WORLD HEALTH ORGANIZATION
REGIONAL OFFICE FOR THE WESTERN PACIFIC

FINAL REPORT
FIRST REGIONAL COURSE IN
PUBLIC HEALTH DENTISTRY
1 May - 30 June 1975
Held in Singapore and Malaysia

Manila, Philippines
August 1975
FINAL REPORT ON THE FIRST REGIONAL COURSE
IN PUBLIC HEALTH DENTISTRY

Singapore and Malaysia
1 May to 30 June 1975

by

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Regional Office for the Western Pacific
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1. OBJECTIVES

The general objective of the Course was to give key dental health workers theoretical and practical experience in the basic elements of dental public health practice in relation to on-going programmes, and a general view of the training and utilization of professionals and dental auxiliaries for the delivery of dental services.

The specific objectives of the Course were:

1.1 To explain the principles of the establishment, organization, administration and evaluation of a public dental health programme.

1.2 To discuss the place of a dental service in the total health programme of a country and areas for integration.

1.3 To provide practical experience in the establishment and maintenance of a dental care service (within a functioning health service and as a separate service).

1.4 To describe alternative approaches to the following functions of public health dentistry:

   (a) Prevention;

   (b) Dental health education;

   (c) Delivery of dental services.

1.5 To provide practical experience in the collection of basic epidemiological data for the purposes of planning and evaluation of a dental health programme.

1.6 To demonstrate particularly the preventive aspects of a community dental health programme.

1.7 To demonstrate the mechanics of mounting and carrying out a community health education campaign on a specific topic.

1.8 To demonstrate the mechanics of organizing and maintaining preventive programmes for dental health in captive groups such as schoolchildren and the public in general.
2. ORGANIZATION

This First Regional Course was organized by the World Health Organization and hosted by the Governments of Singapore and Malaysia. The Singapore sessions were held from 1 to 24 May and from 23 to 30 June, and the Malaysian ones from 25 May to 23 June 1975.

Thirty-five topics were dealt with over a two-month period. The activities included formal lectures, demonstrations of programmes on site, discussions, workshops, seminars and an epidemiological survey exercise in a village where there were neither dental services nor established maternal and child health services. The results of the survey, although the population sample was not representative, formed the basis of discussions for planning dental health programmes (Topics 32 to 35).

Eighteen dental officers and four dental therapist tutors or supervisors from 14 countries and areas in the Western Pacific Region participated in the Course. Seven nominees from South Viet-Nam, Cambodia and Western Samoa were unable to attend. The participants are listed in Annex 1, with illustrations in Annex 5.

Sixty-three reference documents were made available at the Course (Annex 4).

The teaching staff provided by WHO were: four consultants recruited for specific topics; five temporary advisers from the host countries; the Chief of Dental Health from WHO Headquarters in Geneva, who dealt mainly with the health planning sessions; the dental officer of the inter-country project for dental health advisory services, who was also the Course Director; a WHO dental therapist tutor from Saigon. Other main resource personnel provided by the Governments of Singapore and Malaysia are listed in Annex 2.

Transport to the demonstration sites was provided by the Governments of both countries. A national dental exhibition and a national oral health contest were mounted by the Ministry of Health of Singapore during the last week in June.

3. TRAINING PROGRAMME

A programme of activities with 36 topics was issued to the participants as Information Bulletin No. 4, together with a day-to-day diary of activities showing the sites for the lectures, field visits

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1 Now reassigned to Papua New Guinea.
and demonstrations with the responsible officer in charge as chairman, coordinator or contributor. Also issued to participants was a compilation of 12 working papers. Ad hoc changes were made in the course schedule where necessary. A detailed programme of subjects to be covered and supplementary notes were issued by the contributors prior to presenting their topics. The course schedule is presented in Annex 3 and the list of working papers in Annex 4. Three tables which served as country information reports are presented in Annex 7.

The working hours were generally from 0800 to 1200 and 1330 to 1630 from Monday to Friday. Only morning sessions were held on Saturdays.

3.1 Dental services within an organized health service

The topics of basic principles in the organization and planning of public health services, public health and management science, the vital issues faced today, delivery of health care systems and training of public health teams formed the basis for a series of lectures intended to provide background information and to stimulate individual thinking.

The participants were given information on general health management so that they would appreciate that the organization of dental services was within the framework of an existing health service. This was to help them in their own thinking during the discussion of each of the later topics. Field visits in Singapore and Malaysia served to illustrate the principles of organization and planning of dental services defined during the lectures.

3.2 School dental services

The use of operating dental auxiliaries was amply illustrated in the delivery of dental care to schoolchildren. Modified incremental dental care, together with the delineated responsibilities of the dental officer and the school dental nurse, were illustrated in Singapore and Malaysia. The merits were demonstrated of various types of school dental clinics: i.e., those in separate "huts" on the school premises and those within the school building itself.

3.3 Preventive programmes

Techniques of preventive dentistry appropriate to the countries represented were discussed in detail. Greater emphasis was given to periodontal disease so that participants who had hitherto been concerned with caries control alone would appreciate the need for preventive programmes for control of such disease.

3.3.1 Periodontal disease

Illustrated lectures were given on the need for plaque control. Notes were issued containing sample plaque scores, dietary record and analysis and health record sheets. Periodontal disease control and
treatment were also dealt with. The participants were given a
gingivectomy exercise using waxed-up models set in the jaws of phantom
heads prepared by the consultant. As the participants worked in pairs,
those who had not previously carried out a gingivectomy acquired
sufficient competence to apply the technique in suitable cases on their
return home. The pairing of professionals and auxiliary personnel also
enabled those with experience of periodontal surgery to assist those
without this experience.

3.3.2 Dental caries

The need for routine dental care was stressed. The importance of
assigning a patient recall interval designed to cope with the incidence of
dental disease in the country was demonstrated during field visits and
lectures.

Mass preventive measures:

(a) A visit was made to the waterworks in Singapore, and the
method of fluoridation of reticulated water supplies was studied by the
participants. The current status of the use of fluorides for controlling
dental caries was discussed.

(b) Alternative methods of fluoride therapy applied in cases
where water fluoridation was not feasible, were seen. Of special interest
was the mouthrinsing programme with weak solutions of sodium fluoride,
demonstrated in selected schools in Malaysia. This method calls for use
of the services of classroom teachers where possible, with a school dental
nurse supervising the classroom activity. The mechanics of organizing a
fluoride mouthrinsing programme was demonstrated.

