers who just arrived Hong Kong) and non-new arrivals (domestic helpers who had worked in Hong Kong for some time). Our target number of participants was 165, including 40 new arrivals and 125 non-new arrivals.

This study adopted a cluster random sampling method. In Hong Kong, there were 248 employment agencies registered for recruiting and deploying Indonesian domestic helpers. From the full list of these agencies, APPIH randomly selected 12 agencies, including 4 in Hong Kong Island, 4 in Kowloon and 4 in the New Territories. Each of these 12 agencies was then given a quota of participants, which was proportional to the total number of domestic

helpers recruited by this agency from Indonesia. The agencies were instructed to randomly select domestic helpers and invite them to participate in our programme.

## **4.2. DENTAL PROGRAMME**

### **4.2.1. Venue and Time**

The dental programme was conducted at the Indonesian Consulate General in Hong Kong, which was located in Causeway Bay, adjacent to the central business district. Prior to the programme, equipments, instruments, materials and documents were transported to the Indonesian Consulate General.

For new arrivals, the dental work was done on two consecutive Fridays (March 4<sup>th</sup> and 11<sup>th</sup>, 2011) before and after a Welcoming Programme organised by the Consulate General for newly arrived domestic helpers. As to non-new arrivals, considering the fact that the majority of them are free on Sundays, the dental work was scheduled for two consecutive Sundays (March 6<sup>th</sup> and 13<sup>th</sup>, 2011).

### **4.2.2. Consent Taking**

Upon arrival to the venue, each domestic helper was first given an Information Sheet and Consent Form (Appendix II). The dental team explained the details and answered any questions from the domestic helpers to ensure their full understanding of the programme. Two officers from the Indonesian Consulate General were present and worked as interpreters in case the participants encountered difficulty in communicating in English or Cantonese. After signing the form, the participant proceeded to the following activities.

### **4.2.3. Questionnaire**

A self-administered questionnaire was completed by each participant (Appendix III). The questionnaire was formulated in English and translated to Indonesian language (Bahasa Indonesia) by professional translators. The translated questionnaire was pre-tested among six Indonesian domestic helpers, to ensure the clarity and validity of questions.

The questions were structured to collect information on the participants' social-demographic profile, competency in speaking local languages (Cantonese and Mandarin), immigration history and oral health knowledge, attitude, practice and self-efficacy. For non-new arrivals, information was also solicited on their living condition at employers' homes, leisure activities in Hong Kong and changes in their main oral health habits after settling in Hong Kong.

In case a participant encountered difficulties in understanding and answering the questions, an interpreter assisted her in completing the questionnaire. Examples were also posted on site for participants' reference. Before the participant proceeded to the next station, the questionnaire was checked to ensure all the questions had been answered.

### **4.2.4. Oral Examination**

#### **4.2.4.1. Training and calibration**

The oral health status of all the participants was assessed by two examiners and recorded by their assistants in a dental assessment form (Appendix IV). Prior to the programme, the examiners were trained regarding the diagnostic criteria and clinical examination procedures. Representative cases were discussed and possible confusing scenarios were clarified.



Calibration for the clinical examination was performed on six domestic helpers, each of whom was examined by the examiners and an experienced oral epidemiologist. Results were compared and discussed to achieve a consensus.

#### **4.2.4.2. Setting and instruments**

Each participant was examined in supine position on a portable dental chair (Figure 4-1). Instruments used were a disposable mirror attached to a fibre-optic light unit and a CPI probe. The evaluation was based on visual inspection and aided by tactile inspection if necessary. No radiographs were taken.



**Figure 4-1.** Oral examination

#### **4.2.4.3. Tooth status**

Dental caries was registered by using the DMFT (Decayed, Missing and Filled Teeth) index. The examination procedures and diagnostic criteria recommended by World Health Organization were followed (*WHO, 1997*). Caries was recorded as present when there was a

cavity, detectable softened floor or wall, undermined enamel, or a surface with a temporary filling. In the pits and fissures, the catching of the probe was not enough to warrant the diagnosis of caries unless additional visual evidence existed. A tooth was recorded as filled, when one or more permanent restorations were present. If a tooth had both a caries lesion and a filling, it was calculated as a decayed tooth. Separate codes were given to teeth missing due to caries or those due to other reasons (trauma, periodontal diseases, orthodontic extraction, congenitally missing, *etc*). Only the former was counted into the M-component when the DMFT score was calculated.

#### **4.2.4.4. Periodontal health status**

The periodontal status was assessed using the Community Periodontal Index (CPI). Ten index teeth or their substitutes in six sextants were evaluated. Three parameters were considered in the CPI index: presence or absence of gingival bleeding upon probing, presence or absence of calculus deposits and depth of periodontal pockets, which is classified as shallow (4-5mm) or deep ( $\geq 6$  mm). For each sextant, only the highest CPI code was recorded.

#### **4.2.4.5. Oral hygiene status**

The oral hygiene status of participants was recorded using the Visible Plaque Index (VPI) (*Ainamo & Bay, 1975*). Only the labial surfaces of the six upper anterior teeth were examined. The oral hygiene status was classified into three categories according to the proportion of tooth surfaces covered by visible plaque.

Good: Visible plaque on  $< 1/3$  of the upper anterior tooth surfaces

Fair: Visible plaque on  $1/3$  to  $2/3$  of the upper anterior tooth surfaces

Poor: Visible plaque on  $> 2/3$  of the upper anterior tooth surfaces

#### **4.2.4.6. Duplicate examination**

To assess the inter-examiner reliability, duplicate examination was conducted on 16 (10%) participants, with codes randomly selected through Statistical Package for Social Sciences (SPSS V13) programme before each trip. After being examined by the first examiner, the selected participant was guided by an assistant to the other examiner. A new charting form was prepared for the duplicate examination.

#### **4.2.5. Dental Treatments**

##### **4.2.5.1. Training**

The dental treatments were performed by seven dental students. These students have received four years of dental training. Prior to the field work, they were further trained on delivering outreach dental care services in community setting. All the dental works were completed under the on-site supervision of academic staff of the faculty.

##### **4.2.5.2. Treatment planning**

The operator first examined the participant, evaluated the treatment need and judged what was (were) the treatment(s) that could be performed in this setting. Medical history was taken for each individual. Treatments that are contraindicated were noted. Medically compromised subjects, noted after initial assessment, were evaluated for suitability of proceeding to treatments.

The treatment plan was discussed with the participant. Procedures involved and possible

outcomes were explained. Consent was sought from the participant before the operator commenced the treatment. All treatments were on voluntary basis and participants could refuse any or all treatments at any stage.

#### **4.2.5.3. Scaling**

Scaling was provided to a participant when a remarkable amount of calculus deposition existed (Figure 4-2). A portable ultrasonic scaler (Piezon Master 400, EMS, Switzerland) was used to remove calculus, with distilled water as irrigant in scaling. A saliva ejector, connected to a portable suction unit, was employed to suction fluid from the participant's mouth. However, due to limited appointment time, comprehensive removal of calculus could not be performed for the subjects who required a more complex periodontal treatment. They would be advised to visit private dentists for follow-up.



**Figure 4-2. Scaling**

#### 4.2.5.4. Atraumatic restorative treatment

Using the Atraumatic Restorative Treatment (ART) approach, restorations were placed in a tooth if the following criteria were fulfilled simultaneously: (a) the tooth was found with carious lesions extending into dentine; (b) there was no obvious pulpal involvement; (c) the cavity was accessible to hand instruments; (d) the tooth was judged to be restorable; and (e) there was no abscess (swelling) near the tooth. To ensure a satisfactory retention rate, ART was mainly carried out to restore Class I or V cavities.

Only hand instruments were used during ART. Cotton rolls were used for isolation and moisture control. Soft carious dentine was removed with excavators. The prepared cavity was conditioned for 10 seconds using the liquid component of the glass ionomer material diluted with approximately an equal amount of water. The cavity was then washed and dried. A high-strength glass ionomer restoration material (Ketac-Molar; 3MESPE, Seefeld, Germany) was hand-mixed according to the manufacturer's instructions and placed into the cavity. The 'finger-press' technique was used to condense the material into the cavity and any adjacent pits and fissures, resulting in a sealant restoration (Figure 4-3). Excess material was removed with an excavator or carver.



**Figure 4-3.** Atraumatic Restorative Treatment (ART)

#### 4.2.5.5. Topical fluoride applications

Topical fluoride agents were applied on carious teeth which could not be restored using the ART approach. A 38% silver diamine fluoride (SDF) solution (Saforide, Toyo Seiyaku Kasei Co. Ltd., Osaka, Japan) was painted on carious lesions extending into dentine of posterior teeth. Since carious lesions arrested by SDF often turn black, for aesthetic reasons, a 5% sodium fluoride (NaF) varnish (Duraflor, Medicom, USA) was applied on carious lesions extending into dentine of anterior teeth. The sodium fluoride varnish was also applied on all incipient lesions to inhibit or reverse the progression of dental caries, as well as controlling dentine hypersensitivity.

Both fluoride agents were applied to the carious lesions using small disposable brushes (Figure 4-4). Cotton rolls were used for isolation. In each application, a minimal but sufficient amount of fluoride agent was used. The participants were instructed not to eat for at least 30 minutes after the fluoride treatment.



**Figure 4-4.** Topical fluoride application

#### 4.2.6. Oral Health Education

Small groups of 5-6 were gathered after the participants received oral examination and treatment. An oral health talk titled “How to protect your teeth” was given to each group (Figure 4-5). The talk was aided by a PowerPoint presentation and leaflets and posters obtained from the Department of Health. Depending on the participants’ preferences, multiple languages (Cantonese, Mandarin and English) were used in the presentation to meet the need of the participants and to improve their understanding and interest.

The talk covered the following topics: 1) the importance of oral health, 2) causes of common dental diseases (i.e. dental caries and periodontal diseases), 3) dietary advice specially tailored to the Indonesian cultural context, 4) toothbrushing technique, 5) interdental cleaning and mouth-rinsing and 6) proper care-giving to protect oral health of dependent people (children, elders, *etc*). These were explained to the participants using layman terms. There were plenty interactions between the presenter and participants and among the participants. Ample time was given for participants to raise their questions, which were answered by the presenter thoroughly. A large mouth model, toothbrushes and various interdental aids were used for demonstration. Samples were available on the table for the participants to observe and have hand-on experience on the tooth model.



