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<th><strong>Title</strong></th>
<th>Dental health education through mass media in Hong Kong: a pioneer attempt on T.V</th>
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<tr>
<td><strong>Other Contributor(s)</strong></td>
<td>University of Hong Kong. Dept. of Periodontology and Public Health.</td>
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<tr>
<td><strong>Citation</strong></td>
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<td><strong>Issued Date</strong></td>
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SOONG HUNG HUNG, HENRY
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DENTAL HEALTH EDUCATION THROUGH MASS MEDIA IN HONG KONG

. . . A PIONEER ATTEMPT ON T.V.

COMMUNITY HEALTH WORK PROJECT

GROUP 5.2 (1985-1986)

DEPARTMENT OF PERIODONTOLOGY AND PUBLIC HEALTH

UNIVERSITY OF HONG KONG

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<td>6</td>
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<td>Results of evaluation</td>
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<td>27</td>
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<td>Conclusion</td>
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<td>Acknowledgements</td>
<td>29</td>
</tr>
<tr>
<td>References</td>
<td>30</td>
</tr>
<tr>
<td>Appendices</td>
<td>31</td>
</tr>
</tbody>
</table>
INTRODUCTION

CHOICE OF PROJECT

Epidemiological data collected from the recent Hong Kong Survey of Adult Oral Health (1984) revealed a symptomatically motivated pattern in the utilization of dental services and a deficiency in knowledge of oral diseases. This is in part due to insufficient public health education by the dental profession. In the past, few attempts have been made to utilize the mass media for planned dental health education. However representatives from the Hong Kong Dental Association did make occasional appearances on TV talk shows to give brief talks on oral health matters.

Television presents a great and unprecedented potential for public health education. It is wide-reaching and versatile. Accurate and comprehensive information can be presented audio-visually in a dynamic fashion.

It was decided to embark upon a health education project using the medium of television.

PROBLEMS ENCOUNTERED IN PROJECT SELECTION

Our present project was not our first brainchild. In fact, two other equally interesting and meaningful projects were conceived but were aborted due to external factors beyond our control.

We view these failures as valuable learning experiences. To be faced with some of the barriers to public health projects is as significant as any impressive success.

The first failure occurred when we proposed to investigate the oral health status of blind people and implement an oral health education programme. This happened to be the theme of a research project of a member of staff, and we were strongly advised not to pursue it any further. The reasons given were: (1) due to institutional policy, the Blind People's Organization may not welcome several groups of people working for them at the same time; (2) 'Trespassing' into the research area of a reseacher working in the same institution is traditionally unacceptable.

After discussion among our group, we decided to withdraw our proposal as we had barely started working on the subject matter. We were in a position to choose a new title and avoid further complications. The monopolization of research areas deserves a second thought. We then commenced on a new project which happened to be our second failure.
The aim of this second project was "To investigate the oral health status of long-term prisoners and evaluate the dental services provided to them". We wrote a letter to the Commissioner of Correctional Services stating our intentions and asked for an interview. We received a letter of rejection after two weeks which stated briefly, that due to institutional policies, we were not granted permission to carry out our project. Uninterested parties who control decision making in an institution can be a great barrier to public health workers.

PROJECT AIM

To increase the dental awareness of Hong Kong housewives.

OBJECTIVES

1. To identify the present concepts, concerns and queries of our target group in relation to dentistry.

2. To answer the queries and impart accurate and comprehensive information on dentistry to the public via TV.

3. To evaluate the effect of our TV programmes.
MATERIAL, METHOD AND RESULTS

TARGET GROUP

Our target group was housewives. They were our choice because housewives usually play a strategic role in a family. They have considerable influence on their spouses and their children in the matters of daily living, of which dental health is one.

STRATEGIES FOR ACHIEVING OBJECTIVES

TO ACHIEVE OBJECTIVE 1 - Identification of present dental concepts, concerns and queries

For the purpose of collecting background data on the existing queries and misconceptions of potential viewers, two pilot surveys were held at Wah Fu Estate using a questionnaire. (Appendix 2)

First pilot survey - Place: WAH CHUI HOUSE
Date: 12 March 1985
Time: 2:45 pm to 3:55 pm
Number of interview records returned = 49

Second pilot survey - Place: WAH KING HOUSE
Date: 15 March 1985
Time: 4:30 pm to 6:00 pm
Number of interview records returned = 119
RESULT OF PILOT SURVEY

Total number of interview records returned 168

Sex Distribution:
Female 110
Male 58

Number of watchers of 'Women Today' 95 (56.5%)

Age distribution

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Total</th>
<th>Watcher</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. under 20</td>
<td>35</td>
<td>15</td>
</tr>
<tr>
<td>2. between 20 and 29</td>
<td>24</td>
<td>10</td>
</tr>
<tr>
<td>3. between 30 and 39</td>
<td>43</td>
<td>30</td>
</tr>
<tr>
<td>4. between 40 and 49</td>
<td>22</td>
<td>13</td>
</tr>
<tr>
<td>5. between 50 and 59</td>
<td>34</td>
<td>20</td>
</tr>
<tr>
<td>6. over 59</td>
<td>10</td>
<td>7</td>
</tr>
</tbody>
</table>

COMMUNITY HEALTH WORK PROJECT GROUP 5.2 (1985/86) ... Page 6
### Occupation

<table>
<thead>
<tr>
<th>Classification</th>
<th>Total</th>
<th>Watcher</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Professional, technical &amp; related workers</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>2. Clerical &amp; related workers</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>3. Sales workers</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>4. Service workers</td>
<td>16</td>
<td>8</td>
</tr>
<tr>
<td>5. Production &amp; related workers, transport</td>
<td>17</td>
<td>9</td>
</tr>
<tr>
<td>6. Retired or unemployed</td>
<td>20</td>
<td>17</td>
</tr>
<tr>
<td>7. Students</td>
<td>34</td>
<td>13</td>
</tr>
<tr>
<td>8. Housewives</td>
<td>66</td>
<td>48</td>
</tr>
</tbody>
</table>

![Graph showing occupation distribution](image-url)
**Education level**

1. Below Primary 35
2. Primary 65
3. Secondary 62
4. Post-secondary 6

**Past dental experience**

<table>
<thead>
<tr>
<th></th>
<th>watcher</th>
<th>non-watcher</th>
</tr>
</thead>
<tbody>
<tr>
<td>no. of people having dental experience</td>
<td>72 (75.8%)</td>
<td>53 (72.6%)</td>
</tr>
<tr>
<td>no. of people have NO dental experience</td>
<td>23 (24.2%)</td>
<td>20 (27.4%)</td>
</tr>
</tbody>
</table>
Source of information on dentistry

(i) How would you rate your present level of information about dentistry?

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Watcher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>36</td>
<td>22</td>
</tr>
<tr>
<td>Inadequate</td>
<td>69</td>
<td>37</td>
</tr>
<tr>
<td>Fair</td>
<td>49</td>
<td>27</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>14</td>
<td>9</td>
</tr>
<tr>
<td>Very satisfactory</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

(ii) Would you like to have your queries and problems concerning dentistry discussed on TV?

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Watcher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object</td>
<td>2</td>
<td>1 (1.2%)</td>
</tr>
<tr>
<td>No preference</td>
<td>19</td>
<td>19 (11.3%)</td>
</tr>
<tr>
<td>Willing</td>
<td>147</td>
<td>147 (87.5%)</td>
</tr>
</tbody>
</table>
(iii) Where did you learn about dentistry in the past?

<table>
<thead>
<tr>
<th>Source</th>
<th>No. of people</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dentist</td>
<td>46</td>
</tr>
<tr>
<td>Newspaper, magazines</td>
<td>53</td>
</tr>
<tr>
<td>TV</td>
<td>85</td>
</tr>
<tr>
<td>Peers, relatives</td>
<td>34</td>
</tr>
<tr>
<td>School</td>
<td>40</td>
</tr>
</tbody>
</table>

![Bar chart showing sources of learning about dentistry](chart.png)
(iv) From what source would you prefer to receive information on dentistry?