3.3.3 Dental health education

Present day concepts of dental health education, the need for a
method of evaluation of dental health education activities, deficiencies
of traditional approaches, new approaches, problems, objectives, types
and methods of activities and funding for dental health education were
demonstrated in Singapore. Demonstrations were also arranged on the
production of materials and exhibits and the organization of dental
health contests on a national level at the Dental Health Education Unit
in Singapore. In Malaysia, classroom activities of school dental nurses
and collaboration with school teachers were demonstrated.

The participants were able to see a national dental health
education exhibition in the People's Park Complex in Singapore and
witness the public judging of a oral health contest, arranged by the
Dental Division of the Ministry of Health. (This annual event was held
earlier in the year by the Government for the benefit of the participants.
Some selected exhibits are presented in Annex 9.)
3.3.4 Organized classroom toothbrushing

Classroom toothbrushing was seen both in Singapore and Malaysia. This activity was supervised by teachers in the school grounds mainly during the morning break in Singapore, and by school dental nurses in Malaysia. In the rural areas of Malaysia where water fluoridation had not commenced, mouthrinsing with weak solutions of sodium fluoride was integrated with the routine toothbrushing programme.

3.4 Manpower production

The training of dentists and operating dental auxiliaries was seen in Singapore and Malaysia. Of particular interest was the training programmes for operating dental auxiliaries and dental laboratory technicians. Post-basic educational facilities in Singapore for dentists were described by the responsible officers in charge of the programmes.

The training and utilization of dentists and their supporting personnel in countries in the Region were outlined and illustrated with colour transparencies by the writer under the appropriate topics.

Participants appreciated the need to develop training for operating dental auxiliaries in their countries either in a formalized programme or through on-site training.

Special emphasis was given to the need for training of existing dental personnel or new personnel for the maintenance and repair of dental equipment.

3.5 Epidemiology and biostatistics

There was a brief presentation on the role of biostatistics in biomedical investigations, the elements of analytical epidemiology, sampling methods, human and logistic problems in health surveys, the assessment of the health of a community, data summary, the role of the computer in data processing and critique exercises, by the head and staff of the Department of Social Medicine and Public Health of the University of Singapore. This presentation formed the background for the later training of the participants in the use of standardized methods of examination and diagnostic criteria for the conduct of an oral health survey, and seminars on dental health planning.

3.6 Conduct of an oral health survey

The participants were divided into five teams of four led by a consultant and four local dental public health officers. Calibration training was given (i) to emphasize the importance of uniformity in the interpretation and application of criteria on the various conditions to be observed and recorded, and (ii) to encourage each examiner to examine according to a consistent standard and to minimize variations between examiners.
Participants were given the experience of conducting an oral health survey of children and adults living in a rural environment without dental services or organized health services. Kampong Suharto in Tanjong Malim was selected by the Malaysian authorities for this purpose.

For the first time the oral health survey included consideration of the treatment required in the sample surveyed. Individual results were consolidated into team summaries and the participant leader of each team presented a verbal report to a plenary session. The data from each group were in turn consolidated into a set of 16 tables showing the overall state of oral health of the community surveyed. The data were then used as the basis for the final week of seminar-type discussions on planning.

3.7 Planning for dental services and manpower

The objective of the combined topics 32 to 34 was to demonstrate a system of planning, decisions and estimates using epidemiological data collected. These seminar-type exercises conducted by Dr David Barmes related to:

(a) Integration with health planning activities and building of measurable goals for evaluation in each dental health programme.

(b) Devising a five-year plan with specific goals and means of evaluation in five areas in order of priority: (i) prevention (using dental and medical auxiliaries, school teachers); (ii) demand and emergency services (overall relief of pain using medical auxiliaries, traditional practitioners as well as dentists and their auxiliaries); (iii) systematic care (in primary schools using dental auxiliaries and dentists); (iv) manpower production (estimating and projecting needs of the country and devising local training whenever possible); (v) evaluation (testing and demonstration relevant to each programme area). The problems and constraints of planning were covered in the planning exercise using a five-year plan of another country as an example.

In spite of fatigue and the time factor, the participants seemed to derive great satisfaction from the planning exercises in the Course and expressed interest in utilizing the methods they had learnt when they returned to their countries. The consultants felt that future survey and planning exercises should be held earlier in the Course and not towards the end.

Opportunity was taken by the writer for up-dating of the country information with the assistance of participants and consultants. This information is presented in Annexes 7 and 8.

3.8 Observation visits

In Malaysia and Singapore, observation visits made to successful on-going programmes, including visits to the various types of school dental clinics (Singapore and Malaysia), dental clinics manned by dental
nurses and dentists at health centres or sub-centres (Malaysia), and the dental faculties and dental auxiliary training institutions of both countries. The methods of delivering dental care services to urban and rural areas and the periphery were observed. The "lightning dental squad" concept of delivering dental care to the periphery using a team consisting of a dental officer and two school dental nurses was noted with interest. This system was different from that based on a mobile dental clinic, in that only portable equipment especially selected for the purpose was used. Jeeps were used for transporting staff and equipment to schools inaccessible by the mobile dental clinics.

4. DISCUSSIONS

Throughout the Course, every attempt was made to maintain a dialogue between the participants and between the participants and the consultants. Two groups of activities covering a number of listed topics elicited the maximum amount of audience participation.

4.1 Topic 23

A formal workshop was held where six pre-agreed questions on dental care delivery were presented and discussed, and group decisions were arrived at. It also served as an exercise for teaching a method of conducting workshops as a tool for decision-making and for resolving difficult problems. The consultant for this topic defined the requirements for a workshop with slides and handouts. The workshop also gave the WHO Secretariat the opportunity for deciding how the five groups should be composed for the field exercises which were organized later on.

4.2 Topics 27 to 34

These topics included calibration exercises, oral health and treatment requirements, survey and health planning seminars for two weeks of the Course. They provided a basis for frank discussion and dialogue between participants and between participants and consultants. Many observations were made by the consultants and WHO Secretariat, some of which are reported under section 5 (Evaluation).

5. EVALUATION OF THE COURSE

5.1 Selection of participants

The Governments were invited to nominate candidates, in some cases serving dental officers and in other instances senior dental therapist supervisors or tutors in addition to dental officers. In two
instances, dental officers were nominated by the Governments instead of operating dental auxiliaries. The participants themselves were nevertheless well-suited for a course of this nature and were ideal recipients of this learning experience. They were able to identify their countries' needs in relation to the topics presented. Two of the dental officers experienced in epidemiology found new areas for learning as the survey exercise with the "treatment requirements" component had not been organized anywhere else previously. The consultants were able to cope adequately in spite of a slight language difficulty with two of the participants.

5.2 Impact on participants

The way in which the participants apply what they have learnt at the Course on return to their own countries, would constitute the real impact of the Course. This evaluation should be the basis of a special study in the future.