**Figure 4-5.** Oral health education



#### **4.2.7. Report and Feedback**

A report (Appendix V) was distributed to each participant explaining her oral health conditions and treatments received in this programme. Recommendations were made on the measures for improving her oral health. The participant was suggested to visit dental clinics if further dental treatment is needed.

At last, feedback forms in Bahasa Indonesia (Appendix VI) were completed by all participants, who were informed that the completion was entirely anonymous and could be in their language preferred. Besides giving their rating on the effectiveness and usefulness of our programme, they were also invited to give their free comments and suggestions for future programmes. If the comments were written in Indonesian language, they were translated into English by professional bodies afterwards.

A gift pack, which contained a toothbrush, a tube of toothpaste, a pack of dental floss and oral hygiene leaflets, was given to each participant before her departure.

#### **4.3. DATA ANALYSIS**

The inter-examiner reliability in assessing tooth status, periodontal status and oral hygiene status was assessed by using Cohen's Kappa statistics and Intra-class Correlation Coefficient, as appropriate. The descriptive analysis was done on (1) socio-demographic profile of participants, (2) prevalence and severity of dental caries, (3) periodontal status, (4) oral hygiene status, (5) oral health behaviours, (6) treatments delivered and (7) feedback from the participants.

The inferential analysis was conducted for identifying (1) association between socio-demographic factors and oral health behaviours, (2) changes in oral health behaviours after settlement in Hong Kong and (3) impacts of socio-demographic and behavioural factors on oral health. Parametric or non-parametric tests were used, as appropriate, for comparing means. Chi-square test was used for comparing proportions. McNemar test was adopted for evaluating improvement in oral health behaviours after settling in Hong Kong.

To test the relationship between participants' oral health and socio-demographic/behavioural factors, bivariate analysis was first applied. If a factor reached ( $p < 0.05$ ) or approached ( $0.05 \leq p < 0.1$ ) a significant correlation with the outcome variables in the bivariate analysis, it was included as an independent variable in the multivariate analysis (stepwise multiple linear regressions).

## **5. RESULTS**

### **5.1. DESCRIPTIVE ANALYSIS**

#### **5.1.1. Socio-demographic Profiles of Participants**

In total 163 Indonesian domestic helpers participated in this programme, including 41 new-arrivals and 122 non-new arrivals. The socio-demographic profiles of the study sample are shown in Table 5-1.

All participants were female. Their age ranged from 20 to 59 years, with a mean age of 32 years. About 38% of them were in their 20s; 45% in their 30s; and 17% aged 40 or above. The majority of them (88%) had completed their secondary education, while 11% received primary education or below and one participant was a degree holder. About 2/3 of non-new arrivals had their own rooms in the employers' homes, while another 1/3 did not.

About 1/4 (27%) of participants could speak Cantonese and/or Mandarin fluently. More than 1/3 (37%) of participants had lived in other Chinese societies (mainly Singapore and Taiwan) for more than 6 months before coming to Hong Kong.

About 1/3 (29%) of the participants had family members or relatives in Hong Kong. The most common leisure activities of the participants were social gatherings (47%) and religious gatherings (30%).

**Table 5-1. Socio-demographic profiles of the participants**

	n (%)		
	Overall	New arrivals	Non-new arrivals
<b>Total</b>	163 (100)	41 (100)	122 (100)
<b>Demographic Profile</b>			
<b>Age (years)</b>			
20-29	62 (38.0)	19 (46.3)	43 (35.2)
30-39	74 (45.4)	18 (43.9)	56 (45.9)
40 or above	27 (16.6)	4 (9.8)	23 (18.9)
<b>Gender</b>			
Female	163 (100)	41 (100)	122 (100)
Male	0 (0)	0 (0)	0 (0)
<b>Socio-economic Status</b>			
<b>Education level</b>			
Primary school or below	18 (11.4)	5 (12.8)	13 (10.9)
Secondary school	139 (88.0)	34 (87.2)	105 (88.2)
College / university	1 (0.6)	0 (0)	1 (0.8)
<b>Work environment</b>			
Has own room in employer's home	--	--	84 (68.9)
Does not have own room in employer's home	--	--	38 (31.1)
<b>Acculturation</b>			
<b>Fluency in Cantonese and Mandarin</b>			
Fluent in Cantonese and/or Mandarin	43 (27.4)	9 (23.1)	34 (28.8)
Not fluent in either languages	114 (72.6)	30 (76.9)	84 (71.2)
<b>Immigration history</b>			
Residence in other Chinese society	60 (36.8)	17 (41.5)	43 (35.2)
No residence in other Chinese society	103 (63.2)	24 (58.5)	79 (64.8)
<b>Social Supports</b>			
<b>Family members / relatives in HK</b>			
Yes	47 (29.0)	11 (26.8)	36 (29.8)
No	115 (71.0)	30 (73.2)	85 (70.2)
<b>Leisure activities</b>			
Social gatherings	--	--	57 (46.7)
Religious gatherings	--	--	37 (30.3)
Others (shopping, exercise or rest)	--	--	48 (39.3)

### 5.1.2. Inter-examiner Reliability

The inter-examiner reliability was high for all three measures (tooth status, periodontal status and oral hygiene status), as shown in Table 5-2.

**Table 5-2.** Inter-examiner reliability

	<b>Level</b>	<b>Outcome</b>	<b>KAPPA</b>	<b>ICC *</b>
<b>Caries</b>	<b>Tooth</b>	0: Sound 1: Affected by caries	0.853	--
<b>CPI</b>	<b>Tooth</b>	0: Healthy 1: Bleeding 2: Calculus 3: Pocket 4-5mm 4: Pocket $\geq$ 6mm	--	0.863
<b>VPI</b>	<b>Individual</b>	1: Good 2: Fair 3: Poor	--	0.911

\* ICC: Intra-class correlation coefficient

### 5.1.3. Oral Health Behaviours

#### 5.1.3.1. Oral health knowledge

The participants' knowledge on the causes of dental caries and periodontal diseases were reasonably sound (Table 5-3). The most chosen "causes of tooth decay" were improper cleaning of teeth (49%), bacterial accumulation (32%) and sweet intakes (53%). As to gum disease, most participants regarded accumulation of tartar (32%), bacterial accumulation (44%) and improper cleaning of teeth (32%) as the main causes. Some traditional beliefs were held by considerable proportion of participants, such as "tooth worm" as a pathogen of caries (15%) and "heatiness" as a cause of gum disease (24%).

**Table 5-3. Oral health knowledge**

	<b>n</b>	<b>%</b>
<b><i>“What do you think is/are the cause(s) of tooth decay?”</i></b>		
Improper cleaning of teeth	79	48.5
Bacterial accumulation	52	31.9
Eating too much sweet food	86	52.8
Eating too much sour food	21	12.9
Tooth worm	25	15.3
Heatiness	5	3.1
Do not know	12	7.4
<b><i>“What do you think is/are the cause(s) of gum disease?”</i></b>		
Accumulation of tartar	52	32.1
Bacterial accumulation	71	43.8
Improper cleaning of teeth	51	31.5
Poor general health	20	12.3
Smoking	13	8.0
Genetics	2	1.2
Alcoholic drinks	12	7.4
Heatiness	38	23.5
Do not know	11	6.8

### 5.1.3.2. Oral health attitudes

As to oral health attitudes (Table 5-4), all participants (100%) regarded dental health as very important. Overwhelming majority (94%) of them agreed upon the importance of regular dental checkups. However, only 18% of participants did not think tooth loss is a natural process of ageing.

**Table 5-4. Oral health attitudes**

Agreement on the following statements	n	%
<b><i>“Dental health is very important”</i></b>		
Agree / totally agree	163	100
Neutral	0	0
Disagree / totally disagree	0	0
<b><i>“Regular checkup helps to prevent dental problems”</i></b>		
Agree / totally agree	153	94.4
Neutral	6	3.7
Disagree / totally disagree	3	1.9
<b><i>“Tooth loss is a natural process of ageing”</i></b>		
Agree / totally agree	100	61.7
Neutral	33	20.4
Disagree / totally disagree	29	17.9

### 5.1.3.3. Oral health self-efficacy

The oral health self-efficacy of the respondents was high (Table 5-5). The majority could refrain from taking too many sweets on most of the occasions (91%) and brush their teeth thoroughly even when they were busy or stressed (94%).

**Table 5-5. Oral health self-efficacy**

Agreement on the following statements	n	%
<b><i>“I can control myself not to take too many sweets on most of the occasions”</i></b>		
Agree / totally agree	148	90.8
Neutral	13	8.0
Disagree / totally disagree	2	1.2
<b><i>“I can brush my teeth thoroughly even when I am very busy or stressed”</i></b>		
Agree / totally agree	153	93.9
Neutral	9	5.5
Disagree / totally disagree	1	0.6



#### 5.1.3.4. Oral health practice

The oral health practice of the participants is described in Table 5-6. Almost all participants brushed their teeth twice a day or more (97%) and used toothpaste when they brushed (98%). Over 4/5 (81%) of them never flossed. About 2/3 (64%) never used mouthrinse. About 3/4 (76%) reported eating 3 times or less a day, including meals and snacks. The smoking habit was reported by 2 (1.3%) participants. The majority (94%) of participants never visited dentists or only visited dentists when problem arose.