<table>
<thead>
<tr>
<th>Source</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dentist</td>
<td>15</td>
</tr>
<tr>
<td>Newspaper, magazines</td>
<td>11</td>
</tr>
<tr>
<td>TV</td>
<td>79</td>
</tr>
<tr>
<td>Peers, relatives</td>
<td>3</td>
</tr>
<tr>
<td>School</td>
<td>13</td>
</tr>
<tr>
<td>No preference</td>
<td>45</td>
</tr>
</tbody>
</table>

![Bar chart showing preferences]

COMMUNITY HEALTH WORK PROJECT GROUP 5.2 (1985/86) ... Page 11
Queries about teeth and dentistry in general

The distribution of respondents according to their watching and having queries is given in the following table.

<table>
<thead>
<tr>
<th></th>
<th>Watcher</th>
<th>Non-watcher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of people having queries</td>
<td>59 (62.1%)</td>
<td>39 (53.4%)</td>
</tr>
<tr>
<td>Number of people having no query</td>
<td>36 (37.9%)</td>
<td>34 (46.6%)</td>
</tr>
</tbody>
</table>

SUMMARY OF SOURCE OF DENTAL KNOWLEDGE AND EXPERIENCE OF DENTISTRY

Most of the past dental experience was confined to experience of such treatment as extractions, fillings, partial or complete dentures, scaling and oral hygiene instruction. Their subjective evaluation of this showed great variation, from satisfactory or fair to very painful. Over 75% of watchers in both surveys had past dental experience. Many of them felt that the treatment was very expensive and they also asked why the government did not expand the dental service.

The vast majority of people (91.7%) still considered that their present information and knowledge in dentistry was poor, inadequate or fair. This implies they are still seeking the answers to their queries.

The majority of people received their information about dentistry from TV (50.6%) and more than a half of the people interviewed prefer to obtain such information from TV, which is the most convenient way.

Over 60% of the watchers had queries on their minds, and also, about 90% of those interviewed were willing to have their queries and problems concerning dentistry discussed on TV.
SUMMARY OF QUERIES AND MISCONCEPTIONS

1. Caries

- what is the cause of dental caries (even though brushing)
- how to prevent dental decay
- can vitamins prevent caries
- why do we have to restore caries
- the way to solve toothache
- why does candy cause dental decay
- what food stuff is good for teeth
- enamel defects
- is caries caused by too much 'heat' inside the body
- would teeth affect digestion in the stomach
- standard remedy for caries
- how to detect caries
- how to treat caries, restore or extract, what is the rationale for treatment
- is some caries hereditary

2. Gum disease, tooth polishing and scaling

- prevention of increased in mobility of teeth
- how to deal with the stain caused by smoking, ?toothpaste
- what is the cause of bleeding gums
- what is scaling
- what is periodontal disease
- what is the correct toothbrushing method
- which toothpaste is the best
- why does gum recession
- what are yellow and dark patches on child/adult teeth
- toothpick
- how can periodontal disease be treated or prevented by home care
- will flossing do harm to teeth or cause gaps
- how to remove calculus and stain
- is scaling = polishing of teeth
- how does calculus form
- teeth sensitive on eating
- foul breath

3. Restoration and root canal therapy

- discoloration (yellowing) of teeth
- fractured root
- is abnormal tooth color due to lack of calcium
- alternatives for teeth replacement
- tooth color: relation to nutrition
- tooth discolouring after fracture >20 years ago
- cervical abrasion
4. Tooth loss and replacement

- loose teeth and association with age
- abutment teeth loose & denture loose also
- why mobile teeth cause pain
- what to do about loose abutment teeth, ?extraction
- loose denture because of bad dentist

5. Children's Dentistry, orthodontics, and wisdom teeth

- how do we deal with a child’s fractured molars
- newly erupted incisors look very big
- how to motivate children to brush their teeth
- how to conserve the teeth for children
- eruption of teeth
- fractured deciduous teeth
- young children more frequently have decay
- pregnancy causes loss of calcium from teeth
- staining (yellow band) of incisor of the child
- how to treat irregular teeth
- impacted wisdom teeth
- crowding after upper wisdom teeth erupt
- will orthodontic treatment cause discomfort
- when do permanent teeth replace primary teeth
- why malocclusion

6. Others

- recurrent apthous ulcers: treatment & relationship with teeth
- why government does not expand the dental service
- school dental care
- is it necessary for regular check-ups
- when and where to consult a dentist
- is the government student dental service providing orthodontic treatment and treatment for fractured incisor.
- no secondary school scheme for dental care
- anatomy of teeth
- tooth development
- malnutrition—cause of bad teeth
- old age means loss of more teeth; eat more things means loss of more teeth; HK is short of dentists
TO ACHIEVE OBJECTIVE 2 - TV production of Health Education Programme

The programme involved in this project is 'WOMEN TODAY' (婦女新聲) which is broadcast from Monday to Friday at 1:15 - 2:15 pm on TVB Jade Network (Cantonese). Housewives are the main target viewers of the programme. A similar programme 'Mainly for Women' is shown on ATV Network 1. The percentage share of viewers is higher for 'Women Today' (79%) than for 'Mainly for Women' (21%).

The audience estimates of Women Today, as provided by an independent market research company AGB McNair HK Ltd., are given below.

May - July Ave (1985) Mon.-Fri., 1:15-2:15 pm

Homes : 1,310,000 x 25% = 337,980 homes
Audiences : 4,846,000 x 11% = 523,260 individuals

A. PRELIMINARY PREPARATIONS

1. Letter to the executive producer of 'Women Today' which stated our project aim and rationale, with a request for an interview. (Appendix 1)

2. To determine suitable programme content based on data collected from the pilot surveys.

The data from these surveys were grouped under the following headings:

a. Basic knowledge and primary prevention of caries.
b. Periodontal disease, scaling and polishing.
c. Teeth restoration and root canal therapy.
d. Results of tooth loss and the possible remedies.
e. Children's dentistry, orthodontics, dental care of pregnant women, problems associated with wisdom teeth.
Basic knowledge and prevention of caries

a. Cause of decay.
b. Prevention of decay
   i) diet selection i.e. decrease sugar consumption;
   ii) correct and regular brushing;
   iii) role of fluoride;
   iv) regular dental check-up.

Periodontal disease, scaling and polishing

a. Periodontal disease
   i) causes of the disease;
   ii) nature of plaque;
   iii) relation between periodontal disease and tooth loss;
   iv) presentation and progress of the disease;
   v) prevention and treatment of the disease.
b. Tooth-brushing
   i) aim;
   ii) method;
   iii) choice of toothbrush;
   iv) other methods of cleaning teeth.
c. Scaling and polishing
   i) nature of calculus;
   ii) aim of scaling and polishing;
   iii) staining of teeth;
   iv) drug treatment in periodontal disease.

Teeth restoration and root canal therapy

a. Reasons for restoration.
b. Different kinds of restoration.
c. Maintenance of restored teeth.
d. Root canal therapy.
   i) indication;
   ii) method.
e. Bleaching of discoloured teeth.