During the discussions mentioned under section 4, it was observed that the Course was effective in motivating the participants towards modern approaches in dental care delivery and planning of dental services and programmes in the context of a country's needs and problems.

All 22 participants completed the Course and were awarded attendance certificates by the Regional Office for the Western Pacific of the World Health Organization.

5.3 Evaluation by the participants

Two questionnaires were completed by the participants at the end of the Course. Questionnaire No. 1 dealt with the administrative aspects and Questionnaire No. 2 with the technical aspects of the Course. The analysis of both questionnaires was undertaken by Professor G.N. Davies and is presented here.

Analysis of the replies to Questionnaire No. 1 (Administrative) leads to the following conclusions:

(a) Travel arrangements and physical arrangements at the Course sites were very satisfactory.

(b) There was some criticism of the standard of accommodation but the majority classified it as adequate to excellent.

(c) The amount of free time available was satisfactory.

(d) The majority agreed that the length of the Course was adequate. One thought that it was too short and two thought that it was too long.
(e) The schedule and working hours were regarded as appropriate. Only one participant considered the schedule was too crowded. However, in the answers to the second questionnaire, attention was drawn to the crowded schedule in the last week.

(f) The information bulletins were greatly appreciated.

(g) Library and reading facilities were regarded as reasonably adequate although there was no indication of the extent to which they were used.

(h) Documentation on the subjects covered was regarded as excellent to satisfactory and there was a very satisfactory interaction between participants and between participants and the staff.

(i) There was general agreement that the leadership of the Course was outstanding. Indeed the only critical comment came from a participant who felt that the travel should have been first class and that a higher standard of accommodation should have been provided.

The personal comments are somewhat more revealing than the replies to the checklist. It is clear that all participants derived considerable benefit from the Course and that they enjoyed it. Many regarded it as stimulating and expressed the hope that they could obtain such intellectual and technical refreshment on a more regular basis. Despite the answers to the checklist it was clear that several of the participants found the travel to different sites burdensome and that the schedule which included weekend work was tiring and reduced their ability to concentrate at more formal sessions. The opportunity to share ideas and discuss common problems with other participants and staff was greatly appreciated. All participants recognized the complexity and difficulty of organizing a course of this nature and were grateful for the efficiency and courtesy with which the administrative arrangements were made and for the hospitality of the host countries. The inclusion of dental auxiliaries was appreciated.

The replies to Questionnaire No. 2 (Technical) show quite clearly that the participants learnt a great deal from the Course and found it interesting, stimulating and very valuable. All of them indicated that they would be willing to reply to a follow-up questionnaire if one were sent to them in about one year's time. Appreciation was expressed for the opportunity to exchange knowledge and experience with other participants and staff. For the most part the objectives of the Course and expectations of participants were attained.

It is encouraging to note that most of the topics in the Course were considered to be satisfactory. The following topics are listed in order of frequency of mention: Calibration and dental survey
exercise (13), dental health education (7), training and utilization of
 dental auxiliaries (6), principles of planning and their application (4),
 sharing of knowledge and experiments with people from other countries (3),
 school dental services and other health programmes (2), epidemiology and
 biostatistics (2), concept of equal relationship between dentists and
 auxiliaries (2), fluoridation and other uses of fluoride (2), workshop
 on dental care delivery (2), keeping up-to-date in recent advances (1),
 preventive measures (1), integration of dental services in general health
 services (1), undergraduate education (1) and visits to clinics (1).

There were no serious criticisms of the content of the Course.
Four participants were critical of the repetitive nature of the visits to
health centres and clinics, particularly when extra travelling was
involved. Such criticism needs, however, to be seen in perspective. When
more than one country is requested to show the nature and extent of its
services some duplication is inevitable. The interest of the respondents
in epidemiology and biostatistics is reflected in the fact that several
suggested that more time should have been devoted to these subjects.

In answer to the question on the extent to which the Course would
be reflected in plans for development and improvement of dental treatment
and prevention in their own countries, participants gave somewhat vague
replies. Several acknowledged that the Course would result in a general
overall improvement in the quality of their dental services. Others
referred specifically to promoting dental health education and the use
of fluorides in the prevention of dental caries, as well as the training
and employment of dental auxiliaries. The largest number of positive
responders indicated that they would commence an oral health survey.
The last week in Singapore was considered to be valuable because despite
the fact that a lot of extra work was required, it enabled participants
to appreciate the problems involved in analysing results and to
understand the way in which such data could be used for evaluation and
planning purposes. However, attention was drawn to the fact that this
important feature of the Course was crowded into the final week when
participants were tired. Appreciation was expressed for the cooperation
and helpfulness of officers of the Host Governments and of the WHO
consultants, secretariat and temporary advisers.

Some participants expressed the hope that WHO would assist them
to convince their Governments of the need to expand and upgrade the
existing dental services. Others mentioned that they had developed a
significant increase in their confidence to define more clearly the
nature of the dental problems and to make plans for the betterment of
oral health in their home countries.

A considerable number of topics were suggested for discussion at
future courses or seminars. These included dental health education, the
training and use of dental auxiliaries, epidemiology and biostatistics,
the delivery of dental services, the conduct and interpretation of oral
health surveys, conservative dentistry, periodontics, orthodontics, oral
survey, maintenance of dental equipment, preventive dentistry, dentistry
for children, public health administration, leadership, management and
teaching methods.

Such a wide range of proposals suggests the need for regular
refresher courses for public health personnel. Several participants
stressed such a need especially for staff working in small isolated
communities where consultation and discussion between professional
colleagues is very difficult if not impossible. The hope was expressed
that such courses would be held regularly in future and that auxiliaries
as well as dentists would be able to attend.

Summaries of the replies to the questionnaires (checklists) are
presented in Annex 6.

6. ACKNOWLEDGEMENTS

The Governments of Singapore and Malaysia are thanked for their
excellent arrangements and fine hospitality in hosting the First Regional
WHO Course in Public Health Dentistry.
ANNEXES

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ANNEX 9 - SELECTED ILLUSTRATIONS OF THE NATIONAL DENTAL HEALTH EXHIBITION MOUNTED DURING THE "DENTAL HEALTH WEEK" IN SINGAPORE
ANNEX 1

LIST OF PARTICIPANTS, 1975

Dr Philo A. Jennings (American Samoa), Clinical Dentist, In charge of School Dental Services, I.BJ Tropical Centre, Pago-pago.

Dr Kaa Henry (Cook Islands), Director of Dental Services, Health Department, P.O. Box 106, Rarotonga.

Dr Matakele Ramatang (Gilbert and Ellice Islands), Dental Officer, Ministry of Health and Welfare, Tarawa.

Dr William C. Siemons (Guam), Public Health Dentist, Department of Public Health and Social Services, Agana.