**Table 5-6.** Oral health practice

	<b>n</b>	<b>%</b>
<b>Toothbrushing frequency</b>		
Less than twice per day	5	3.1
Twice per day or more	156	96.9
<b>Use of toothpaste during toothbrushing</b>		
Yes	158	98.1
No	3	1.9
<b>Flossing</b>		
Never	132	81.0
Less than once per day	6	3.7
Once per day or more	25	15.3
<b>Use of mouth rinse</b>		
Never	103	63.6
Less than once per day	8	4.9
Once per day or more	51	31.5
<b>Diet habit (number of meals/snacks a day)</b>		
3 times per day or less	113	75.8
4 times per day	22	14.8
5 times per day or more	14	9.4
<b>Smoking habit</b>		
Yes	2	1.3
No	156	98.7
<b>Dental visits</b>		
Irregular (only when problem arose or never)	153	93.9
Regular (once every 12 months or more often)	10	6.1

## 5.1.4. Oral Health Status

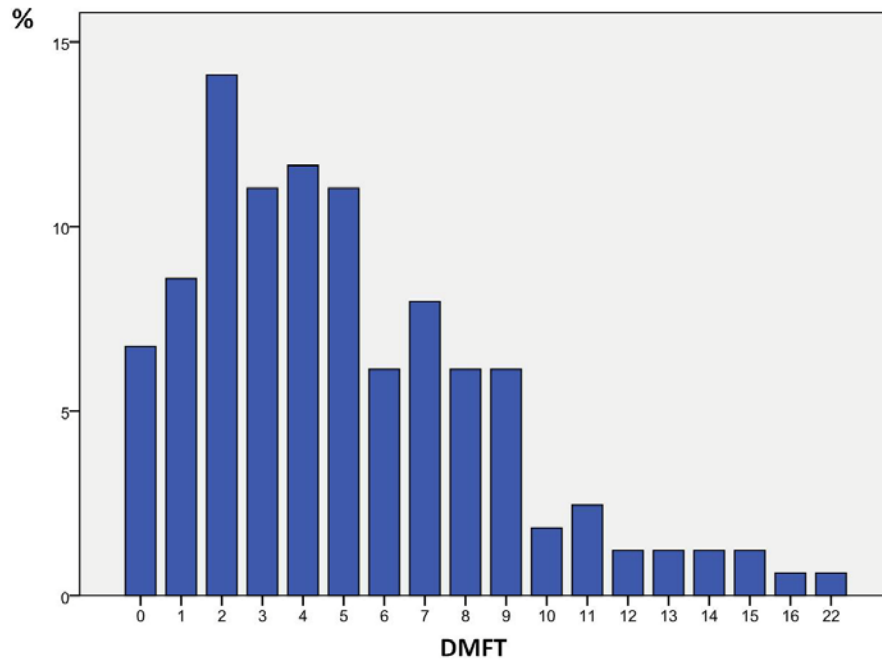
### 5.1.4.1. Dental caries

As shown in Table 5-7, 93% of participants were affected by caries (DMFT>0). About 88% had untreated decayed teeth (DT>0). The mean DMFT was 5.04. The majority (73%) of affected teeth were untreated decayed teeth, with 23% as filled teeth and 4% as missing teeth. No significant difference was found in any caries statistic between new arrivals and non-new arrivals (all p>0.05)

**Table 5-7.** Caries prevalence and severity

Caries Prevalence	n (%)		
	Overall	New Arrivals	Non-new Arrivals
% affected by caries (DMFT>0)	152 (93.3)	37 (90.2)	115 (94.3)
% with untreated decayed teeth (DT>0)	144 (88.3)	34 (82.9)	110 (90.2)
Caries Severity	Mean (SD)		
	Overall	New Arrivals	Non-new Arrivals
DMFT	5.04 (3.79)	4.12 (3.01)	5.34 (3.97)
DT	3.69 (3.15)	3.15 (2.57)	3.88 (3.33)
MT	0.18 (0.57)	0.22 (0.51)	0.17 (0.57)
FT	1.16 (1.50)	0.76 (1.11)	1.30 (1.59)

Figure 5-1 shows the percentage distribution of subjects according to their DMFT scores.



**Figure 5-1.** Percentage distribution of subjects according to their DMFT score

#### 5.1.4.2. Periodontal health

Table 5-8 shows the percentage distribution of subjects according to their highest CPI score. No participants were rated as “healthy” (score 0) or having “bleeding only” (score 1). About half (55%) scored 2 (calculus) and 37% scored 3 (shallow pockets). Deep pockets existed in 8% of participants.

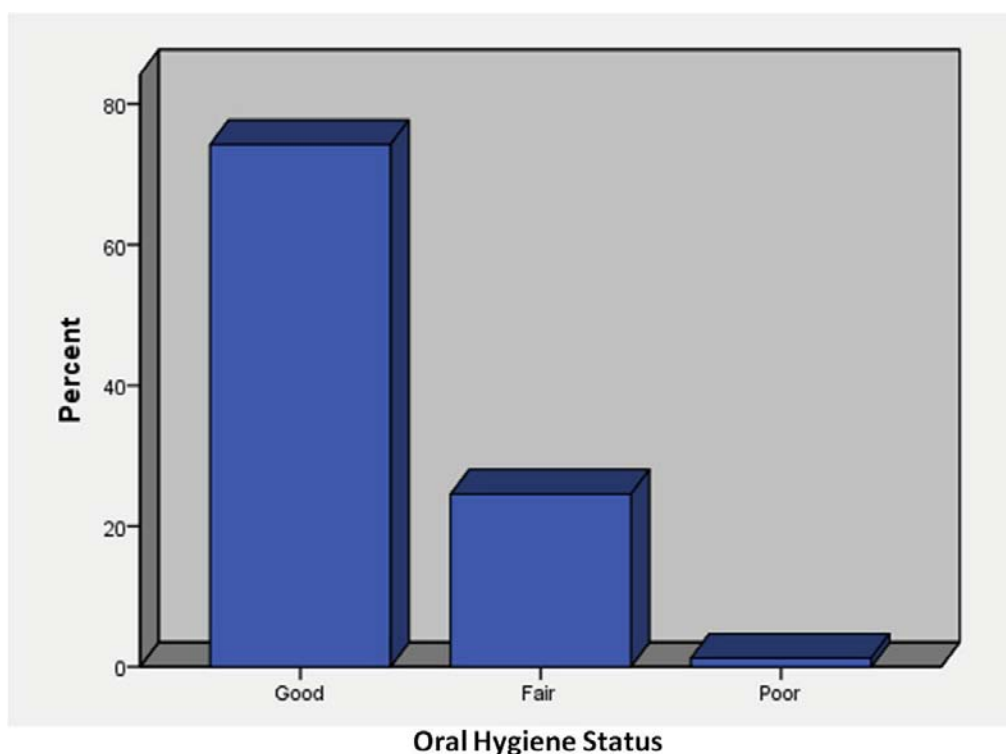
**Table 5-8.** Percentage distribution of subjects according to their highest CPI score

Highest CPI score	%		
	Overall	New Arrivals	Non-new Arrivals
0 (Healthy)	0	0	0
1 (Bleeding)	0	0	0
2 (Calculus)	55.2	61.0	53.3
3 (Shallow pocket; 4-5 mm)	36.8	29.3	39.3
4 (Deep pocket; $\geq 6$ mm)	8.0	9.8	7.4

No significant difference was found in the periodontal status between new arrivals and non-new arrivals ( $p=0.498$ ).

### 5.1.4.3. Oral hygiene

As shown in Figure 5-2, the oral hygiene was “good” in 121 (74%) participants, “fair” in 40 (25%) participants and “poor” in 2 (1%) participants.



**Figure 5-2.** Percentage distribution of participants according to their oral hygiene status

### 5.1.5. Dental Services Delivered

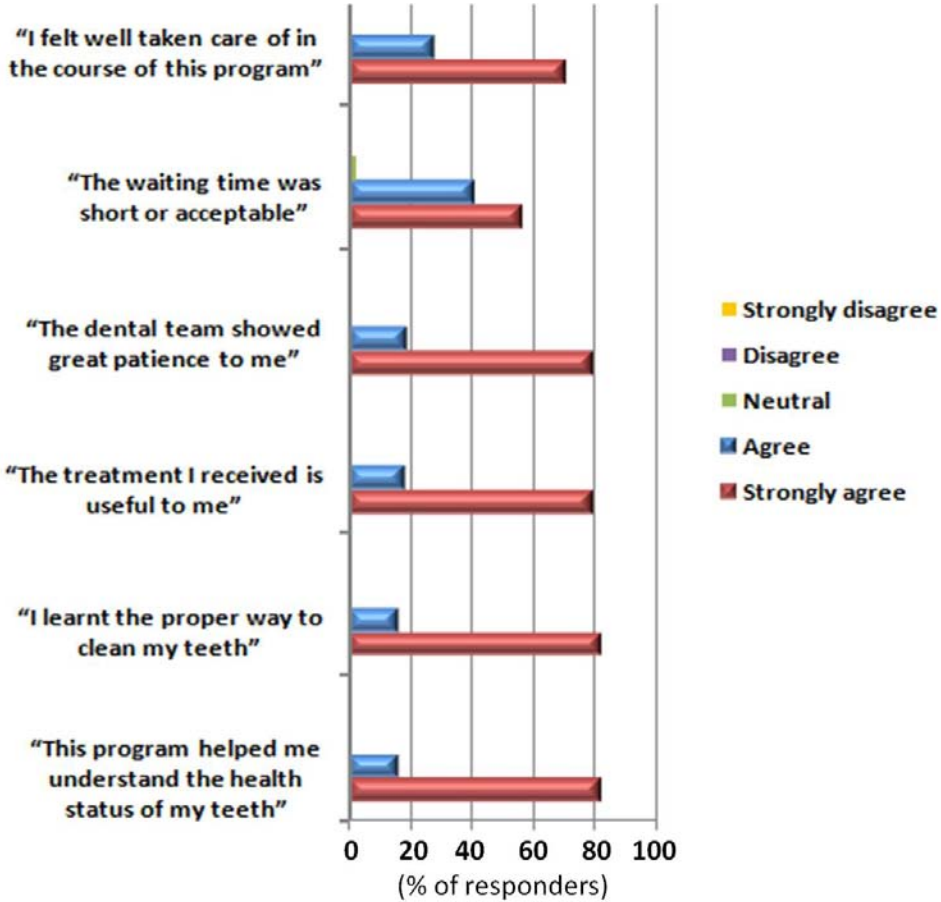
The dental services delivered in this programme are listed in Table 5-9. All participants attended the oral health education talk. Scaling was provided to 31 (19%) participants. Topical fluorides and ART treatments were received by 86% and 19% of participants, respectively. The total number of teeth treated by fluorides and ART were 533 and 35, respectively.