Results of tooth loss and remedy

a. Effect of tooth loss on dentition
   i) esthetic problem;
   ii) functional problem.
b. Remedy with prosthetic teeth
   i) options available;
   ii) pros and cons of the options.
c. Care of prosthesis
   i) home care;
   ii) regular check-up.
d. Reminder: prostheses are never as good as natural teeth.
Children's Dentistry, orthodontics, care of teeth during pregnancy, and problems associated with wisdom teeth

a. Pregnancy
   i) relation between pregnancy and tooth loss.

b. Deciduous teeth
   i) time of eruption;
   ii) care of deciduous teeth;
   iii) effects of early loss of deciduous teeth;
   iv) problems with loose deciduous teeth.

c. Permanent teeth
   i) eruption times;
   ii) symptoms during eruption and their treatment;
   iii) lingual eruption of lower incisors.

d. Orthodontics
   i) indication - aesthetic and functional;
   ii) time for commencement of treatment;
   iii) adult orthodontics.

e. Wisdom teeth
   i) problems associated with them in young adults i.e. pericoronitis, tooth impaction;
   ii) treatment for these problems.
B. PROJECT PROPOSAL TO TVB

After much delay, we established contact with the senior producer of the programme. Objectives were laid down for the proposed interview:

1. The recapitulation of the aim and rationale of our project, including reasons for our choice of this programme.
2. The presentation of the pilot survey results to back up the need for production of a "dental health special" within the programme.
3. To gain general information on the production of the target programme.
4. Discussion of the possibility of our presentation on the show.

The first interview was THE crucial step. The interest of the staff in a commercial TV broadcasting company was obviously different from ours. Their aim of producing a programme is to attract viewers while ours is to educate them. However, successful public health promotion does not stem alone from information provided by the health professionals but rather from the close cooperation between the health profession and the mass media professionals with the common interest of serving the public. Indeed, the first interview with the senior producer was a success.

Some decisions were made as follows:

1. There would be a "dental health special" series for 5 consecutive Tuesdays on 'Women Today' starting from 7th of May to 4th of June.
2. Each presentation would last for eight to ten minutes.
3. There would be a major theme for each presentation, basically following the five headings of the suggested programme content.
4. Each presentation would be recorded prior to broadcasting.

During the meeting, a major query was raised by the senior producer. Our status as dental students brought in the question of authority. They made it quite strongly that a professionally qualified person should act as a presenter in the "dental health special". Their reason being, the confidence that would be instilled into the viewers by such an authority.

The problem was overcome by enlisting the help of Dr L.P.LIM (Department of Periodontology and Public Health). Dr. Lim joined our presentation team and appeared in all five parts of the "dental health special" series. The programme material was also sent to the heads of all Departments in the Faculty of Dentistry for their approval prior to its use.
C. FURTHER PREPARATIONS PRIOR TO TAPING

To determine the format of presentation

The following plan shows the basic format used throughout the "Dental Health Special" series.

First set (street scene)
Opening gag performed by TVB Jade actors.

Second set
Opening by the 1st compere: recapitulation of theme hidden in the gag & introduction of guest presenter - Dr. Lim.

Main theme of the day & important concepts explained by Dr. Lim.

Third set (surgery scene)
Dialogue between the 2nd compere and a student presenter; answering queries raised by the compere & performing relevant demonstrations.

Round-up by the 1st compere and Dr. Lim.

The opening gag was a one minute comic to capture the attention of the audience, to bring liveliness to the presentation and to provide cue for the main theme of the day.

Dr. Lim appeared as the authoritative figure in each presentation to bring out important concepts, such as disease etiology, while the student presenter carried out demonstrations and gave answers to common queries in a genial manner.

To edit programme material into TV script and prepare props for demonstration

A rundown of each presentation was prepared after discussion between the TV scriptwriter and the student-in-charge of the section. The script was then compiled by the TV scriptwriter and handed over to us for modifications. The information that appeared in the amended script was put into an English "Outline of presentation" for submission to Heads of Departments of the Faculty of Dentistry for approval and advice. (Appendix 3)
Relevant slides, pictures, posters, models, and oral hygiene devices were collected for each part of the programmes.

Selection of presenters and rehearsal

Six students were assigned to be the presenters. Together with Dr. Lim, the presentation team carried out rehearsals of the completed script.

Visit to TVB

A visit was arranged for the whole group to watch the production of the 'Women Today' show in the studio of HKTVB prior to our taping.

D. TAPING

The five parts of the "Dental Health Special" were separately recorded at the TVB studio on Tuesday mornings at the arranged time. Each recording session took from one to one and a half hours and the taping was completed uneventfully.

E. PROGRAMME PROMOTION AND PREPARATION OF PAMPHLETS

Starting from one week before actual broadcasting, announcements of the coming "Dental Health Special" were made on the "Women Today" show and during other hours on TVB Jade.

To make full use of the carefully compiled programme material, a pamphlet based on the information therein was prepared. Announcements were again made to invite postal requests for these free-of-charge "Dental Health Special" pamphlets (Appendix 4).

RESULT

BROADCAST

The dates and time of the five "Dental Health Special" telecasts were as follows:

- May 7 of 1985  1:30 - 1:45 pm (Tue)
- May 14 of 1985  1:30 - 1:45 pm (Tue)
- May 21 of 1985  1:30 - 1:45 pm (Tue)
- May 28 of 1985  1:30 - 1:45 pm (Tue)
- Jun 4 of 1985  1:30 - 1:45 pm (Tue)
TO ACHIEVE OBJECTIVE 3 – Evaluation of the TV Programmes

The evaluation consisted of three parts:

1. AUDIENCE SURVEY – To determine the extent of outreach of the programme in terms of rating and demographic distribution of audience.

2. INTERVIEW – To determine the effectiveness of the "Dental Health Special" production as the means to increase awareness and arouse interest in dental care AND viewers' opinion on the format of presentation and the depth of information delivered.

3. POSTAL REQUESTS FOR FREE-OF-CHARGE PAMPHLETS – To determine the demand for the pamphlets.

AUDIENCE SURVEY

The Quantitative evaluation of the 5 consecutive "Dental Health Specials" was based upon the "TV Audience Survey : Weekly Summary" obtained from the Marketing Research Department of the HKTVB. The data were provided by AGB McNair HK Ltd. AGB McNair HK Ltd. is an independent data surveying firm employed by the TV & Entertainment Licensing Authority (Hong Kong Government), HKTVB and ATV (the two commercial TV stations in Hong Kong). AGB McNair HK Ltd. obtain the data through 2 means:

1. By installing electronic devices in the TV sets of 250 selected homes for the purpose of recording the channel tuned-into every quarter of an hour in a period of one week. This method gives the home ratings.

2. By obtaining the cooperation of every member (above age 4) of families in 250 households who complete a diary recording all the programmes that they have seen from 7 am to 3 am the next day, for a period of 2 weeks. By this method, a correction for method (1) is made, and the individual audience ratings and the demographics are obtained.

Our findings are based on the ratings data within the period 1330-1345 every Tuesday from May 7 – June 4, 1985, the time when our programmes were broadcast. The data are first presented in percentages of potential home rating and audience rating (i.e. the number of all possible homes in Hong Kong which possess a TV set and all possible audience above age 4 in Hong Kong).
INTERVIEW

Date: 10/6, 11/6, 18/6 and 17/7 of 1985
Time: 1:30 pm to 2:00 pm
Venue: ORU seminar room and PCU reception area of PPDH.

The respondents were people who came to seek dental care at the PPDH on the 4 days mentioned above. They were invited to watch the video show and be interviewed. The total number of people interviewed was 40.

The respondents completed a questionnaire (Appendix 5) after a 10 minute showing of Part one of our Dental-health educational TV programme. Part one only was chosen, because it contained fundamental concepts on caries etiology and prevention and also because it would take too long if we showed the whole series. The video show was carried out in the Oral Radiology Unit seminar room, on a group basis, while the interview-questionnaire was conducted on a one to one basis, in the Primary Care Unit reception area.

The open-ended questions asked in the interview were used to test for subjective perception. Useful inferences may be made from the responses, but quantitative assessment of awareness was indeed, difficult to achieve.

The following questions were asked in the questionnaire:

1. Have you watched this programme before?
2. What do you think the main theme of this video is?
3. What aspects of the programme did you think were significant, and did you learn anything from the programme?
4. Is there anything in the video that you can't understand or anything that isn't clear enough?
5. Do you have any comments about this programme?