Ms LEUNG Cheuk-ha (Hong Kong), Dental Nurse Tutor, Dental Sub-Department, Medical and Health Department.

Dr WONG Pak-yiu (Hong Kong), Dental Officer, Dental Sub-Department, Medical and Health Department.

Dr John Bae KIM (Korea), Assistant Professor, Department of Preventive Dentistry, College of Dentistry, Seoul National University, Seoul.

Dr Chung Suck LEE (Korea), Chairman, Department of Dentistry, Ewha Medical Center, College of Medicine, Ewha Women's University, 72 Chongro 6-Ka, Seoul.

Dr Tae Won LEE (Korea), Senior Staff of Dental Surgery, National Medical Center, Seoul.

Dr Siona Talagi (Niue), Senior Dental Officer, In charge of Dental Services, Health Department, Niue Island.

Dr Moi No Tapealava (Tonga), Acting Chief Dental Officer, Health Department, Vaiola Hospital, Tofoa.

Dr Momotaro Lanitulok (Trust Territory of the Pacific Islands), Dental Officer, Department of Health Services, Majuro, Marshall Islands.

Ms Katsumi M. Taima (Trust Territory of the Pacific Islands), Senior Dental Nurse, Koror, McDonald Hospital, Palau, Western Caroline Islands.

Dr Romeo M. Carreon (Philippines), Regional Health Officer, No. 3, Department of Health, San Fernando, Pampanga.

Dr Aquilino C. Rimorin (Philippines), Bureau of Dental Health Services, Staff Dentist Research Section, Department of Health, Manila.
Annex 1

Dr (Capt) Ernesto T. Gotos (Philippines), 5 Pipit Street, Villilia Subdivision, Tandang Sora, Quezon City. Dental Officer.

Dr Stephen Poawai Pouru (Papua New Guinea), Dental Officer, Port Moresby Dental College, Boroko, P.O. Box 1881.

Mr Ao Bue (Papua New Guinea), Senior Tutor Dental Therapist School, Port Moresby Dental College, Boroko, P.O. Box 1881.

Dr (Mrs) Jiko Fatafehi Yasa (Fiji Islands), Dental Officer, In charge of Nausori Dental Clinic and School Dental Services, Nausori.

Mrs Susan A. Herman (Fiji Islands), Suva Dental Centre, CWM General Hospital, Suva. Dental Therapist Tutor.

Dr Baetalua Taluomea (Solomon Islands), Dental Officer, Ministry of Health and Welfare Dental Clinic, Box 349, Honiara.

Dr Khoo Swee Har (Malaysia), Senior Dental Officer, Government Dental Clinic, Muar, Johore.
LIST OF CONSULTANTS, TEMPORARY ADVISERS, RESOURCE PERSONS, AND WHO STAFF MEMBERS, 1975

1. CONSULTANTS

Dr Innes Grant, Periodontologist, Perth Dental Hospital, Perth Western Australia (30 April to 12 May).

Brigadier J. Ferris Fuller, Kelvin Chambers, The Terrace, 16, Wellington, New Zealand (16 May to 1 June).

Professor G.N. Davies, Professor of Social and Preventive Dentistry, Dental School, Turbot Street, Brisbane, Queensland 4000, Australia (13 June to 3 July).

Dr Blanche C. Barbers, Assistant Professor, Institute of Public Health, University of the Philippines, Pedro Gil, Ermita, Manila 2801, Philippines (30 May to 15 June).

2. TEMPORARY ADVISERS

Dr Chua Sui Yeow, Assistant Director of Medical Services (Dental), Dental Division, Ministry of Health, Dental Branch, Palmer Road, Singapore 2 (32 days - Singapore).

Professor Phoon Wai-on, Head of Department of Social Medicine and Public Health, University of Singapore, Outram Hill, Singapore 3 (14 days - Singapore).

Dr Tai Yen Hooi, Director of Dental Services, Ministry of Health, 2nd Floor, MMA Building, Pabang Road, Kuala Lumpur, Malaysia (16 days - Malaysia).

Dr Abdul Rahman bin Awang, Deputy Director of Dental Services, Ministry of Health, 2nd Floor, MMA Building, Pabang Road, Kuala Lumpur, Malaysia (16 days - Malaysia).

Professor Ibrahim bin Haji Mohd. Yassin, Dean, Dental Faculty, University of Malaya, Kuala Lumpur, Malaysia (12 days - Malaysia).
3. RESOURCE PERSONS

Singapore

Dr Tan Yok Lin, Senior Dental Officer, School Dental Centre, Pegu Road, Singapore 12.

Dr Lim Kheng Ann, Senior Dental Officer, Prosthodontics; Deputy-Director of Postgraduate Studies, Outram Road Dental Clinic, General Hospital, Singapore 3.

Dr Wong Hee Deong, Senior Dental Officer, Training and Dental Health Education, Dental Health Education Unit, Alexander Park, Singapore 5.

Professor F.M.S. Lee, Director, Postgraduate Studies, Dental Faculty, University of Singapore, Outram Road, Singapore 3.

Professor Edmund Tky, Dean, Dental Faculty, University of Singapore, Outram Road, Singapore 3.

Professor J.A. Jansen, Department of Prosthodontics, Dental Faculty, University of Singapore, Outram Road, Singapore 3.

Dr W.K. Ng, Associate Professor, Department of Social Medicine and Public Health, University of Singapore, Outram Hill, Singapore 3.

Dr James Lee, Lecturer (statistics), Department of Social Medicine and Public Health, University of Singapore.

Dr Lee Hin Peng, Lecturer (epidemiology), Department of Social Medicine and Public Health, University of Singapore.

Dr H.K. Leong, Senior Lecturer, Department of Social Medicine and Public Health, University of Singapore.

Dr W.P. Wan, Lecturer, Department of Social Medicine and Public Health, University of Singapore.

Malaysia

Dr A. Tajuddin, Assistant Director of Dental Services, 2nd Floor, MMA Building, Pabang Road, Kuala Lumpur, Malaysia.

Dr Chong Weng Hoon, State Dental Director, Pahang.

Dr Yoong Kim Poon, State Dental Director, Negri Sembilan.

Dr Ho Boon Keat, State Dental Director, Kelantan.
Annex 2

Dr Abdullah Johari, Principal, Dental Training School, Penang.

Dr Muhammad Yaacob, Dental Public Health Officer, Negeri Sembilan

Dr Haji Mohd. Ariffin, Dental Public Health Officer, Ministry of Health.

Professor Chin Tuck Chiew, Dental Faculty, University of Malaya.

Professor Dato Lee Seng Guan, Dental Faculty, University of Malaya.