**Table 5-9.** Dental services delivered

Dental Services	Subjects	Teeth	
	n (%)	Total	Mean
Oral Health Education	163 (100)	-	-
Scaling	31 (19.0)	-	-
Fluorides	140 (85.9)	533	3.27
ART	31 (19.0)	35	0.21

**5.1.6. Participants’ Feedback on the Programme**

As shown in Figure 5-3, almost all participants agreed that (1) the programme helped them understand the health status of their teeth; (2) they learnt the proper way to clean their teeth; (3) the treatments they received are useful to them; (4) the dental team showed great patience to them; (5) the waiting time was short or acceptable; and (6) they felt well taken care of in the course of the programme.



**Figure 5-3.** Participants’ evaluation (rating) on the programme

The participants' free comments were exclusively on the following: (a) appreciations to our dental team and the Consulate General; (b) good job by the dental team; (c) usefulness of the programme; and (d) wishes for having the programme in future years and willingness to join again.

## 5.2. INFERENCE ANALYSIS

### 5.2.1. Socio-demographic Factors Affecting Oral health Behaviours

Significant associations were found between several socio-demographic factors and oral health behaviours ( $p < 0.05$ ). As shown in Table 5-10, the misconception of "heatiness" as a cause of dental caries was more prevalent among middle-aged (30-39 years) domestic helpers ( $p = 0.045$ ). Age appeared to be negatively associated with the knowledge on the harmful roles of bacteria in causing gum disease ( $p = 0.009$ ). The younger age group (20-29 years) tended to have lower self-efficacy in controlling their sweet intakes ( $p = 0.013$ ).

**Table 5-10.** Age and oral health behaviour

Agreement on the following statements	% of Subjects			p
	Age (years)			
	20-29	30-39	≥40	
<b>Heatiness is a cause of caries</b>				
Yes	0	6.8	0	0.045
No	100	93.2	100	
<b>Bacteria is a cause of gum disease</b>				
Yes	56.5	41.1	22.2	0.009
No	43.5	58.9	77.8	
<b>Self-efficacy (sweets)</b>				
<i>"I can control myself not to take too many sweets on most of the occasions"</i>				
Strongly agree / agree	80.6	97.3	96.3	0.013
Neutral	16.1	2.7	3.7	
Strongly disagree / disagree	3.2	0	0	

Less educated participants tended to disagree that regular dental checkup helps to prevent oral diseases ( $p=0.007$ ) (Table 5-11).

**Table 5-11.** Education and oral health behaviour

Agreement on the following statement	% of Subjects		p
	Education		
	Primary or below	Secondary or above	
<b>“Regular checkup helps prevent dental disease”</b>			
Strongly agree / agree	88.9	95.0	0.007
Neutral	0	4.3	
Strongly disagree / disagree	11.1	0.7	

As shown in Table 5-12, among those who have their own rooms at employer’s homes, lower proportion of domestic helpers could correctly identify sweet intake as a cause of dental caries, as compared with their counterpart ( $p=0.019$ ). However, they were more aware that “regular checkup helps to prevent dental problems” ( $p=0.023$ ).

**Table 5-12.** Living condition and oral health behaviour

Agreement on the following statements	% of Subjects		p
	Living Condition		
	Having own room	Not having own room	
<b>“Sweet intake is a cause of dental caries”</b>			
Yes	41.7	65.8	0.019
No	58.3	34.2	
<b>“Regular checkup helps to prevent dental problems”</b>			
Agree / totally agree	97.6	92.1	0.023
Neutral / disagree / totally disagree	2.4	7.9	

From Table 5-13, it was found that subjects who had previously resided / worked in other Chinese societies (Singapore and Taiwan) for more than 6 months were more aware of the detrimental effect of insufficient cleaning in causing caries.



**Table 5-13.** Immigration history and oral health behaviour

Agreement on the following statement	% of Subjects		p
	Residence in other Chinese society		
	Ever	Never	
<b>“Insufficient cleaning is a cause of caries”</b>			
Yes	60.0	41.7	0.034
No	40.0	58.3	

Table 5-14 shows that participants who spent their leisure time on social or religious gatherings were more aware of the relationship between oral health and general health ( $p=0.021$ ) and ate less frequently in a day ( $p=0.024$ ), as compared with their counterparts (i.e. people whose leisure activities were shopping, exercise or rest, which involved little socialization).

**Table 5-14.** Socialization and oral health behaviour

	% of Subjects		P
	Leisure Activities		
	Socialization	No Socialization	
<b>“Poor general health is a cause of gum disease”</b>			
Yes	19.3	2.6	0.021
No	80.7	97.4	
<b>Diet frequency</b>			
3 times per day or less	80.8	62.9	0.024
4 times per day	13.7	14.3	
5 times per day or more	5.5	22.9	

### 5.2.2. Changes in Oral Health Behaviours after Settling in Hong Kong

About a quarter (23%) of non-new arrivals (those who had settled in Hong Kong for some time) had tried flossing. This proportion was significantly higher than that in new arrivals (7%) ( $p=0.037$ ) (Table 5-15).

**Table 5-15.** Flossing habit of new and non-new arrivals

	% of Subjects		p
	New arrival	Non-new arrival	
<b>Flossing</b>			
Never	92.7	77.0	0.037
Ever	7.3	23.0	

Among those who have stayed in Hong Kong for some time (non-new arrivals), the comparisons between their flossing habits in Indonesia and Hong Kong also showed an improvement in flossing habits after settling in Hong Kong ( $p=0.039$ ) (Table 5-16).

**Table 5-16.** Flossing habit of non-new arrivals when they were in Indonesia and Hong Kong

		In Hong Kong		Total
		Never flossed	Ever flossed	
<b>In Indonesia</b>	<b>Never flossed</b>	92	10	102 (83.6%)
	<b>Ever flossed</b>	2	18	20 (16.4%)
	Total	94 (77.0%)	28 (23.0%)	122
<b>McNemar test</b>				<b>p=0.039</b>

### 5.2.3. Socio-demographic and Behavioural Determinants of Oral Health

Table 5-17 shows factors that reached ( $p<0.05$ ) or approached ( $0.05 \leq p < 0.10$ ) a significant association with at least one of the three caries outcomes in the bivariate analysis. High caries rate was linked to “not having own room at employer’s home”, “having family members or relatives in Hong Kong” and “frequent meals/snacks (5 times per day or more)” (all  $p<0.05$ ). “Smoking” and “oral hygiene” had a marginal effect on the caries experience ( $0.05 \leq p < 0.10$ ).

**Table 5-17.** Factors reached or approached a significant association with participants' caries experience in bivariate analysis

	% DMFT>2	% DMFT>4	Mean (SD) DMFT
<b>Living condition</b>	<b>p=0.013 *</b>	<b>p=0.011 *</b>	<b>p&lt;0.001 *</b>
Having own room	67.9	42.9	4.49 (3.34)
Not having own room	89.5	68.4	7.24 (4.59)
<b>Family member / relative in Hong Kong</b>	<b>p=0.087 **</b>	<b>p=0.083 **</b>	<b>p=0.020 *</b>
Yes	80.9	59.6	6.32 (4.54)
No	66.1	43.5	4.53 (3.34)
<b>Diet frequency</b>	<b>p=0.066 **</b>	<b>p=0.023 *</b>	<b>p=0.070 **</b>
4 time per day or less	68.1	45.2	4.87 (3.82)
5 times per day or more	92.9	78.6	6.79 (2.83)
	% DMFT>2	% DMFT>4	Mean (SD) DMFT
<b>Smoking habit</b>	<b>p=0.087 **</b>	<b>p=0.498</b>	<b>p=0.188</b>
Yes	0	0	1.50 (0.71)
No	71.2	48.1	5.10 (3.83)
<b>Oral hygiene</b>	<b>p=0.330</b>	<b>p=0.174</b>	<b>p=0.051 **</b>
Good	67.8	44.6	4.62 (3.31)
Fair	77.5	55.0	6.18 (4.88)
Poor	100	100	7.50 (0.71)

\* Significant association (p<0.05).

\*\* Marginally significant association (0.05≤p<0.10).

Worse periodontal status (Table 5-18) was linked to low education attainment (p=0.010) and low self-efficacy in toothbrushing (p=0.019) in bivariate analysis. Age approached, but did not reach, a significant association with periodontal status (p=0.096).

**Table 5-18.** Factors reached or approached a significant association with participants' periodontal status in bivariate analysis

	Highest CPI		
	%		
	2 (Calculus)	3 (Shallow pocket)	4 (Deep pocket)
<b>Age (years)</b>		<b>p=0.096 **</b>	
20-29	64.5	33.9	1.6
30-39	48.6	37.8	13.5
≥40	51.9	40.7	7.4
<b>Education</b>		<b>p=0.010 *</b>	
Primary or below	33.3	66.7	0
Secondary or above	59.3	31.4	9.3
<b>Self-efficacy in brushing</b> <b>"I can brush my teeth thoroughly even when I am very busy or stressed"</b>		<b>p=0.019 *</b>	
Agree / totally agree	55.6	37.3	7.2
Neutral	55.6	33.3	11.1
Disagree / totally disagree	0	0	100

\* Significant association (p<0.05).

\*\* Marginally significant association (0.05≤p<0.10).

The multivariate analysis (Table 5-19) has linked better living condition to a lower caries rate (p=0.002). “Having own room at employer’s home” reduced the number of affected teeth (DMFT) by 2.55. A positive association between age and highest CPI score was also revealed.

**Table 5-19.** Factors affecting oral health in multivariate analysis

	Regression Coefficient		P
	B	95% CI	
<b>Determinant of caries (DMFT score)</b>			
Having own room in employer’s home	-2.554	(-0.975, -4.133)	0.002
<b>Determinant of periodontal status (highest CPI)</b>			
Age (year)	0.016	(0.000, 0.031)	0.045

\* Results were obtained through multiple linear regressions. The dependent variables were DMFT and highest CPI scores, respectively. Independent variables entered were main socio-demographic variables (age, gender and education level) and those reached (p < 0.05) or approached (0.05 ≤ p < 0.1) a significant correlation with the outcome variables in the bivariate analysis.

## **6. DISCUSSION**

The health of immigrant populations is an important public health issue. It is attracting more attention in recent years and is regarded as the central element of social cohesion for contemporary societies and a priority area for reducing health disparity (*WHO, 2010*). Indonesian domestic helpers represent one of the largest foreign worker groups in Hong Kong society. Understanding and promoting the oral health of this unique immigrant population is of obvious importance and was therefore the target of this community health project.