POSTAL REQUESTS FOR PAMPHLETS

To make full use of the carefully compiled programme material. A pamphlet containing the information broadcast in the "Dental Health Special" was prepared. An announcement was made on the programme that the pamphlet would be available upon postal request.
RESULTS

AUDIENCE SURVEY

The average ratings from May to July 1985 are provided for reference:

<table>
<thead>
<tr>
<th>Date</th>
<th>Home rating (%)</th>
<th>Audience rating (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 7</td>
<td>24</td>
<td>9</td>
</tr>
<tr>
<td>May 14</td>
<td>30</td>
<td>13</td>
</tr>
<tr>
<td>May 21</td>
<td>24</td>
<td>10</td>
</tr>
<tr>
<td>May 28</td>
<td>25</td>
<td>11</td>
</tr>
<tr>
<td>Jun 4</td>
<td>26</td>
<td>11</td>
</tr>
<tr>
<td>average</td>
<td>25.8</td>
<td>10.8</td>
</tr>
<tr>
<td></td>
<td>(= 337,980 homes)</td>
<td>(= 523,260 individuals)</td>
</tr>
<tr>
<td>Ave. May-Jul</td>
<td>25</td>
<td>11</td>
</tr>
</tbody>
</table>

Out of 1.3 million homes in Hong Kong, viewers in about one quarter of them watched the programme, while out of 4.8 million of people, about 11% of them were watchers of 'Women Today'.

In the figure headed, General Audience Estimate - Demographics, the shaded areas indicate the proportion of viewers whose TV sets were tuned to our programme. Clearly, more females than males watched it. Of the potential female viewers (housewives), from 12 - 26% watched the programme. The unshaded areas of the bars indicate the proportion of potential viewers whose TV sets were not tuned to the programme. Of these potential viewers, some may have been watching a programme on another channel, and others may not have been watching TV at all.
GENERAL AUDIENCE ESTIMATES - DEMOGRAPHICS

Programme: WOMEN TODAY  
Time: 1330-1345  
Day: Tue (May 7 - Jun 4): Average ratings

No. of Viewers

COMMUNITY HEALTH WORK PROJECT

GROUP 5.2 (1985/86) ... Page 24

AGE RANGE

Potential Viewers

Actual Viewers

- Male
- Female

16.7% 3.8% 1.6% 2.6% 7.4% 11.6% 10.4% 16.4% 23.4% 25.6%
INTERVIEW

The age of the participants varied from 15 to 76 while the average age was about 40. There were 18 males and 22 females and only two of them (1 male & 1 female) had seen the TV programme before.

In response to the question about the theme of the programme, 5 people did not know, 20 only partly understood it, and the other 15 people were able to answer correctly.

The answers to the question, "What aspects did you think were significant" are summarized as follows:

1. selection of toothbrush 13
2. when to change a new toothbrush 11
3. decrease sugar intake esp. between meals 11
4. correct frequency of toothbrushing 8
5. use of fluoridated toothpaste 6
6. fissure sealant 4
7. opening gag 3
8. process of tooth decay 2
9. shouldn’t use salt to brush teeth 2
10. correct brushing technique is more important than frequency of toothbrushing 1

Niney percent of the respondents answered yes when they were asked whether they had learned something new after watching the video.

In response to the question, "Is there anything in the video that you can’t understand or anything that isn’t clear enough", the result was that basically all people could understand it, but 13 people raised further questions such as:

- how to choose toothpaste
- which toothpaste doesn’t contain fluoride
- how to brush teeth
- which toothpaste is the best; is ‘Salz’, good for teeth
- more about fissure sealants
- what kind of food is good for teeth
- what is the optimal length of toothbrush bristles
Finally, in response to seeking approval of the programme, the replies were "quite good" or "very good". Some people gave more detailed comments such as:

- This programme should be broadcast at night time so that more people can watch it and benefit from it.
- It could increase people’s basic knowledge about dental care.
- Some people, although very few, felt that the information was too basic.
- The format of 'Question and Answer' was quite good because it was easy to understand.
- The programme was a bit too short (N.B. this person didn’t know that the programme contained 5 parts).
- The presentation was clear.
- The opening gag was a good idea.
- It would be better if the doctor could speak more fluent Cantonese.

POSTAL REQUEST FOR PAMPHLET

The number of requests amounted to 653.
DISCUSSION

The W.H.O. Expert Committee on Planning and Evaluation of Health Education Services described health education as follows:

"The force of health education is on people and on action. In general, its aims are to persuade people to adopt and sustain healthful life practices, to use judiciously and wisely the health services available to them, to take their own decisions, both individually and collectively, to improve their health status and environment."

The audience of commercial television has a primary interest in "entertainment" that is relevant to one's lifestyle. Exposure to a communication does not guarantee learning and action. It is highly probable that information being sought would have greater impact on a viewer than would information merely offered, since people tend to seek information which supports their own views on an issue or a commitment that they have made. It is with this in mind that we conducted the survey on the viewers' queries in order to cater for the audience's interests and needs.

The transition from unawareness to action is intercepted by numerous hurdles. It must be borne in mind that awareness constitutes only one step in the chain of events leading to behavioural change.

THE KNOWLEDGE AND BEHAVIOUR CHANGE MODEL:

- Unawareness
- Awareness
- Self-interest
- Attitude
- Belief
- Commitment
- Action

Educating the public through TV becomes a complex problem when the viewer's individual background is considered. These factors include personality, education background, socioeconomic status, interests and group influence.

To determine the role of mass media in dental health education, Rosen stressed the need to make the public (1) feel susceptible to dental disease (2) believe dental problems to be serious (3) believe dental treatment to be beneficial, and (4) believe dental treatment to be less disabling than the disease itself.

The application of these principles known as the Health Belief Model, exemplifies the limitations of solely relying on the mass media as a means of communication in dental health education.
The place of mass media in dental health education would appear to be limited to transmitting information which is of value only when the original message, either directly or indirectly, reaches the particular group for which it is intended.

At the same time, the greater the number of variables in the communication process that can be controlled, the greater the chance of communicating desired meanings and achieving desired responses.

Dental Health Education via television can form part of an on-going community based Dental Health Education Scheme. Dental Health related messages can be promoted via TV and other mass informational resources, such as radio and newspapers, while other activities such as health exhibitions, local community campaigns and school programmes should be integrated to form a multidisciplinary approach to the implementation of dental health education programmes.

CONCLUSION

To obtain maximum impact via mass media, Dental Health Programmes must utilize a solid research-design approach. Baseline data collection provides communications personnel with the basic information needed to design appropriate messages. This information should also be of help in determining which media should be employed to reach a specific target group.

The audience interest may be identified through the survey results and the clustering of variables may be used to design a programme which will satisfy audience interest and needs

We fully realized that the impact of this ephemeral "Dental Health Special" would be limited. Yet this project represents unprecedented collaboration between the Dental Profession and TV professionals in the promotion of dental health. Each step in the preparation and production of the complete 50 minute programme series involved close teamwork. We were not charged for the costs of production and telecast time, which could have amounted to a huge sum. The establishment of this working relationship certainly paves the way for future endeavours in TV Dental Health promotion.
ACKNOWLEDGEMENTS

We are grateful to Dr. Davies, Dr. Walker, Dr. Gordon Ho, Miss Dando and Mr. Crabbe for their kind permission to lend us the clinical slides and demonstration material needed during our project. Our secretarial work was assisted by Miss Nerissa Chan, Miss Selina Mo and other secretaries in the Department of Periodontology and Public Health. We appreciated the proof reading of the TV presentation scripts by the heads of the 5 clinical departments. We also wish to express our thanks to the Primary Care and Oral Radiology Units for their co-operation during our evaluation activities. We especially thank TVB for their co-operation during the planning, production and evaluation phases in our project, and in particular Mr. Edward K.W. Chan, the Senior Producer of 'Women Today' and Mr. Lawerence Lau. Finally, we are greatly indebted to the guidance and encouragement by Dr. O.P. Lind, Dr. R.W. Evans and Mr. Kelvin Mak throughout our project, and we extend our warm gratitude to Dr. Lim for her whole hearted participation in the TV programme.
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6th March, 1985

Mr. Li Yu,
Executive Producer of 'Women Today',
H.K.T.V.B.,
3 Broadcast Drive,
Kowloon.