Mrs Theresa Al Rashid, Dental Sister, Dental Faculty, University of Malaya.

Mr Onn bin Kayat, International Health Section, Office of the Secretary-General, Ministry of Health.

Dr B.C. Seth, Senior Dental Officer, Johor Baharu, Johor.

Dr Foong Sim Kang, Senior Dental Officer, Mentakab, Pahang.

Dr Dzulkarnain Ibrahim Ali, State Dental Director, Perlis.

Dr Ong Cheng Im, Senior Dental Officer, Kuala Lumpur

Dr M. Mahendra, Senior Dental Officer, Klang, Selangor.

Dr Lam Cheng Kan, State Dental Director, Selangor.

4. WHO STAFF MEMBERS

Ms Khoo Siew Thay, WHO Dental Therapist Tutor, Port Moresby, Papua New Guinea (25 April to 3 July).

Dr David E. Barnes, Chief, Dental Health Programmes, WHO Headquarters, Geneva, Switzerland (12 June to 3 July).

Dr Chellie J. Sundram, Course Director, WHO Office for the Western Pacific Region, P.O. Box 2932, Manila, Philippines (20 April to 7 July).
## PROGRAMME - COURSE SCHEDULE

### FIRST REGIONAL COURSE IN PUBLIC HEALTH DENTISTRY

**Singapore**  
1-24 May; 23-30 June 1975  
Malaysia  
25 May-23 June 1975

### Topics and Dates

<table>
<thead>
<tr>
<th>Topic</th>
<th>Type and Site</th>
<th>Chairman/Moderator Coordinators/Contributors</th>
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<tbody>
<tr>
<td>0</td>
<td>Hostel, King Edward VII Hall 12 College Road, Outram Road General Hospital Compound Singapore</td>
<td></td>
</tr>
</tbody>
</table>
- Country Planning Committee  
- WHO staff |
| 00    | Guests Allen Lecture Hall Singapore |  
- Regional Director, WPRO  
- Permanent Secretary (Health)/Director of Medical Services, Singapore  
- Country Planning Committee, Singapore  
- WHO Representative |
| 01    | Consultants and advisers in attendance: Dr Innes Grant - 30 April-12 May  
Dr Chua Sui Yeow (34 days)  
Professor Phoon Wai-On (14 days) |  
Singapore |
| 1     | Lectures Lecture Room, Medical Faculty, Singapore |  
- Professor W.O. Phoon  
(Coordinator)  
- Professor W.K. Ng  
(Associate)  
- Dr H.K. Leong |  
- Dr H.K. Leong |
<table>
<thead>
<tr>
<th>Topics and Dates</th>
<th>Type and Site</th>
<th>Chairman/Moderator</th>
<th>Coordinators/Contributors</th>
</tr>
</thead>
</table>
| **Topic 2**: 1/2 day - Monday, 5 May (afternoon) | Symposium - Lecture Room, Medical Faculty, Singapore | a) Professor W.O. Phoon (Chairman) | b) Dr I. Grant  
c) Dr Chua Sui Yeow  
d) Dr C.J. Sundram |
| **Topic 3**: 1 day - Tuesday, 6 May | Presentations (morning) - Workshop (afternoon) - Plenary session | a) Professor W.O. Phoon  
b) Dr I. Grant  
c) Dr Chua Sui Yeow  
d) Ms Khoo Siew Thay  
e) Dr C.J. Sundram (Moderator)  
f) Dr Wong Hee Deong (Coordinator)  
|  | Lecture Room, Medical Faculty, Singapore | a) Professor W.O. Phoon (Chairman) | b) PNG participants to assist  
c) Dr Wong Hee Deong  
d) Staff of Dental Branch, Singapore  
e) Dr C.J. Sundram  
f) Dr Chua Sui Yeow (Coordinator)  
g) Dr Khoo Siew Thay |
| **Topic 4**: 2 days - Wednesday, 7 May Thursday, 8 May | Lectures - Illustrations - Demonstrations | a) Dr I. Grant  
b) PNG participants to assist  
c) Dr C.J. Sundram  
d) Dr Chua Sui Yeow (Coordinator)  
e) Dr Khoo Siew Thay |
| **Topic 5**: 3 days - Friday, 9 May  
Monday, 12 May  
Tuesday, 13 May | Presentations - Field visits - Demonstrations - Seminar  
OHU Unit Alexander Park  
Selected Schools, Singapore | a) Dr Wong Hee Deong  
b) Staff of Dental Branch, Singapore  
c) Dr C.J. Sundram  
d) Dr Chua Sui Yeow (Coordinator)  
e) Dr Khoo Siew Thay |
| **Topic 6**: 1/2 day - Saturday, 10 May | Field visit - Demonstration | a) Dr Wong Hee Deong  
b) Water Engineer, Singapore  
c) Dr Chua Sui Yeow (Coordinator)  
d) PNG participants to assist  
e) Staff of Dental Branch, Singapore  
f) Dr C.J. Sundram  
g) Dr Chua Sui Yeow (Coordinator)  
h) Dr Khoo Siew Thay |
<table>
<thead>
<tr>
<th>Topics and Dates</th>
<th>Type and Site</th>
<th>Chairman/Moderator/Coordinators/Contributors</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. End of Dr Grant's consultantship - Monday, 12 May (debriefing in Singapore)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Topic 7: 3 days - Wednesday, 14 May Thursday, 15 May Friday, 16 May</td>
<td>Elementary epidemiology and biostatistics - Lectures - Practical classes Lecture Room Medical Faculty Singapore</td>
<td>a) Professor W.O. Phoon (Coordinator/Chairman) b) Dr J. Lee c) Dr H.P. Lee</td>
</tr>
<tr>
<td>8. Topic 8: 1/2 day - Saturday, 17 May</td>
<td>Reading and library assignments</td>
<td>Professor W.O. Phoon (Coordinator) Department of Social Medicine and Public Health (SMPH)</td>
</tr>
<tr>
<td>9. Topic 9: 1 day - Monday, 19 May</td>
<td>The organization of dental health services in Singapore (examples of on-going programmes in a highly urbanized community) - Lecture and briefing - Field visits On-site Pegu Rd. Dental Centre, Singapore</td>
<td>a) Dr Tan Yok Lin and staff b) Dr Chua Sui Yeow (Coordinator) O Brigadier J. Ferris Fuller (summing-up)</td>
</tr>
<tr>
<td>10. Topic 10: 2 days - Tuesday, 20 May Wednesday, 21 May</td>
<td>The organization of school dental services in Singapore - Lecture - Field visits - Informal discussion Pegu Rd. Dental Centre, Singapore</td>
<td>a) Dr Tan Yok Lin and staff b) Dr Chua Sui Yeow (Coordinator) O Brigadier J. Ferris Fuller (summing-up)</td>
</tr>
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</table>
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<thead>
<tr>
<th>Topics and Dates</th>
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</thead>
</table>
| **Topic 11**: 1 day - Thursday, 22 May | - Discussion of paper presented by Brigadier J. Ferris Fuller | a) Brigadier J. Ferris  
  b) Professor W.O. Phoon  
  c) Dr C.J. Sundram  
  d) Dr Lim Kheng Ann (Moderator) |
| Selecting methods of delivering dental services influenced by factors prevalent in the country | - Forum  
  - Lecture Room, Medical Faculty, Singapore | |
| **Topic 12**: 1 day - Friday, 23 May | - Forum  
  - Dental Faculty, Singapore | a) Professor Edmund Tay (Dean)  
  b) Professor F.M.S. Lee  
  c) Dr Lim Kheng Ann  
  o Brigadier J. Ferris Fuller (summing-up) |
| Professional education and training of dental auxiliaries in the Singapore Dental Faculty and General Hospital | |
| **Morning** | - Basic dental education (a)  
  - Post-basic dental education (b)  
  - In-service training; continuing education and higher degree courses (b) | |
| **Afternoon** | - Training of dental assistant nurses (chairside assistants) (c)  
  - Training of laboratory technicians (c) | |
| Party leaves for Kuala Lumpur, Malaysia on 24 May by Mayflower airconditioned bus | see Topic 13 |
### Annex 3