### **6.1. SELECTION OF PARTICIPANTS**

With the support of the Indonesian Consulate General and the association of employment agencies, we were able to obtain a random sample of Indonesian domestic helpers. In response to the request of the Indonesian Consulate General, our programme involved both groups of domestic helpers – those who had just arrived in Hong Kong (new arrivals) and who had worked in Hong Kong for some time (non-new arrivals). The main oral health statistics (DMFT, CPI, *etc*) generated from the latter group gave us an overview of the oral health status of current Indonesian domestic helpers. The inclusion of both groups has allowed comparisons and shed light on the changes in domestic helpers' oral health and related behaviours.

### **6.2. ORAL HEALTH STATUS**

Our results showed that the overwhelming majority (over 90%) of Indonesia domestic helpers were affected by dental caries and none of them had healthy gum. Almost all their dental problems were untreated at the time of the survey.

To better understand the oral health status of Indonesian domestic helpers, we attempted to make comparisons with Hong Kong's second largest domestic helper group (Filipinos), Hong Kong adults and Indonesian adults. Such comparisons were however difficult due to the differences in year of survey and demographic profiles (age and gender) of survey subjects across available studies. Although these comparisons could give us some clues on the relative status of various groups, they should be interpreted with cautions.

In all four populations, almost all adults had at least one carious tooth (Table 6-1). The severity of caries in Indonesian domestic helpers appeared to be lower than that in Filipino domestic helpers (mean DMFT 5.0 vs. 10.6). It seems that whether Indonesian domestic helpers were less affected by caries, as compared with adult populations of Hong Kong or Indonesia. However, such a conclusion is doubtful, since the limited difference in their mean DMFT may be due to the difference in the age of survey subjects.

**Table 6-1.** Comparisons of caries prevalence and severity

Population	Year	Gender	Age (yrs)	% affected	DMFT	Source of Data
Indonesian domestic helpers	2011	F	20-59 *	93.3	5.0	This study
Filipino domestic helpers	2004	F	25-44	96.5	10.6	Lo <i>et al</i> , 2004
Hong Kong adults	2001	M/F	35-44	97.5	7.4	HKSAR DoH, 2003
Indonesian adults	1995	M/F	35-44	94.6	6.1	Indonesian MoH, 1997

\* Mean age: 32 years

When periodontal health is concerned, it was found that no domestic helpers in both groups (Indonesians and Filipinos) had healthy gum (Table 6-2). The proportions of Indonesian domestic helpers with shallow and deep periodontal pockets were higher than those in Filipinos. Periodontal pockets appeared to be equally prevalent in Indonesian domestic helpers and Hong Kong adults. However, since the Indonesian domestic helpers were obviously younger on average (mean age 32) than those Hong Kong adults (35-44 years) included in the survey, it may be expected that the periodontal status of Indonesian domestic

helpers is in fact worse than that of the local population at the same age.

**Table 6-2.** Comparisons of periodontal status

Highest CPI Score	% of Subjects		
	Indonesian Domestic Helpers (2011)	Filipino Domestic Helpers (2004)	Hong Kong Adults (2001)
<b>0 (Healthy)</b>	0	0	0.7
<b>1 (Bleeding)</b>	0	0	3.4
<b>2 (Calculus)</b>	55.2	75.9	49.9
<b>3 (Shallow Pocket)</b>	36.8	22.7	38.9
<b>4 (Deep Pocket)</b>	8.0	1.4	7.1
<b>Source of Data</b>	This study	Lo <i>et al</i> , 2004	HKSAR DoH, 2003

Overall, compared with Filipino domestic helpers, Indonesian domestic helpers had fewer tooth decays but more periodontal problems. Comparisons of the national survey data collected from these two countries also showed a lower mean DMFT in Indonesian adults than in Filipino adults (6.1 vs. 15.0) (*Indonesian Ministry of Health, 1997, Philippines Department of Health, 1998*). Since in both countries water fluoridation covers only a minimal proportion of the population (less than 5%) (*Freeze & Lehr, 2009*), the difference in their caries severity may be attributable to the ethnical difference in the susceptibility to dental caries and cultural differences related to oral health.

### 6.3. ORAL HEALTH SELF-CARE BEHAVIOURS

An encouraging finding of this study is that the Indonesian domestic helpers possess sound knowledge on the causes of common oral diseases, positive attitudes toward oral health and high self-efficacy in practising proper oral health measures. Nevertheless, many of them held a fatalistic view on oral health. For instance, an overwhelming majority of participants perceived tooth loss as a “natural process of ageing”. Such fatalism on oral health may stem

from their past observations in early years when oral diseases were ubiquitous, their previous encounter with elders who have missing teeth and wear dentures in their surroundings and some traditional beliefs in their cultures.

Such fatalistic views may hamper them from improving their oral health habits, despite their other knowledge, positive attitudes and strong self-efficacy in protecting oral health. It is therefore important to convince them with scientific evidences that oral diseases are highly preventable and it is possible to preserve teeth over a lifetime if proper habits are formed and preventive measures are taken. Health talks imparting such knowledge should be integrated as an essential part of oral health promotion programmes among domestic helpers.

Overall, the participants reported reasonable diet and toothbrushing habits. Nevertheless, flossing was rarely seen. Over 80% of Indonesian domestic helpers never flossed, a percentage higher than those among Filipino domestic helpers (<30%) (*Lo et al., 2004*) and Hong Kong adults (66%) (*HKSAR Department of Health, 2003*). On the other hand, our results suggested that Indonesian tended to start flossing after settling in Hong Kong. This implies a positive impact of modern lifestyles and cultural norm on the domestic helpers' oral health self-care practice.

Our results also have showed some positive behaviours among domestic helpers who spent their leisure time on socializing with others, such as snacking less and being more aware of the relationship between oral health and general health. Domestic helpers often lose their social networks and family supports when they leave their homestead for an unfamiliar city. In this connection, social and religious gatherings organized by the local and foreign governments, non-government organizations (NGOs) and agencies shall be encouraged to promote domestic helpers' physical, psychological and social well-beings.



#### **6.4. UTILIZATION OF DENTAL CARE SERVICES**

Regular dental checkup is regarded as an efficient way to safeguard oral health. Almost all participants agreed upon the importance of dental checkup. However, in reality, regular dental checkup was rarely received by Indonesian domestic helpers. An overwhelming majority (94%) of the participants never visited a dentist or only visited the dentist when problems arose. This finding, similar to that among Filipino domestic workers, was expected, since various barriers exist to domestic helpers' dental attendance.

Domestic helpers in Hong Kong normally receive the minimum wage (\$3580 per month). Although employers are obligated to bear the cost of emergency dental care for domestic helpers, if other dental cares are needed, they are to be sought on the domestic helpers' own cost and are largely unaffordable to them. Due to long working hours, time constraint may be another barrier that prevents them from seeking dental care. Meanwhile, cultural differences and language barriers may also create difficulties for domestic helpers to access dental service.

To promote the dental attendance of domestic helpers, establishing special dental services to provide basic dental care to them at low cost is essential. Meanwhile, the employment contract could be reviewed to explore the possibility of expanding the coverage of their medical benefit to include basic dental cares.

#### **6.5. SOCIO-DEMOGRAPHIC AND BEHAVIOURAL FACTORS AFFECTING ORAL HEALTH**

Our analyses have identified a few socio-demographic and behavioural factors affecting oral

health. Some of these factors are commonly known, such as age, education attainments, diet and oral hygiene, which are related to the occurrence of dental caries and/or periodontal diseases.

In addition, our data suggested a positive impact of domestic helpers' living condition on their oral health. Domestic helpers who had their own rooms at the employers' homes had fewer carious teeth, as compared with their counterpart. Such association remained significant in our multivariate analysis, after controlling for possible confounders (age, gender, education level and behaviours). This finding has added further evidence to support the efforts of the government (HKSAR Labour Department) and non-government bodies (*e.g.* APPIH) in protecting domestic helpers' right in receiving proper accommodation.

## **6.6. OUTREACH DENTAL SERVICE FOR DOMESTIC HELPERS**

This programme not only helped us to understand the oral health of Indonesian domestic helpers, but also allowed us to deliver oral health education and provide basic preventive and curative dental care to this community.

Our dental services were tailor-made to cater the specific needs and address the most prominent oral health issues related to Indonesian domestic helpers. The health talk was aided by multi-media (computer, models, posters and leaflets) and was composed of various elements (talk, demonstration, hand-on practice and discussions). Knowing that domestic helpers are often the carers of children, elders and other dependent people in the employers' families, we have incorporated topics to equip the participants with knowledge on protecting oral health of people under their care. Such approach may indirectly benefit the local population, especially those dependent people who are vulnerable to oral diseases. Under the

non-clinical field setting, we could only provide some basic dental treatments (scaling, restoration and fluoride application), which were focused on preventing and treating most common oral diseases (dental caries and periodontal diseases). Our dental programme was well received and highly appreciated by domestic helpers. This was manifested in their great interests in the programme, eagerness of participation and very positive feedback on our services.

Within our constraints of time, manpower and resources, we could only deliver dental services to a small number of domestic helpers. However, the implementation of this programme may serve as a humble demonstration for the practicality and effectiveness of outreach programmes in this immigrant group.

To promote oral health in this community in a long run, it would be practical and cost-effective to disseminate oral health education materials through some available channels, such as the agencies' offices and the Indonesian Consulate General welcoming programme for new arrivals. Oral health topics can be incorporated into the talks on general health and the health booklet for domestic helpers recently designed by the Hong Kong government (Department of Health and Labour Department).

The oral health promotion among domestic helpers requires efforts from many different sectors of the society. Our programme represents a joint effort of academic institution, local and foreign governments, non-government organizations (NGOs) and the industry. The substantial and continuous involvement of all concerned parties is the key to a healthier domestic helper community in Hong Kong.

## 7. CONCLUSIONS

Based on this project, several conclusions have been drawn:

- (1) The oral health of Indonesian domestic helpers was unsatisfactory. Over 90% of them were affected by dental caries. None of them had healthy gingiva. Almost half (45%) were found with periodontal pockets.
- (2) The oral health behaviours of Indonesian domestic helpers needed to be improved. Despite participants' sound oral health knowledge, positive attitudes, high self-efficacy and reasonable diet and toothbrushing habits, the use of dental floss was rare and the fatalistic view on oral health was common.
- (3) Several socio-behavioural factors may impact oral health. Indonesian domestic helpers tended to start flossing after settling in Hong Kong. Socialization and good living condition were associated with favourable oral health behaviours and better oral health.
- (4) The outreach service is a practical way of delivering basic dental cares to this community. Our project of this kind was regarded as useful and effective by domestic helpers.