Dear Sir,

We are a group of final year students of the Faculty of Dentistry, HKU. As part of our curriculum, we have to conduct a project concerning dental public health in H.K. After intensive discussion, we decided to present important concepts in dental health, give answers to the most common queries and misconceptions, and introduce new advances in the field of dentistry to the public via television, the most powerful and efficient mass medium.

It is our sincere hope that you will meet us to discuss the project and on the basis of our discussion consider the possibility of the production of a "Dental Health Special" in your programme 'Women Today'.

Our project is closely supervised by our teacher DR. O.P. Lind. Looking forward to your reply.

Yours respectfully,

Chai Yat Chiu, Johnny
group co-ordinator

DR. O.P. Lind
Reader,
Periodontology and Public Health.
Dental Public Health Project
Group 4.2
Pilot Survey Interviewing Record

- Personal Data
  Age
  Sex
  Occupation
  Education level Primary Secondary Post-secondary

- Interview guidelines
  1. Dental experience and subjective evaluation.
     regular visit

  2. Source of information on dentistry.
     (i) ? present information adequate.
        | poor inadequate fair satisfactory v. satisfactory |

     (ii) Would you like to have your queries and problems concerning dentistry discussed on TV?
        | object no preference willing |

     (iii) past: dentist
           newspaper, magazines
           TV
           peers, relatives
           school
           others

     (iv) preference: ___________________

     (v) ? Watcher of 'Women Today': Y/N

  3. Any queries about teeth and dentistry in general.
22nd April, 1985

Professor W.I.R. Davies,
Dean
Faculty of Dentistry,
University of Hong Kong.

Dear Professor Davies,

Re: The Public Health Project of Group 4.2

Our group is working on a public health project which includes a series of presentations on TV. The programme we have selected is "Women's Daily" (TVB Jade) which is a magazine programme designed for housewives. It is broadcasted from 1:10 p.m. to 2:15 p.m., every Monday to Friday, at a time when many housewives have just had their lunch and may be relaxing or washing their dishes while watching TV.

The aim of our project is to increase the dental awareness of the housewives through providing them with accurate and comprehensive information regarding dentistry in an interesting way. We have already agreed with the senior producer of the programme that the information will be presented as a series on 5 consecutive Tuesdays in May, each as an 8 minute special within the one-hour programme. The first of the series is already scheduled to be broadcast on 7th May, this would be taped on 30th April.

We had discuss with the senior producer concerning the format of the presentation. It would follow this line:-

1. Opening Gag: it is in the form of a one minute comic, the purpose of which is to draw the attention of the audience and to introduce them to the main theme of the presentation. It carries no educational purpose in itself. This short opening gag is very essential in such a TV programme.

2. Presentation of the subject material in the form of a chit-chat between the compere and the dentist (Dr. Lim of the Dept. of Periodontology and Public Health).

/3......
3. Presentation of diagrams and oral hygiene technique etc. by a dental student who act as a demonstrator and as an assistant to Dr. Lim.

4. Finally, a summary will be made by Dr. Lim.

Moreover, we will edit the material of the programme into a pamphlet which we will mail to any member of the audience who requests it by letter. The purposes of the pamphlet are:

1. To evaluate the viewer's response.
2. Reinforcing the TV presentation.

To ensure that the information we are going to present is accurate, it would be much better if it were to be backed up and approved on a Faculty basis. Therefore, our prepared information (in English) is being sent to all the clinical department heads for them to read and to make suggestions for any modifications thought to be necessary, so that these can be made promptly.

Our final presentation will be in Cantonese and supplemented by visual aids. The information approved by the Faculty (which is now written in English) will be strictly adhered to and basically unaltered.

Thank you for your kind attention.

Yours sincerely,

[Signature]

Y.C. Chai
Representative of Group 4.2

c.c. Prof. C.E. Renson
   Prof. R.K.F. Clark
   Prof. S.H.Y Wei
   Prof. J.B. Rosenquist
OUTLINE OF PRESENTATION

This is a series of programme designed for answering the common queries about dental diseases, their prevention and treatment. The contents are grouped under the following headings:

1. Basic knowledge and primary prevention of caries.

2. Periodontal disease, scaling and polishing.

3. Teeth restoration and root canal therapy.

4. Results of tooth loss and the possible remedies.

5. Children's dentistry, orthodontics, dental care of pregnant women, problems associated with wisdom teeth.

1. **Basic knowledge and prevention of caries**
   a. Cause of decay.
   b. Prevention of decay
      i) diet selection i.e. decrease sugar consumption.
      ii) correct and regular brushing.
      iii) regular dental check-up.

2. Periodontal disease, scaling and polishing
   a. Periodontal disease
      i) cause of the disease.
      ii) nature of plaque.
      iii) relation between periodontal disease and tooth loss.
      iv) presentation and progress of the disease.
      v) prevention and treatment of the disease.
   b. Tooth-brushing
      i) aim.
      ii) method.
      iii) choice of toothbrush.
iv) Other methods of cleaning teeth.

c. Scaling and polishing
   i) nature of calculus.
   ii) aim of scaling and polishing.
   iii) staining of teeth.
   iv) drug treatment in periodontal disease.

3. Teeth restoration and root canal therapy
   a. Reasons for restoration.
   b. Different kinds of restoration.
   c. Maintenance of restored teeth.
   d. Root canal therapy.
      i) indication.
      ii) method.
   e. Bleaching of discoloured teeth.

4. Results of tooth loss and remedy
   a. Effect of tooth loss on dentition
      i) esthetic problem.
      ii) functional problem.
   b. Remedy with prosthetic teeth
      i) options available.
      ii) pros and cons of the options.
   c. Care of prosthesis
      i) home care.
      ii) regular check-up.
   d. Reminder: prostheses are never as good as natural teeth.
5. Children's Dentistry and Orthodontics, care of teeth during pregnancy, problems associated with wisdom teeth

a. Pregnancy
   i) relation between pregnancy and tooth loss

b. Deciduous teeth
   i) time for eruption.
   ii) care of deciduous teeth.
   iii) effects of early loss of deciduous teeth.
   iv) problem with loose deciduous teeth.

c. Permanent teeth
   i) eruption time.
   ii) symptoms during eruption and its treatment.
   iii) lingual eruption of lower incisors.

d. Orthodontics
   i) indication - esthetic and functional.
   ii) time for commencement of treatment + ? adult orthodontics.

e. Wisdom teeth.
   i) Problems associated with them in young adults i.e. pericoronitis, tooth impaction and treatment.
I. BASIC KNOWLEDGE AND PRIMARY PREVENTION OF CARIES

The commonest oral diseases are caries and periodontal disease. We'll first concentrate on queries concerning the etiology and prevention of caries. Most people accept that frequent intake of sweet food causes decay. More precisely, decay is due to the microorganisms living on the surfaces of teeth, which utilise sugar from our food as their nutrient and at the same time release acids to dissolve away the mineral contents of our teeth, thus causing decay. People would ask, "I don't eat sweets, why do I still have dental decay?" In fact a lot of food contain sugar, such as sweet cakes, chocolate, soft drinks, etc. Sugar is also added into our food during cooking. We obviously cannot avoid all food containing sugar. Therefore, if we can avoid eating sweet snacks, especially sticky types between meals, the incidence of dental caries could be lowered. One would also ask, "Why am I still having dental decay despite brushing twice a day?". It is true that correct and efficient brushing can prevent smooth surface decay and periodontal disease. The problem is that most people don't know how to brush correctly. We'll demonstrate it later on this series of programme. If we carefully examine the surface of a tooth, there are spurs and fissure. The bristles of a toothbrush cannot reach the depth of these fissures. Does it imply that brushing is not useful? The answer is 'No'. When we are brushing, in addition to cleaning most of the plaque off the teeth, we also apply fluoride onto our teeth if the toothpaste contains it. Fluoride will make the enamel surface of teeth more resistant to decay. Concerning those salt or enzyme containing toothpastes, their usefulness on the prevention of decay or periodontal disease is not yet documented.