**Malaysia**

*24 May-23 June 1975*

<table>
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<tr>
<th>Topics and Dates</th>
<th>Type and Site</th>
<th>Chairman/Moderator/Coordinators/Contributors</th>
</tr>
</thead>
</table>
| **13** Topic 13: 1/2 day - Saturday, 24 May | - Field visit  
- Informal discussions  
- Customs clearance at Johore Bahru  
- Mayflower Tourist Service | a) Ms S.T. Khoo (Coordinator)  
b) One Malaysian official  
c) Dr C.J. Sundram  
- A dental officer in the Malaysian government service will do the briefing and will accompany the party from Singapore to Kuala Lumpur (Coordinator) |
| **14** Topic 14: 1 day - Monday, 26 May | - Presentation  
Dental Faculty, Kuala Lumpur  
- Wesak Day - Public holiday in Malaysia | a) Dean Ibrahim (Chairman)  
b) Staff nominated by the Dean |
| **15** Topic 15 (a + b): 2 days - Tuesday, 27 May Wednesday, 28 May | - Presentation by panel  
- Field visits  
Dental Faculty, Kuala Lumpur | a) Dr A. Rahman (Chairman)  
b) Panel of Malaysian officers  
- Brigadier J. Ferris Fuller (summing-up) |
| *Consultants and advisers in attendance:*  
Brigadier J. Ferris Fuller (until 2 June)  
Dean and Professor Ibrahim Yassin (12 days)  
Dr Tai Yen Hooi (16 days)  
Dr Abdul Rahman Awang (16 days) |  |  |
## Annex 3

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<tr>
<th>Topics and Dates</th>
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<th>Chairman/Moderator/ Coordinators/Contributors</th>
</tr>
</thead>
</table>
| OFFICIAL WELCOME - Morning, Malaysian Sessions Thursday, 29 May | Ministry of Health Conference Room Kuala Lumpur | a) Director-General  
b) Secretary-General  
c) WHO Representative, Kuala Lumpur  
d) Country Planning Committee (Dr Tai and Dr Rahman) |
| • First half of morning session - official welcome  
• Coffee-break  
• Second half of morning session - Topic 16 | | o Inche Onn bin Kayat  
O Dr Ahmad Tajuddin  
(Special responsibilities) |
| Topic 16: Morning, Thursday, 29 May | Briefing Ministry of Health Conference Room Kuala Lumpur | a) Tan Sri Dato (Dr) Abdul Majid  
b) Brigadier J. Ferris Fuller (Chairman) |
| Delivery of the medical, health and dental services in Malaysia - problems and priorities | | |
| 17 Topic 17: 1 day - Friday, 30 May | Field visits Demonstrations at health centres outside Kuala Lumpur - Klang, Sg. Pelik, Semenyih, Kajang | a) Dr A. Rahman  
b) Dr Tai Yen Hooi  
O Brigadier J. Ferris Fuller (summing-up) |
| Delivery of health services - with integrated dental services | | |
| 18 Topic 18: 1/2 day - Saturday, 31 May | Field visits in Kuala Lumpur Bangsar Clinic, Kampong Pandan | a) Dr Tai Yen Hooi  
b) Dr A. Rahman  
O Brigadier J. Ferris Fuller (summing-up) |
| Delivery of dental services in an urban and semi-urban location | | |
| Party leaves on Sunday, 1 June for Kuantan by Malaysian Government transport | | |
| Consultant in attendance: Professor Blanche G. Barbers - 1-15 June  
(briefing in Manila on 30 May; debriefing in Kuala Lumpur and Singapore on 15 June) | | |
## Annex 3

<table>
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<th>Topics and Dates</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Topic 19:</strong> 1/2 day - Monday, 2 June</td>
<td>Discussion of paper presented by Professor B. Barbers</td>
<td>a) Professor B. Barbers</td>
</tr>
<tr>
<td>Fluorides and dental health - review of current status.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>in afternoon: Commence Topic 20 - field visit</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Topic 20:</strong> 1/2 day - Tuesday, 3 June</td>
<td>Discussion of field visits</td>
<td>a) Dr A. Rahman and staff</td>
</tr>
<tr>
<td>a) Mechanics of implementing fluoride and mouthrinsing programme in schools</td>
<td>Field visits Kuantan, Pahang</td>
<td>b) Dr Cheong Weng Hoon and staff</td>
</tr>
<tr>
<td>b) Fluoridation in Malaysia</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>End of Brigadier J. Ferris Fuller's assignment on 2 June (debriefing, Kuala Lumpur)</strong></td>
<td></td>
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<tr>
<td><strong>Party returns to Kuala Lumpur on 4 June - a public holiday in Malaysia</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Topic 21:</strong> 1 day - Thursday, 5 June</td>
<td>Visits Demonstration On-site discussion</td>
<td>a) Dr Tai Yen Hooi</td>
</tr>
<tr>
<td>Delivery of dental services in the periphery - &quot;Pasokan Kilat Pergigian&quot; (Dental Mobile Squad)</td>
<td>Negeri Sembilan</td>
<td>b) Dr A. Rahman (Coordinator)</td>
</tr>
<tr>
<td>a) Dr A. Rahman</td>
<td></td>
<td>c) Dental service staff</td>
</tr>
<tr>
<td>b) Dr Cheong Weng Hoon and staff</td>
<td></td>
<td>Professor B. Barbers (summing-up)</td>
</tr>
<tr>
<td><strong>Topic 22:</strong> 1+1/2 days - Friday, 6 June Saturday, 7 June</td>
<td>Illustrated presentation Discussion Field visits to demonstrate utilization</td>
<td>a) Dr C.J. Sundram</td>
</tr>
<tr>
<td>The training and utilization of dental auxiliaries regionally: (i) dental nurses, (ii) dental chairside assistants, (iii) dental technicians;</td>
<td></td>
<td>b) Dr A. Rahman and Dean Ibrahim (summing-up)</td>
</tr>
<tr>
<td>b) Re-visits by participants and reading assignments</td>
<td></td>
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</tr>
</tbody>
</table>