## **8. RECOMMENDATIONS**

Our recommendations are as followed:

- (1) The Department of Health should consider delivering oral health education programmes and materials to Indonesian domestic helpers in their own language and incorporate oral health topics into the health booklet designed by the government for domestic helpers.
  
- (2) The Labour Department should review the provision of medical benefits as stated in the standard employment contract of domestic helpers and explore the possibility of extending the coverage to include basic dental cares.
  
- (3) Non-government organizations, social service agencies, religious bodies and employment agencies can contribute by organizing social activities for domestic helpers, improving their living condition and setting up special dental services to provide subsidized dental care (no cost or low cost) to Indonesian domestic helpers in Hong Kong.

## **ACKNOWLEDGEMENTS**

We would like to thank our supervisor Dr. Gao Xiaoli for her advice and guidance throughout the whole project. To us, this programme was an interesting, fruitful and eye-opening learning journey. We enjoyed working closely with one another as a team.

We wish to express our sincere gratitude to the following parties, who have supported our programme in one way or another:

### University of Hong Kong Faculty of Dentistry

Professor Lakshman P Samaranayake (Dean)

Professor Colman McGrath (Dental Public Health Undergraduate Programme Director)

Professor Edward C.M. Lo

Dr. Anthony Wong

Dr. Alex Chau

### Indonesian Consulate General in Hong Kong

Mr. Teguh Wardoyo (Consul General)

Miss Sendra Utami (Consul for Labour)

Other officers

### Asosiasi PPTKI Hong Kong Limited (APPIH)

Mr. Joe Chow (Chairman)

### Industries

Oral B Company

Colgate-Palmolive Company

GlaxoSmithKline Company

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## Appendix I. Ethical Approval



香港大學  
University of Hong Kong

香港大學及醫管局港島西醫院聯網研究倫理委員會



醫院管理局  
HOSPITAL  
AUTHORITY

### Institutional Review Board of the University of Hong Kong/ Hospital Authority Hong Kong West Cluster (HKU/HA HKW IRB)

Address: Rm 901, Administration Block, QMH Tel 2255 3923 2255 4086 Fax 2255 4735

Mr. SL Mak

(Year-4 student)

The University of Hong Kong

04-Mar-11

Dear Mr. Mak,

IRB Reference Number: **UW 11-060**

The HKU/HA HKW IRB is authorized by a joint agreement of the University of Hong Kong and Hospital Authority Hong Kong West Cluster to review and monitor clinical research. It serves to ensure that research complies with the Declaration of Helsinki and acts in accordance to ICH GCP guidelines, local regulations and Hospital Authority and the University policies.

I write to inform that your research application/submission has been approved by an expedited process with details shown below. You are also requested to adhere to the conditions listed.

- Protocol title** : Understanding and Promoting Oral Health of Indonesian Domestic Workers in Hong Kong
- Study site(s)** : As stated in application form
- IRB reviewer** : Professor Virginia Wong, Chairman of the HKU/HA HKW IRB
- Document(s) approved** :
- : 01. Clinical research ethics review application form
  - : 02. Protocol (Version 1; January 28, 2011)
  - : 03. Invitation letter (V2; February 10, 2011) - English
  - : 04. Information sheet and consent form (V2; February 10, 2011) - English
  - : 05. Questionnaire (Version 1; January 28, 2011) - English
  - : 06. Dental Assessment Form (Version 1; January 28, 2011) - English
- Document(s) reviewed** : 07. Short CV of principal investigator

- (Conditions :
1. Do not deviate from, or make changes to the study protocol without prior written IRB approval, except when it is necessary to eliminate immediate hazards to research subjects or when the change involves only logistical or administrative issues.
  2. Report the following to HKU/HA HKW IRB: (i) study protocol or consent document change (use 'HKU/HA HKW IRB RE001F7'), (ii) serious adverse event (use 'HKU/HA HKW IRB RE001F8'). (iii) study progress (use 'HKU/HA HKW IRB RE001F9a')\* (iv) new information that may be relevant to a subject's willingness to continue participation in the study.
  3. Report study progress to HKU/HA HKW IRB at a 12-monthly interval until study closure.)

Yours sincerely,

W. H. Lee

HKU/HA HKW IRB Secretary



## Appendix II. Information Sheet and Consent Form

### Information Sheet for Participants

Thank you for your interest to participate in our dental health Program conducted by fourth-year dental students from the University of Hong Kong Faculty of Dentistry. This Information Sheet explains why this program is conducted and what it will involve. Please read it carefully and ask us if you have any question.

#### **Program and Organizer:**

Understanding and Promoting Oral Health of Indonesian Domestic Workers in Hong Kong  
Faculty of Dentistry, University of Hong Kong

**Significance of the program:** In Hong Kong, there are an increasing number of Indonesian domestic workers. Due to various reasons, seeking dental services are often difficult to them and their oral problems are often neglected. This program will help us to understand the oral health status of Indonesian domestic workers and provide basic dental care services to this community.

**What should you do if you join the program?** Participation in this program takes you half an hour to two hours depending on the treatments you need. After completing a simple questionnaire, you will receive a dental check-up. If necessary, the dentist will give you some basic dental treatments. You will receive advice on how to protect your teeth and a souvenir as an appreciation for your participation. Before you leave, please fill in a feedback form and let us know your comments and suggestions on our program.

**Benefits and Risks:** By participating in this program, you will receive (1) professional advice on how to protect your teeth, (2) free dental checkup, (3) free basic dental treatments, and (4) a souvenir. All the dental work will be done by our dental students supervised by a registered dentist. Sterilized instruments and disposable materials will be used. We will let you know if you still have other dental problems which need to be treated in the clinic on your own cost. If you have a medical condition, such as blood disease or heart disease, it may be triggered directly or indirectly during examination or treatments. However, this risk can be managed, prevented, or reduced if you let the dentist know your medical history prior to examination and treatment.

**Confidentiality and autonomy:** Any information about your participation will be completely confidential. All of your details and information will be identified only with a code number. And your name will never be used in a publication or presentation. Whether to participate in this study is completely up to your decision. You are entitled to refuse to participate in this study and this will not affect your legal rights. You can also withdraw from the program at any time by informing the organizer. Upon withdrawal, your data taken would be destroyed accordingly.

**Who should I call if I have any questions?** Please contact Dr. Gao Xiaoli at 28590481 for information about this program. For independent opinions on the program and the rights of participants, you may contact the University of Hong Kong / Hospital Authority Hong Kong West Cluster Institutional Review Board, who has reviewed this project.

**CONSENT FORM**

**Subject Identification Number:** \_\_\_\_\_

**Program and Organizer:**

Understanding and Promoting Oral Health of Indonesian Domestic Workers in Hong Kong  
Faculty of Dentistry, University of Hong Kong

I hereby acknowledge that:

**Please initial box**

1. I have read and understand the information sheet (on the opposite side of this paper) for the above program and had the opportunity to ask questions.
  
2. I understand that the participation is completely up to my decision and I am free to withdraw at any time, without giving any reason and without my legal rights being affected.
  
3. I, \_\_\_\_\_ (name), will take part in the above program.

_____ Name of Participant	_____ Signature	_____ Date
------------------------------	--------------------	---------------

_____ Name of Investigator	_____ Signature	_____ Date
-------------------------------	--------------------	---------------

**Copies to:**  
Participant  
Researcher's File

**Appendix III.**

**Questionnaire for New Arrivals (Original English version)**

Name: \_\_\_\_\_ Age: \_\_\_\_\_(years) Gender: Female Male

---

1) Highest education level attained:

- No education     Primary school     Secondary school  
 College/university     Postgraduate or above

2) Have you ever lived in any other place besides Indonesia and Hong Kong for more than 6 months?

- No    Yes

<u>Where</u>	<u>When</u>	<u>For what purpose (e.g. study, work...)</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

3) Can you speak Cantonese?

- Not at all     A little bit     Fluently

4) Can you speak Mandarin?

- Not at all     A little bit     Fluently

5) Do you have any family members or relatives in Hong Kong?

- No    Yes (Please specify): \_\_\_\_\_
- 

6) How often do you brush your teeth?

- Never    Less than once a day    Once a day    Twice a day    More than twice a day

7) Do you brush your teeth with toothpaste?

- Yes    No

8) How often do you use dental floss?

- Never    Less than once a day    Once a day    Twice a day    More than twice a day

9) How often do you use mouth rinse?

- Never    Less than once a day    Once a day    Twice a day    More than twice a day

10) How many times do you eat in a day on average (including meals and snacks)?

- On e    Twice    3 times    4 times    5-6 times    more than 6 times

11) Do you smoke?

- No    Yes (Started from \_\_\_\_\_ years of age; \_\_\_\_\_ cigarettes a day at present)

12) How often do you visit a dentist?