For queries about the frequency of brushing, it is advocated that we should brush everyday after breakfast and before sleep. A thorough brushing once a day is better than quick and ineffective brushings after every meal.

Toothbrush should be replaced after use for a period of time because deformed bristles cannot effectively remove plaque. The average life span of a toothbrush is about three months. There are a number of brands of toothbrush on the market, how should we choose? Toothbrushes are usually divided into a range of different bristle stiffness and working head sizes. Bristle stiffness, can be subdivided into 'stiff', 'medium' and 'soft'. The 'medium stiffness' is the usual choice, but in case of diseased or delicate gum, the soft ones are better. The working head should be about one inch long. Too long a working head will interfere with the smoothness of motion of the toothbrush inside the mouth. Other designs, such as the pattern of bristles, angulation of the heads, round-end or cut-end bristles are left for individual's preference.

Parents, besides brushing their own teeth, should pay attention to their children's teeth also. Teaching children brushing alone may not be enough because they may not be interested in brushing.
their teeth. Parent's aid to brushing children's teeth should be advised.

No matter how efficiently one uses a toothbrush, plaque will not be removed between teeth. Dental floss is the best device to remove plaque in these areas. Correct and effective use of dental floss will help reducing chances of inter proximal decay. Other devices such as wooden stick, single tufted brush under correct use can also effectively remove plaque. There are a number of mouthwashes on the market. The effectiveness of these agents in removing plaque depends on their active ingredients. However the merits and drawbacks for long term use has yet to be evaluated. Mouthwash is not a substitute for toothbrushing. Having mentioned types of decay prevention measures, there are other professional methods. The commonest one is water fluoridation. Fluoride, in addition to strengthening enamel against decay, also favours remineralization of early decay. Other fluoride containing mouthwash, varnish, gel etc. should be use under the dentist's advice.

Fissure sealant is a new decay prevention material. Teeth may be benefited should they receive such treatment within a year after their eruption. Clinical trials have demonstrated its usefulness, however, we cannot expect its effect to be absolute.

After all, the key to decay prevention is regular dental visit. Similar to every chronic disease, the progression of decay is inconspicuous. Seeking help when toothache is intolerable will probably be too late.
II. PERIODONTAL DISEASE, SCALING AND POLISHING

Periodontal Disease is a chronic inflammatory disease, involving the tooth supporting tissues. The manifestation of which are swollen gum with redness and bleeding on brushing, foul breath, mobile teeth, resorption of alveolar bone. The most severe sequel of which is tooth loss. Actually, it is one of the important causes of tooth loss in adult.

Plaque is the causative agent of this disease. It contains a lot of bacteria which will metabolize the food debris around the teeth and produce toxic material causing inflammation around the gum. Since there is such a close relationship between plaque and periodontal disease, removal of plaque by effective toothbrushing is most important in the prevention of periodontal disease.

Calculus is the hard substance accumulating and adhering to the tooth surface which varies from light yellow to dark brown in colour. It is actually calcified plaque which patients themselves cannot easily remove. The rough surface of calculus causes plaque retention, therefore its removal by dental professionals is necessary in the treatment and prevention of periodontal disease.

Chinese word 洗牙 may mean two things:

1. scaling - removal of calculus.
2. polishing - removal of plaque and extrinsic stain.

They are 2 procedures with different functions.

In the treatment of periodontal disease, drug is useful only under certain conditions. Drugs must be taken according to dentists' prescription for optimal results. Self-medication is to be discouraged.
III. SIMPLE TOOTH RESTORATIONS, ROOT CANAL THERAPY AND CROWNS

1. There are many methods for treating a decayed tooth. Extraction is only the last resort. If possible, a decayed tooth should be restored.

2. **Sign and Symptom of Caries:**

Toothache is the commonest symptom of tooth decay; however, it occurs when the caries is considerably extensive. The very early sign of caries can only be detected by the dentist (usually with the help of radiographs). This is because caries usually develops at fissures and proximally, which is hard for the patient to discover.

In the later stages of caries, when the cavity of decay is quite extensive, there may be food impaction, bad breath and sensitivity of the tooth to cold or hot water/food.

3. **The Progression of Caries:**

Caries will extend from the surface of the tooth (in the enamel) to the dentine and then to the pulp (which composed of blood vessels and nerves). Therefore, caries should be treated as soon as possible.

4. The commonest indication for restoring a tooth is caries i.e. tooth decay. But there are other indications including tooth-fracture and developmental anomalies of teeth.

The normal procedure of simple tooth restoration is like this:

First your dentist will examine your teeth. If he discovers that a tooth is carious, he will then select a particular method of restoration. (Sometimes he may need to take radiographs of the appropriate part of your teeth to aid his diagnosis). To start restoring the carious tooth, the dentist will first remove the decayed part of the tooth with a dental drill. Then he will tidy up the cavity and fill the cavity with a suitable restorative material. Generally speaking, tooth-coloured composite material will be used on anterior teeth while posterior teeth are commonly restored with silver amalgam. But which material is actually the most suitable is depending on each individual circumstances.

In the simplest terms "Root Canal Therapy" is the treatment of the pulp of the tooth in order to preserve the tooth in function in the dental arch. A tooth is composed of a crown portion and a root portion. The pulp of a tooth is the blood vessels and nerves situated in the centre of the crown which extend down the root canal and connected to those in the bone. The commonest causes of pulpal injury are dental caries and trauma to the teeth e.g. tooth-fracture. When
the pulpal tissue is injured, it will become inflamed, moribund and eventually dead; and may then become the dwelling place of bacteria. When this infection spreads to the bone around the root tip a dental abscess is formed. This is sometimes very painful. If this is left unattended, there is the risk of the infection spreading to other places which may be very dangerous.

Before the introduction of "Root Canal Therapy" the only solution to this problem of pulpal injury and infection is the extraction of the tooth eliminating its infected pulp. Today, after the introduction and improvements in the techniques of "Root Canal Therapy", we may be able to save the tooth as an integral part of the dental arch. In such a process the infected materials in the pulp chamber and the root canal are removed, and replaced by clean dental material. As the whole pulp chamber and root canal are filled, the bacteria have no place to dwell, and so the tooth can be saved.

Sometimes even though the tooth is saved, it becomes a little darkened. If it is an anterior tooth it may have a bad effect on the appearance. In such circumstances, bleaching may be of some help.

If a tooth is badly broken down as a result of tooth decay or trauma, we can consider making an artificial crown of the tooth. Whenever a tooth is badly broken down, (no matter the pulp is still vital or non-vital but root-filled), an artificial crown would be indicated to restore the tooth to function both in chewing and in appearance. The crown can protect the remaining tooth tissue by covering the tooth tissue within its rigid jacket. The materials used in artificial crown construction include some high strength metal (e.g. gold) and porcelain. Gold crown is usually used in the molars while porcelain crown is used in more anterior teeth. Porcelain crown has the advantage of its high capability in simulating the shade of natural teeth and it is sometimes used to restore teeth which are greatly discoloured or developmentally defective.
IV. RESULTS OF TOOTH LOSS AND THE POSSIBLE REMEDIES

Many causes may lead to tooth loss, such as accidental trauma, gross caries and advanced periodontal disease.

The first problem of tooth loss is adverse appearance change. It is especially true if the tooth lost is an anterior tooth. Another problem of tooth loss is difficulty in chewing which will reduce your enjoyment in eating. Sometimes the situation would be complicated by the fact that the teeth in front and behind the extraction space move into the space; while the opposing tooth erupts further and jams into the space also. This will probably lead to food impaction and discomfort in chewing. Sometimes this will have an adverse effect on the jaw joints and facial muscles.