- **Note:** Field visits to schools Kuantan, Pahang.
**Annex 3**

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<tr>
<th>Topics and Dates</th>
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<th>Chairman/Moderator/Coordinators/Contributors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>23</strong> Topic 23: 2 days - Monday, 9 June Tuesday, 10 June</td>
<td>- Presentations - Discussions - Workshop - Plenary session Dental Faculty Kuala Lumpur</td>
<td>a) Dr C.J. Sundram b) Dr Tai Yen Hooi c) Professor B. Barber</td>
</tr>
<tr>
<td>a) Review - Regional dental health programme of WHO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Integration of dental services in a health service - where, when, why, how...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Basic dental services - definition of &quot;basic&quot;</td>
<td></td>
<td>O Dean Ibrahim (Chairman)</td>
</tr>
<tr>
<td>d) Basic dental biostatistics - functional application</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>24</strong> Topic 24: 2 days - Wednesday, 11 June Thursday, 12 June</td>
<td>- Illustrated panel presentation - Forum (questions and answers) Dental Faculty Kuala Lumpur</td>
<td>a) Dr A. Rahman and staff in Topics 27 to 29 o Professor B. Barbers (summing-up)</td>
</tr>
<tr>
<td>National oral health surveys as organized in Malaysia - adult survey (current) and a survey of schoolchildren (past)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>25</strong> Topic 25: 1 day - Friday, 13 June</td>
<td>- Conducted tour Dental Faculty Kuala Lumpur</td>
<td>a) Dean Ibrahim Yassin</td>
</tr>
<tr>
<td>Visit to Dental Faculty Kuala Lumpur</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>26</strong> Topic 26: 1/2 day - Saturday, 14 June</td>
<td>- Presentations Dental Faculty Kuala Lumpur</td>
<td>a) Professor G.N. Davies b) Dr D.E. Barmes</td>
</tr>
<tr>
<td>Basic oral surveys - methods of assessment of oral lesions for public health purposes</td>
<td></td>
<td></td>
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<tr>
<th>Topics and Dates</th>
<th>Type and Site</th>
<th>Chairman/Moderator Coordinators/Contributors</th>
</tr>
</thead>
</table>
| **Topic 27**: 1 day - Monday, 16 June | Exercise - Demonstrations on-site Kuala Lumpur Sri Petaling School | a) Professor G.N. Davies  
**Assisted by:**  
Dr A. Tajuddin  
Dr Mohd. Yacob  
Dr Foong Sim Kam  
Dr Ho Boon Kiat |
| **Topic 28**: 1 day - Tuesday, 17 June | Exercise on-site Kuala Lumpur Sg. Besi Army Cantonment | a) Professor G.N. Davies  
**Assisted by:**  
Dr A. Tajuddin  
Dr Mohd. Yacob  
Dr Foong Sim Kam  
Dr Ho Boon Kiat |
| **Topic 29**: 3 days - Wednesday, 18 June, Thursday, 19 June, Friday, 20 June | Exercise on-site Kuala Lumpur Kampong Suharto | a) Professor G.N. Davies  
b) Dr D.E. Barnes  
**Assisted by:**  
Dr A. Tajuddin  
Dr Mohd. Yacob  
Dr Foong Sim Kam  
Dr Ho Boon Kiat |

Participants leave on 20 June (evening) for Ipoh by Mayflower Coach (night in Ipoh)  
Participants leave on 21 June (Saturday) for Penang (night in Penang)  

**Topic 30**: 2 days - Saturday, 21 June, Monday, 23 June  
Observation of utilization of dental auxiliaries in Ipoh (cf. Topic 22 (a)) and training in Penang  
Return to Singapore on 23 June (night)  

a) Dr Tai Yen Hooi (Coordinator)  
b) Dr A. Rahman  
c) Dr A. Johari (Penang)  
d) Dr C.J. Sundram  
WHO  
e) Ms S.T. Khoo
### Annex 3

**Singapore**

24-30 June 1975

<table>
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<tr>
<th>Topics and Dates</th>
<th>Type and Site</th>
<th>Chairman/Moderator/Coordinators/Contributors</th>
</tr>
</thead>
</table>
| **Topic 31:** 1 day - Tuesday, 24 June | Exercise - Lecture Room, Medical Faculty Singapore | a) Professor G.N. Davies  
b) Dr D.E. Barmes |
| Preparation of survey reports | | |
| **Topic 32:** 1 day - Wednesday, 25 June | Exercise - Seminar - Lecture Room, Medical Faculty Singapore | a) Professor G.N. Davies  
b) Dr D.E. Barmes |
| a) Planning a community dental health programme using findings of the sample survey  
b) Identifying alternative methods of delivering dental services | | |
| **Topic 33:** 1/2 day - Thursday, 26 June | Exercise - Incorporating ideas and facts gathered in Topic 15 (b) | a) Professor G.N. Davies  
b) Dr D.E. Barmes |
| Institute a toothbrushing programme including fluoride mouthrinsing and dental health education  
*(commence Topic 34)* | | |
| **Topic 34:** 1 day - Friday, 27 June | Exercise - Seminar - Lecture Room, Medical Faculty Singapore | a) Professor G.N. Davies  
b) Dr D.E. Barmes |
| Institute the utilization of operating dental auxiliaries best suited to:  
a) sample group;  
b) your country  
- type and period of training  
- scope and limitations of duties  
- professional leadership  
*(Commence Topic 35)* | | |
| **Topic 35:** 1 day - Saturday, 28 June | Exercise - Seminar - Lecture Room, Medical Faculty Singapore | a) Professor G.N. Davies  
b) Dr D.E. Barmes  
c) Dr C.J. Sundram |
| a) Preparation of reports describing and evaluating what was done and making recommendations for the future  
b) Evaluation of the Course (WPRO) | | |
| **Topic 36:** 1 day - Monday, 30 June | Lecture Room, Medical Faculty Singapore | Country Planning Committee, Singapore and WPRO |
| Closing ceremony and administrative procedures | | |
Notes:

**Topics 26 to 35**

Professor G.N. Davies and Dr D.E. Barmes will be in attendance and conduct most of the sessions listed under Topics 26 to 35. They would like the participants to be divided into five teams with four participants in each team, under the direction of those listed in Topics 27, 28 and 29 (page 9). It should be possible for each team to be organized in sub-teams of two - one to act as examiner and the other as recorder and then change around. If the number of participants is 30, then we would have five teams of six in each team.