- Every 3 months   Every 6 months   Once a year   Only when problem arises   Never

13) What do you think is/are the cause(s) of tooth decay? (You can choose more than one)

- Improper cleaning of teeth   Eating too much sweet food   Eating too much sour food  
Bacteria accumulation   Tooth worm   Heatiness (熱氣)  
Others (please specify \_\_\_\_\_)   Don't know

14) What do you think is/are the cause(s) of gum disease? (You can choose more than one)

- Accumulation of tartar   Bacteria accumulation   Improper cleaning of teeth  
Poor general health   Smoking   Alcoholic drinks   Genetics  
Heatiness (熱氣)   Others (please specify \_\_\_\_\_)   Don't know

15) Do you agree with the statements below?

a) "Dental health is very important"

- Strongly agree   Agree   Neutral   Disagree   Strongly disagree

b) "Tooth loss is a natural process of ageing"

- Strongly agree   Agree   Neutral   Disagree   Strongly disagree

c) "Regular checkup helps to prevent dental problems"

- Strongly agree   Agree   Neutral   Disagree   Strongly disagree

d) "I can control myself not to take too many sweets on most of the occasions"

- Strongly agree   Agree   Neutral   Disagree   Strongly disagree

e) "I can brush my teeth thoroughly even when I am very busy or stressed"

- Strongly agree   Agree   Neutral   Disagree   Strongly disagree

*~ End of questionnaire. Thank you. ~*

## Questionnaire for New Arrivals (Translated Indonesian version)

### Daftar Pertanyaan

Nama: \_\_\_\_\_ Umur: \_\_\_\_ (tahun) Jenis Kelamin: Wanita Lelaki

---

- 1) Tingkat pendidikan tertinggi yang pernah dicapai:  
Tidak bersekolah    Sekolah Dasar    Sekolah Menengah  
Perguruan Tinggi / Universitas    Pasca Sarjana atau lebih tinggi
- 2) Apakah anda pernah tinggal di tempat lain selain Indonesia dan Hong Kong selama lebih dari 6 bulan?  
Tidak    Ya  

<u>Di mana</u>	<u>Kapan</u>	<u>Untuk tujuan apa (contohnya: belajar, bekerja, dsb)</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
- 3) Apakah anda bisa berbicara bahasa Kantonis?  
Sama sekali tidak    Sedikit    Lancar
- 4) Apakah anda bisa berbicara bahasa Mandarin?  
Sama sekali tidak    Sedikit    Lancar
- 5) Apakah anda mempunyai anggota keluarga atau sanak saudara di Hong Kong?  
Tidak    Ya (Harap menjelaskan): \_\_\_\_\_
- 

- 6) Berapa sering anda menggosok gigi anda?  
Tidak pernah    Kurang dari satu kali dalam sehari    Sehari sekali  
Dua kali sehari    Lebih dari dua kali dalam sehari
- 7) Apakah anda menggosok gigi anda dengan pasta gigi?  
Tidak    Ya
- 8) Berapa sering anda menggunakan benang gigi?  
Tidak pernah    Kurang dari satu kali dalam sehari    Sehari sekali  
Dua kali sehari    Lebih dari dua kali dalam sehari
- 9) Berapa sering anda menggunakan cairan pembersih mulut?  
Tidak pernah    Kurang dari satu kali dalam sehari    Sehari sekali  
Dua kali sehari    Lebih dari dua kali dalam sehari
- 10) Berapa kali rata-rata anda makan dalam sehari? (termasuk makanan hidangan dan makanan kecil)  
1 kali    2 kali    3 kali    4 kali    5-6 kali    Lebih dari 6 kali

- 11) Apakah anda merokok?  
Tidak Ya (Sejak umur \_\_\_\_ tahun; \_\_\_\_ batang rokok sehari saat ini)
- 12) Berapa sering anda pergi ke dokter gigi?  
Setiap 3 bulan sekali Setiap 6 bulan sekali Setahun sekali  
Hanya pada saat terdapat masalah Tidak pernah
- 
- 13) Menurut anda, apa penyebab kerusakan gigi? (Anda boleh memilih lebih dari satu)  
Pembersihan gigi yang tidak tepat Makan terlalu banyak makanan manis  
Makan terlalu banyak makanan asam Penumpukan bakteri  
Cacing gigi Panas dalam  
Lainnya (harap menjelaskan \_\_\_\_\_) Tidak tahu
- 14) Menurut anda, apa penyebab penyakit gusi? (Anda boleh memilih lebih dari satu)  
Penumpukan karang gigi Penumpukan bakteri  
Pembersihan gigi yang tidak tepat Kesehatan umum yang buruk  
Merokok Minuman beralkohol  
Keturunan Panas dalam  
Lainnya (harap menjelaskan \_\_\_\_\_) Tidak tahu
- 15) Apakah anda setuju dengan pernyataan-pernyataan di bawah ini?  
 a) "Kesehatan gigi sangatlah penting."  
Sangat Setuju Setuju Netral Tidak Setuju Sangat Tidak Setuju
- b) "Rontoknya gigi adalah proses penuaan yang alami."  
Sangat Setuju Setuju Netral Tidak Setuju Sangat Tidak Setuju
- c) "Pemeriksaan berkala membantu untuk mencegah timbulnya masalah dengan gigi."  
Sangat Setuju Setuju Netral Tidak Setuju Sangat Tidak Setuju
- d) "Saya kebanyakan dapat mengontrol diri saya sendiri untuk tidak makan terlalu banyak makanan manis."  
Sangat Setuju Setuju Netral Tidak Setuju Sangat Tidak Setuju
- e) "Saya tetap dapat menggosok gigi saya secara keseluruhan walaupun saya sedang sangat sibuk ataupun tertekan."  
Sangat Setuju Setuju Netral Tidak Setuju Sangat Tidak Setuju

~ Akhir dari daftar pertanyaan. Terima kasih. ~

## Questionnaire for Non-new Arrivals (Original English version)

Name: \_\_\_\_\_ Age: \_\_\_\_\_ (years) Gender: Female Male

---

1) Highest education level attained:

- No education    Primary school    Secondary school  
College/university    Postgraduate or above

2) Have you ever lived in any other place besides Indonesia and Hong Kong for more than 6 months?

- No    Yes

<u>Where</u>	<u>When</u>	<u>For what purpose (e.g. study, work...)</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

3) Can you speak Cantonese?

- Not at all     A little bit     Fluently

4) Can you speak Mandarin?

- Not at all     A little bit     Fluently

5) Do you have any family members or relatives in Hong Kong?

- No    Yes (Please specify): \_\_\_\_\_

6) How do you usually spend your leisure time in Hong Kong?

- Social gathering    Religious gathering    Shopping    Exercise/sports  
Rest    Others (Please specify): \_\_\_\_\_

7) Do you have your own room in your employer's house?

- Yes    No
- 

8) How often did you brush your teeth?

In Indonesia:

- Never    Less than once a day    Once a day    Twice a day    More than twice a day

In Hong Kong:

- Never    Less than once a day    Once a day    Twice a day    More than twice a day

9) Did you brush your teeth with toothpaste?

In Indonesia:

- Yes    No

In Hong Kong:

- Yes    No

10) How often did you use dental floss?

In Indonesia:

- Never    Less than once a day    Once a day    Twice a day    More than twice a day

In Hong Kong:

- Never    Less than once a day    Once a day    Twice a day    More than twice a day

11) How often did you use mouth rinse?

In Indonesia:

- Never   Less than once a day   Once a day   Twice a day   More than twice a day

In Hong Kong:

- Never   Less than once a day   Once a day   Twice a day   More than twice a day

12) How many times did you eat in a day on average (including meals and snacks)?

In Indonesia:

- Once   Twice   3 times   4 times   5-6 times   more than 6 times

In Hong Kong:

- Once   Twice   3 times   4 times   5-6 times   more than 6 times

13) Did you smoke?

In Indonesia:

- No   Yes (Started from \_\_\_\_\_ years of age; \_\_\_\_\_ cigarettes a day at present)

In Hong Kong:

- No   Yes (Started from \_\_\_\_\_ years of age; \_\_\_\_\_ cigarettes a day at present)

14) How often did you visit a dentist?

In Indonesia:

- Every 3 months   Every 6 months   Once a year   Only when problem arises   Never

In Hong Kong:

- Every 3 months   Every 6 months   Once a year   Only when problem arises   Never

-----  
15) What do you think is/are the cause(s) of tooth decay? (You can choose more than one)

- Improper cleaning of teeth   Eating too much sweet food   Eating too much sour food  
Bacteria accumulation   Tooth worm   Heatiness (熱氣)  
Others (please specify \_\_\_\_\_)   Don't know

16) What do you think is/are the cause(s) of gum disease? (You can choose more than one)

- Accumulation of tartar   Bacteria accumulation   Improper cleaning of teeth  
Poor general health   Smoking   Alcoholic drinks   Genetics   Heatiness (熱氣)  
Others (please specify \_\_\_\_\_)   Don't know

17) Do you agree with the statements below?

- f) "Dental health is very important"  
Strongly agree   Agree   Neutral   Disagree   Strongly disagree
- g) "Tooth loss is a natural process of ageing"  
Strongly agree   Agree   Neutral   Disagree   Strongly disagree
- h) "Regular checkup helps to prevent dental problems"  
Strongly agree   Agree   Neutral   Disagree   Strongly disagree
- i) "I can control myself not to take too many sweets on most of the occasions"  
Strongly agree   Agree   Neutral   Disagree   Strongly disagree
- j) "I can brush my teeth thoroughly even when I am very busy or stressed"  
Strongly agree   Agree   Neutral   Disagree   Strongly disagree



## Questionnaire for Non-new Arrivals (Translated Indonesian version)

### Daftar Pertanyaan

Nama: \_\_\_\_\_ Umur: \_\_\_\_ (tahun) Jenis Kelamin: Wanita Lelaki

- 1) Tingkat pendidikan tertinggi yang pernah dicapai:  
Tidak bersekolah      Sekolah Dasar      Sekolah Menengah  
Perguruan Tinggi / Universitas      Pasca Sarjana atau lebih tinggi
- 2) Apakah anda pernah tinggal di tempat lain selain Indonesia dan Hong Kong selama lebih dari 6 bulan?  
Tidak    Ya  