There are basically two types of method in replacing the missing tooth with a false/prosthetic tooth:

1. Removable i.e. the patient can remove the false tooth and its retaining components and clean the whole thing which we call denture (Ụọ ọha).

2. Fixed i.e. the false tooth is fixed to the adjacent natural teeth and cannot be removed. This type of prosthetic treatment we usually call "Bridge" (ụọ ọha). Some people prefer bridge to denture because a false tooth which is fixed to the rest of the dentition would give the patient a sense of security (that it is really a part of the body). Actually both removable and fixed prostheses have their advantages and disadvantages.

As a warning, when an extraction space is restored with a prosthesis, it does not mean that all the problems are solved. It is because caries and periodontal diseases can occur at or around the remaining teeth. The presence of the prosthesis makes the cleaning of the adjacent teeth more difficult and in turn makes them more prone to dental diseases. So good oral hygiene and regular dental check-up are very important.

"Concerning oral hygiene, if you are a denture wearer, you should remove the denture from your mouth for cleaning. Rinse your denture and mouth after every meal. You may brush it with soap, detergent and water but never use a stiff brush and an abrasive agent as this can damage the plastic base and teeth. Hold your denture over a basin of water during cleaning as this will provide a cushion in case you drop it."

If you have a bridge, you should clean the bridge with a toothbrush as meticulously as possible, and better still with some special devices such as special bridge-cleaning small brushes. Sometimes a bridge can be cleaned with a dental floss.

Question: I have some old relatives who have already lost all their teeth. They are now wearing "Complete Dentures". Can you tell us why sometimes they become ill-fitting and loose?
Answer: The main reason of complete denture becoming loose is bone resorption of the residual arches. Regular dental check-up is important in this respect and it is prudent to seek dental advice immediately if your complete denture become ill-fitting. It should be kept in mind that bone resorption of the residual ridge is basically an irreversible process. As ill-fitting denture will aggravate bone resorption which in turn make the denture even more ill-fitting, the problem should not be left unattended.

Lastly, denture or bridge at their best cannot totally reproduce the appearance and function of natural teeth. Prevention of tooth loss is better than remedying for it.
V. DENTAL CARE OF PREGNANT WOMEN, CHILDREN'S DENTISTRY, ORTHODONTIC, PROBLEMS ASSOCIATED WITH WISDOM TEETH

Many women have experienced gingivitis, gum swelling, and gum bleeding during pregnancy. Some think that their body calcium is being taken up by the foetus, leading to calcium deficiency that causes caries and periodontal problems. In fact, this is a wrong concept.

The cause of periodontal disease is poor oral hygiene which leads to the accumulation of bacterial plaque around the gums, causing inflammation. Gingivitis will happen to anybody who does not maintain good plaque control, although hormonal changes during pregnancy may affect the manifestation of periodontal disease.

The basic dental care during pregnancy is to maintain good oral hygiene, to go for routine check-up. Simple treatment such as scaling, restorations can be carried out without complications.

Deciduous teeth will erupt when a baby is about half a year old. Many parents neglect the maintenance of young children's teeth, thinking that they will be replaced by a new set sooner or later. In fact, the health of deciduous teeth have substantial influence on the growth of the permanent teeth. Before the permanent teeth erupt, they are embedded in the alveolar bone, underneath their deciduous predecessors. If the deciduous teeth are decayed, infection may spread through the roots and affect the developing tooth germ of permanent teeth leading to deformities.

Early loss of deciduous teeth may result in drifting of adjacent teeth and loss of space for the erupting permanent teeth. Children should therefore develop a good habit of brushing their teeth with fluoridated toothpaste from an early age. If the child is too young to manage a toothbrush, the parent should help brushing their child's teeth so that the child is accustomed to toothbrushing. The avoidance of frequent in-between-meal sugary snacks and regular dental check up is essential for healthy teeth.

Eruption problems is another common worry. When a child reaches the age of 6-7, permanent teeth will start to erupt. Parents should note that the last standing molar that erupts at this age is the first permanent molar. Eruption of lower incisors often causes a lot of anxiety in the mothers. It is not uncommon that permanent incisors erupt lingually prior to the exfoliation of the deciduous teeth. Under most circumstances, this overlapping phenomenon will be self-corrected when the deciduous teeth finally exfoliates by itself.

As more permanent teeth erupt into the mouth, mothers may start worrying about the irregularities of tooth arrangement. Apart from affecting the appearance, irregular teeth may also cause problems in tooth-cleaning, chewing and speech. Orthodontic treatment may be necessary to correct malocclusions that causes functional and esthetic problems. Treatment is often started
during the late mixed dentition stage or the early permanent dentition stage, i.e. at around 11-12, as diagnosis and treatment planning is more accurate and the continuing growth of the child favours tooth movement. The time needed for completion of treatment varies from case to case. Specialist consultation at the appropriate stage is advisable. In fact, adults can also receive orthodontic treatment but treatment time may be prolonged and some people may find it hard to tolerate orthodontic appliances.

When a young person is about 18, 3rd molars may start to erupt. The exact eruption time is highly variable, it is also very common to find people with missing or even absence of 'wisdom teeth'. Problems associated with erupting wisdom teeth are pericoronitis and tooth impaction. Chronic or acute inflammation of the gum tissue overlying a normally erupting or impacted tooth may cause swelling, pain, and fever. Appropriate treatment includes improvement in oral hygiene, hot saline mouth rinses. Drugs should be taken only upon the prescription by dentists and impacted teeth might have to be extracted to avoid future complications.

Some parents may ask their children to shake their deciduous teeth in order to loosen them, thinking that it might induce exfoliation of the deciduous teeth. In fact, this is a redundant procedure as deciduous teeth will normally exfoliates by themselves at the appropriate time. Moreover, shaking teeth by hand might induce discomfort to the child and it is not hygienic.
蛀牙基本認識及預防辦法

蛀牙成因：
依附於牙齒表面的細菌，以食物渣滓中的糖份作
養料，並放出酸素，令牙齒中礦物質溶解，形成蛀牙。
細菌 + 糖份 → 酸 + 牙齒 → 蛀牙

預防蛀牙：
1. 減少每天在飯餐以外吃含糖份食物的次數，特別是
黏牙的甜食。
2. 擦牙
① 作用——消除黏在牙齒上導致蛀牙的細菌。
② 次數——應該每天在早餐後及在睡前各擦一次，
而晚上所擦的一次比較重要。
③ 牙刷的選擇——刷毛是中性的硬度最適當。牙肉發
炎或牙肉疼痛時，軟的刷毛比較
好，刷頭的大小應以約一吋長較
為恰當，因太大的刷頭會阻礙
牙刷在口腔內的活動。其他的設
計諸如刷毛長短，不同的排列形

牙膏的選擇——含有氟素的牙膏對防止蛀牙有幫助，至於酵素及酵對於牙病的療效則未經證實。

5. 擦牙的正確方法：

1. 擦牙應分開上下擦，有系統的從一邊擦到另一邊。
2. 牙齒及牙肉的邊緣是最需要注意清潔的地方。
3. 在擦牙表面近面頰或近舌的一邊時，把牙刷放於牙齒與牙肉邊成45度角。
4. 擦牙最好用打圈動作。
5. 不可忘記牙齒向口腔的一面也要擦。
6. 最後是以打橫方法擦牙齒的咬合面。

專業預防蛀牙辦法：

①自來水已加入氟素（FLUORIDE），氟和牙齒表面的琺瑯質產生化學作用，加強琺瑯質對酸素的抵抗力。
②牙醫把含高陰離子氟素溶液塗上清洗好的牙齒。
③牙膏防蛀——對填入牙表面的縫隙，使引致蛀牙的細菌無藏身之處。

定期檢查，可以及早發現初期牙患，治療程序較簡單。
牙、補牙、蛀牙根

蛀牙的徵狀

牙痛是最常見的徵狀，但到了有牙痛可能已蛀得很厲害了。早期的徵狀只有牙醫詳細的檢查及根據X－光片的分析才可發現，這是因為蛀牙大多數都發生在牙根和牙與牙之間的貼面地方，病人自己難以發現。

蛀牙的進行期，牙洞大了，就可能會藏食物，造成口臭，而且會對冷熱水或食物敏感（即產生疼痛）。

蛀牙的過程

蛀牙的基本結構：（圖⑴及⑵）

既然蛀牙會不斷漫延，所以越早補牙越好。

蛀牙的補救

蛀牙的補救辦法很多，拔牙是最後的解決。若是可能牙齒應盡量補救。

普通的補牙過程

1. 首先將牙齒蛀壞了的部份除去。
2. 將牙齒的洞整理好。
3. 再將塗料補入牙洞。

補牙後不是一了百了，仍然要注意牙齒的衛生。
除了蛀牙之外的其他补牙原因

1. 牙质缺憾
2. 意外崩裂

上牙根是甚麽？

1. 「杜牙根」是對受蠟牙髓的治療，使牙齒得以保存，不用拔掉。

牙髓受傷的原因：(1)蛀牙的後期。
(2)意外牙齒受創。

牙髓受傷的後果：(1)發炎。
(2)牙髓壞死，成為細菌滋長的地方。
(3)當感染漫延到牙骨時，牙癆就會形成。
（一個牙癆可能會令到病人十分之痛楚，面部也可能會腫脹，如果置之不理，感染會漫延到其他的地方，後果可以十分危險。）

4. 牙髓受傷的解決辦法：(1)在未有杜牙根之前，唯一的辦法就是拔牙。
(2)「杜牙根」之發明使牙髓壞了的牙齒可以保存。

5. 杜牙根的過程
(1) 將牙髓與根管徹底清理。
(2) 填入清潔的材料。

牙冠的用途
(1) 態牙因蛀牙或創傷而嚴重損壞，那麼怎辦呢？
在這個情況下，我們可用牙冠來將餘下的牙齒組織保護在它的堅固外套之內。從此，牙齒的功能可以回復，包括用來咀嚼和保持美觀。
(2) 通常在大牙我們會用金來造牙冠，在前面的牙會用瓷來造牙冠，因爲瓷牙可以模倣真牙的色泽，十分美觀，所以瓷牙亦可以用來補救一些變了色的牙，和生長有缺憾的牙齒。
牙周病

是一種慢性發炎現象，發生在支持牙齒的牙肉組織。病徵包括牙肉紅腫，擦牙時流血，牙肉萎縮，口臭以及牙齒鬆動等，它的成因是垢膜的積聚。

什麼是垢膜？

是一層不斷地滋生於牙齒表面而帶黏性的物質，充滿細菌，如果不將垢膜清除，便會引起牙周病。

預防的方法

因為牙周病是由垢膜引起，要預防就要有效地清除垢膜，而最有效的方法是清牙和用牙線。

怎樣用牙線（圖4）

1. 用8至12吋長的牙線結成一圈子。
2. 用尾三隻手指拿著牙線。
3. 頭兩隻手指應相距不超過一吋，以便易於控制牙線。
4. 小心推住把牙線滑入牙縫，慢慢地把它移入垢膜積聚的地方，將牙線環繞牙齒表面成C字形，慢慢上落數次刮淨牙面，然後以相同方法刮淨鄰齒的表面。
5. 慢慢將牙線拉出，依照(4)方法來清潔其他牙縫間的垢膜。

何謂洗牙？

洗牙包括兩個不同的程序

1. 清除牙齒表面的污漬
2. 清除牙石

清除污漬：例如茶漬，煙漬等，對牙肉的健康影響不大，而清除牙石卻對牙肉健康有很重要的作用。

清除牙石

如果不及早把垢膜從牙齒上擦去，它便會硬化，形成牙石，這樣就不能單靠清潔去清潔了，而更多垢膜會積聚在牙石上，令牙周病惡化。牙醫用工具才能清除這些牙石，當牙石被清除後，牙齒便能更容易被清潔。
假牙
假牙之配带及護理

牙齒脫掉後，牙醫往往會替病人鑲上假牙，但這並不是一了百了，正確的假牙護理對假牙及病人整個口腔是非常重要的。

假牙有幾種呢？

假牙通常分為兩類
1. 牙托——是可以除出口腔外清洗的。
2. 牙橋——是依賴牙位前後的真牙把假牙鑲緊在口腔內的。

正確的護理是怎樣？

1. 關於牙托：
   每次進食後：把牙托除出在洗手盆中，用肥皂，洗潔精，或清水沖洗，而不宜用硬毛刷或其他磨損性的物質清洗。另外，用清水漱口，最好能用牙刷擦牙。
   睡覺前：應該把牙托除出，浸在一杯清水中，放在安全的地方，起床清理口腔後再戴上牙托。

2. 關於牙橋：
   因為不能除出，護理要更加用心，除用正確方法擦真牙外，應用特別的小牙刷及牙線幫助清理牙橋週圍的垢膜。
   除了這些清理方法外，不論是用牙托或牙橋，咀嚼時應該左右兩邊的牙齒並用，及避免太熱和太硬的食物。最重要的，是定期到牙醫處檢查，看有否需要作適當的調校，這樣的護理，就能保證病人假牙及整個口腔的健康。
懷孕婦女的口腔護理
在懷孕期間，牙肉發炎，流血是常見的事，而蛀牙也會增加。這是因飲食習慣的改變（如吃酸性食物），及身體內分泌的轉變。所以婦女在懷孕初期，應先到牙醫接受口腔檢查和洗牙，保持口腔清潔。

兒童的牙齒保健
乳齒對恒齒的影響
(1) 蟲壞的乳齒可能令底下的恒齒受感染，引致恒齒有缺憾（圖5）
(2) 倘若乳齒過早脫落，附近的牙齒就會移動，原来的空位就會縮小，當恒齒長出來的時候，就會出現不整齊和擠迫的現象。

兒童如何護理牙齒
(1) 少吃含糖份的食物。
    減少吃糖類食物的次數。
    避免在飯餐間吃糖。
(2) 自少養成早晚刷牙的習慣。
    用含氟（FLUORIDE）的牙膏。
    倘若幼童不懂擦牙，家長可以幫助孩子擦牙，從中作指導。

兒童換牙須知
6-7歲開始換牙，由下頜的門牙開始。
通常乳牙會隨著恒齒的生長而自動脫離，而不必要將乳牙拔掉。倘若過了一段時間乳牙還不鬆脫，就應該請教牙醫。

箍牙
箍牙即是牙齒矯正，是將不整齊的牙齒用「牙箍」來矯正。
倘若需要箍牙，最好是在十一、二歲左右的年紀開始，至於所需的時間，要視乎個別情況，通常是1-2年。
成人也可以箍牙，但需時較長。
智慧齒的問題

智慧齒是第三隻大臼齒，通常上、下、左、右各有一隻，共四隻，但有些人是少於四隻，甚至沒有。

智慧齒通常在十八歲至廿四歲之間長出。

很多人智慧齒不能長出，原因是下顎骨不夠大，以致智慧齒被前面的牙齒頂着，這樣的智慧齒很容易引起牙肉發炎，甚至口腔、面部腫脹，徹底的治療方法就是將它們拔掉。（圖6）
EVALUATION INTERVIEW

DATE:
SEX:
AGE:

1. 你以前有没有看过这节目？

2. 你认为刚才播出片段的主题偏向？

3. 节目内容哪些对你觉得有用，你有学到的新知识？

4. 节目中有意见的部分你希望它改向或改进什么地方？

5. 你对这一期的节目有何批评或建议？