<u>Di mana</u>	<u>Kapan</u>	<u>Untuk tujuan apa (contohnya: belajar, bekerja, dsb)</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
- 3) Apakah anda bisa berbicara bahasa Kantonis?  
Sama sekali tidak      Sedikit      Lancar
- 4) Apakah anda bisa berbicara bahasa Mandarin?  
Sama sekali tidak      Sedikit      Lancar
- 5) Apakah anda mempunyai anggota keluarga atau sanak saudara di Hong Kong?  
Tidak    Ya (Harap memperincikan): \_\_\_\_\_
- 6) Bagaimana biasanya anda menghabiskan waktu luang anda di Hong Kong?  
Pertemuan silaturahmi    Perkumpulan agaman    Berbelanja    Olah raga    Beristirahat  
Lainnya (harap menjelaskan): \_\_\_\_\_
- 7) Apakah anda mempunyai kamar sendiri di rumah majikan anda?  
Ya    Tidak
- 
- 8) Berapa sering anda menggosok gigi anda?  
Di Indonesia:  
Tidak pernah      Kurang dari satu kali dalam sehari      Sehari sekali  
Dua kali sehari      Lebih dari dua kali dalam sehari
- Di Hong Kong:  
Tidak pernah      Kurang dari satu kali dalam sehari      Sehari sekali  
Dua kali sehari      Lebih dari dua kali dalam sehari
- 9) Apakah anda menggosok gigi anda dengan pasta gigi?  
Di Indonesia:      Di Hong Kong:  
Ya    Tidak      Ya    Tidak
- 10) Berapa sering anda menggunakan benang gigi?  
Di Indonesia:  
Tidak pernah      Kurang dari satu kali dalam sehari      Sehari sekali  
Dua kali sehari      Lebih dari dua kali dalam sehari
- Di Hong Kong:  
Tidak pernah      Kurang dari satu kali dalam sehari      Sehari sekali  
Dua kali sehari      Lebih dari dua kali dalam sehari
- 11) Berapa sering anda menggunakan cairan pembersih mulut?  
Di Indonesia:  
Tidak pernah      Kurang dari satu kali dalam sehari      Sehari sekali  
Dua kali sehari      Lebih dari dua kali dalam sehari
- Di Hong Kong:  
Tidak pernah      Kurang dari satu kali dalam sehari      Sehari sekali  
Dua kali sehari      Lebih dari dua kali dalam sehari

12) Berapa kali rata-rata anda makan dalam sehari? (termasuk makanan hidangan dan makanan kecil)

Di Indonesia:

1 kali   2 kali   3 kali   4 kali   5-6 kali   Lebih dari 6 kali

Di Hong Kong:

1 kali   2 kali   3 kali   4 kali   5-6 kali   Lebih dari 6 kali

13) Apakah anda merokok?

Di Indonesia:

Tidak   Ya (Sejak umur \_\_\_\_ tahun; \_\_\_\_ batang rokok sehari saat ini)

Di Hong Kong:

Tidak   Ya (Sejak umur \_\_\_\_ tahun; \_\_\_\_ batang rokok sehari saat ini)

14) Berapa sering anda pergi ke dokter gigi?

Di Indonesia:

Setiap 3 bulan sekali   Setiap 6 bulan sekali   Setahun sekali

Hanya pada saat terdapat masalah   Tidak pernah

Di Hong Kong:

Setiap 3 bulan sekali   Setiap 6 bulan sekali   Setahun sekali

Hanya pada saat terdapat masalah   Tidak pernah

---

15) Menurut anda, apa penyebab kerusakan gigi? (Anda boleh memilih lebih dari satu)

Pembersihan gigi yang tidak tepat   Makan terlalu banyak makanan manis

Makan terlalu banyak makanan asam   Penumpukan bakteri

Cacing gigi   Panas dalam

Lainnya (harap menjelaskan \_\_\_\_\_)   Tidak tahu

16) Menurut anda, apa penyebab penyakit gusi? (Anda boleh memilih lebih dari satu)

Penumpukan karang gigi   Penumpukan bakteri

Pembersihan gigi yang tidak tepat   Kesehatan umum yang buruk

Merokok   Minuman beralkohol

Keturunan   Panas dalam

Lainnya (harap menjelaskan \_\_\_\_\_)   Tidak tahu

17) Apakah anda setuju dengan pernyataan-pernyataan di bawah ini?

a) "Kesehatan gigi sangatlah penting."

Sangat Setuju   Setuju   Netral   Tidak Setuju   Sangat Tidak Setuju

b) "Rontoknya gigi adalah proses penuaan yang alami."

Sangat Setuju   Setuju   Netral   Tidak Setuju   Sangat Tidak Setuju

c) "Pemeriksaan berkala membantu untuk mencegah timbulnya masalah dengan gigi."

Sangat Setuju   Setuju   Netral   Tidak Setuju   Sangat Tidak Setuju

d) "Saya kebanyakan dapat mengontrol diri saya sendiri untuk tidak makan terlalu banyak makanan manis."

Sangat Setuju   Setuju   Netral   Tidak Setuju   Sangat Tidak Setuju

e) "Saya tetap dapat menggosok gigi saya secara keseluruhan walaupun saya sedang sangat sibuk ataupun tertekan."

Sangat Setuju   Setuju   Netral   Tidak Setuju   Sangat Tidak Setuju

*~ Akhir dari daftar pertanyaan. Terima kasih. ~*

**Appendix IV. Dental Record Form**

**Dental Assessment Form**

Name of participant: \_\_\_\_\_

Record number: \_\_\_\_\_

Gender: \_\_\_\_\_

D.O.B: \_\_\_\_/\_\_\_\_/\_\_\_\_

Examiner:  #1       #2

**DMFT record and CPI record**

<b>Remarks</b>																
<b>Tx.</b>																
<b>Status</b>																
	18	17	16	15	14	13	12	11	21	22	23	24	25	26	27	28
		<input type="checkbox"/>	<input type="checkbox"/>	55	54	53	52	<input type="checkbox"/>	61	62	63	64	65	<input type="checkbox"/>	<input type="checkbox"/>	
	48	47	46	45	44	43	42	41	31	32	33	34	35	36	37	38
<b>Status</b>																
<b>Tx.</b>																
<b>Remarks</b>																

**Visible Plaque Index:**

- Good
- Fair
- Poor

## Dental Treatment Record

### Medical History

	Y	N
1. Are you taking any medicine either from your doctor or of your own accord?		
2. Are you allergic to penicillin or any other medicine, food or substance?		
3. Have you ever had abnormal bleeding after extractions, surgery or injury?		
4. Have you undergone steroid, anti-coagulant or irradiation therapy?		
5. Do you have sudden fainting attacks or giddiness?		
6. Are you an expectant mother?		

7. Have you suffered from any of the following illnesses?

Heart Disease		Stroke		Thyroid disease		Epilepsy	
Hypertension		Kidney Disease		Hepatitis		Rheumatic fever	
Blood disease		Diabetes		Tuberculosis		Asthma	

8. Remarks or drug taken:

\_\_\_\_\_

### Treatment Plan

- OHI
- Scaling
- Topical fluoride: \_\_\_\_\_
- Atraumatic Restorative Treatment (ART): \_\_\_\_\_

### Day Sheet:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Completed by:** \_\_\_\_\_ **Date:** \_\_\_\_\_

## Appendix V. Report to Participants

Name of participant: \_\_\_\_\_ Date of report: \_\_\_\_/3/2011

Dear Participant,

### **Dental Check / Treatment Report**

Thank you for joining our community oral health program for Indonesian domestic workers.

We have checked your teeth and found the following:

- (1) Your oral hygiene status:  Good  Fair  Not satisfactory
- (2) Number of decayed teeth: \_\_\_\_\_
- (3) Gum diseases:  Not found  Mild  Moderate  Severe

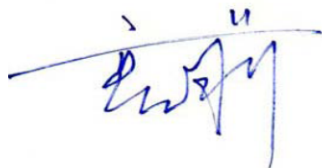
We have provided to you the treatment(s) as follows:

- Scaling (professional cleaning)
- Silver Diamine Fluoride treatment (for arresting tooth decays) on \_\_\_\_\_ tooth/teeth
- Atraumatic Restoration Treatment (filling of decayed teeth) on \_\_\_\_\_ tooth/teeth
- Others: \_\_\_\_\_

### **Recommendations:**

- Improve oral hygiene
- Seek further dental treatment from dentists

Should you have any enquiry, please contact me at 2859 0481.



Dr. Gao Xiaoli

Faculty of Dentistry, University of Hong Kong

**Appendix VI.**

**Feedback Form (Original English version)**



**Feedback Form**

Thank you for joining our community oral health program for Indonesian domestic workers. Before you leave, please kindly complete this feedback form and let us have your comments and suggestions on our program.

- 1. This program helped me understand the health status of my teeth  
Strongly agree Agree Neutral Disagree Strongly disagree N/A
- 2. I learnt the proper way to clean my teeth  
Strongly agree Agree Neutral Disagree Strongly disagree N/A
- 3. The treatment I received is useful to me  
Strongly agree Agree Neutral Disagree Strongly disagree N/A
- 4. The dental team showed great patience to me  
Strongly agree Agree Neutral Disagree Strongly disagree N/A
- 5. The waiting time was short or acceptable  
Strongly agree Agree Neutral Disagree Strongly disagree N/A
- 6. I felt well taken care of in the course of this program  
Strongly agree Agree Neutral Disagree Strongly disagree N/A

Other comments:

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Thank you for your comments and participation!

Dental Team

2011 Community Oral Health Program for Indonesian Domestic Workers

University of Hong Kong Faculty of Dentistry

## Feedback Form (Translated Indonesian version)



### Formulir Tanggapan Balik

Terima kasih telah bergabung dengan program komunitas kesehatan mulut kami untuk penata laksana rumah tangga Indonesia. Sebelum anda pergi, tolong lengkapi formulir tanggapan balik ini agar kami bisa mendapatkan komentar-komentar dan saran-saran anda terhadap program kami.

1. Program ini membantu saya memahami status kesehatan dari gigi saya.  
Sangat Setuju Setuju Netral Tidak Setuju Sangat Tidak Setuju Tidak Be
2. Saya dapat mempelajari cara yang tepat untuk membersihkan gigi saya.  
Sangat Setuju Setuju Netral Tidak Setuju Sangat Tidak Setuju Tidak Be
3. Perawatan yang saya terima sangat berguna bagi saya.  
Sangat Setuju Setuju Netral Tidak Setuju Sangat Tidak Setuju Tidak Be
4. Tim dokter gigi menunjukkan kesabaran yang besar terhadap saya.  
Sangat Setuju Setuju Netral Tidak Setuju Sangat Tidak Setuju Tidak Be
5. Waktu tunggu saya singkat atau bisa diterima.  
Sangat Setuju Setuju Netral Tidak Setuju Sangat Tidak Setuju Tidak Be
6. Saya merasa mendapatkan perawatan yang baik selama jalannya program ini.  
Sangat Setuju Setuju Netral Tidak Setuju Sangat Tidak Setuju Tidak Berlaku

Komentar-Komentar Lain:

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Terima kasih atas komentar-komentar dan partisipasi anda!

Tim Dokter Gigi

Program Komunitas Kesehatan Mulut untuk Penata Laksana Rumah Tangga Indonesia

Tahun 2011

Fakultas Kedokteran Gigi, Universitas Hong Kong