They will be assisted in the field work by Dr A. Tajuddin, Dr Mohd. Yacob and Dr Foong Sim Kum, and Dr Ho Boon Keat, all of whom are experienced dental public health practitioners in the Public Health Service of Malaysia. These same officers will also participate actively in Topic 24 under the leadership of Dr Abdul Rahman, wherein the Malaysian experience will be described. Continuity will thus be maintained.

Dr Horowitz, Dr Barmes and Professor Davies have made a start in Geneva with revision of the WHO Manual for Basic Oral Health Survey Methods and among their recommended amendments they have included provision for a combined oral health and treatment assessment. A preliminary draft of a form they have prepared will be used in the oral survey exercise in Malaysia. Each participant would examine a minimum of 20 persons, if possible. If it is necessary to limit the survey to specific age groups, preference will be given to the following: 6, 12 and 35-44 years of age. It appears difficult to choose different locations for the various groups although this would be preferable. In any case, data from the surveys conducted by the five teams will be used as a basis for the seminars listed under Topics 31 to 34. Professor Davies and Dr Barmes would like to point out that the survey cannot be carried out on a representative population sample as it should be. But for the benefit of the discussions, we shall assume that the data were collected from a representative population sample. The consultants will lead the discussions on the methods of realistic programming within the context of the particular areas surveyed and the knowledge acquired by the participants during the Course.

Professor Davies and Dr Barmes will be present from 14 June till the end of the Course.

**The sessions**

Sessions in Singapore and Malaysia will be conducted from 9.00 a.m. to 12.00 noon, with a coffee break at 10.30 a.m. The afternoon sessions will be from 2.00 to 5.00 p.m. On Saturday from 9.00 a.m. to 12.00 noon, and on Sundays participants are free for social engagements.

Ad hoc changes may be necessary during the actual conduct of the Course and provision has been made in the curriculum design for some flexibility.
DOCUMENTS MADE AVAILABLE AS REFERENCE MATERIAL AND WORKING PAPERS ISSUED TO PARTICIPANTS, 1975.

FIRST REGIONAL COURSE
IN PUBLIC HEALTH DENTISTRY

Singapore and Malaysia
1 May to 30 June 1975

● REFERENCES AND WORKING PAPERS

A. WHO PUBLICATIONS (Geneva)

(a) Technical Report Series

1. WHO (1959), Expert Committee on Auxiliary Dental Personnel,

2. WHO (1958), Expert Committee on Water Fluoridation,
   Tech. Rep. Series No. 146, Geneva


5. WHO (1962), Standardization of reporting of dental diseases and conditions,

6. WHO (1965), Organization of dental public health services,


8. WHO (1972), The etiology and prevention of dental services caries,

(b) Manuals


B. RESEARCH PUBLICATIONS (WHO Sponsored)

    50, 494-504
Annex 4


C. WHO/WPRO PUBLICATIONS (Manila)

(a) Group Educational Activities in Dentistry


15. WHO (1972), *First Regional Workshop on Dental Health Services,* Singapore, May (document WPRO 5503), WPRO, Manila

(b) Manuals


(c) Assignment Reports


18. (1972), WHO Assignment Report, dental health, Philippines document 5501-E, WPRO, Manila


23. Cadell, P.B., (1966), *Training Course on Dental Epidemiology Methods for countries in the Western Pacific Region,* 18 February - 8 May 1964, document WPR/334/64, WPRO, Manila

24. Fuller, F.J., (1963), WHO Assignment Report, Dental health advisory services (inter-country WPRO 0160), WPRO, Manila

25. (1966), Assignment Report, Phase IV (Inter-country visits), WPRO, Manila
26. Fuller, F.J., (1969), *WHO Assignment Report, dental health, China (Province of Taiwan)*, Hong Kong, Republic of Korea, Sabah, Singapore, West Malaysia, document WPRO 0160, WPRO, Manila


34. __________ (1972), *WHO Assignment Report, dental health, China (Province of Taiwan)*, document WPRO 5501, Manila

35. __________ (1972), *WHO Assignment Report, dental health, Viet-Nam, 16 August - 15 October*, document WPRO 5501-B, WPRO, Manila


38. __________ (1973), *WHO Assignment Report, dental health, Tonga, 29 May - 8 June*, document WPRO 5501-B (Tonga), WPRO, Manila

39. __________ (1973), *WHO Assignment Report, dental health, Western Samoa, 8 - 16 June*, document WPRO 5501, Western Samoa, WPRO, Manila

40. __________ (1973), *WHO Assignment Report, dental health, Fiji, 17 June - 12 July*, document WPRO 5501 (Fiji), WPRO, Manila

41. __________ (1973), *WHO Assignment Report, dental health, Hong Kong, 24 August - 16 September*, document WPRO 5501 - Hong Kong, WPRO, Manila

42. __________ (1973), *WHO Assignment Report, dental health, Republic of Korea, October*, document WPRO 5501, Republic of Korea, WPRO, Manila
Annex 4


45. (1974), WHO Assignment Report, dental health, Viet-Nam, 23-27 October, 4-9 November, document ICP/DNH/01, VNR/HMD/03, WPRO, Manila


47. (1974) WHO Assignment Report, dental health, Fiji, 14 June - 1 August 1974, document ICP/DNH/01, WPRO, Manila


D. PUBLICATIONS UNDER OTHER AGENCIES


55. American Dental Association, Comments on the opponents of fluoridation, Bureau of Public Information


E. WHO MAGAZINE, GENEVA

61. World Health Magazine, December 1973 - devoted entirely to dentistry

F. BOOKS (WHO)


Annex 4

G. WORKING PAPERS ISSUED TO PARTICIPANTS (May–June 1975)

1. Dr Innes Grant (WPR/DNH/1)
   Periodontal disease - etiology, prevention, treatment and control.

2. Brigadier J. Ferris Fuller (WPR/DNH/2)
   Dental care delivery systems - a selection of methods and manpower in current use.

3. Professor Blanche C. Barbers (WPR/DNH3)
   Fluorides and dental health - the current status (emphasizing the mechanics of organizing fluoride mouthrinsing).

4. Professor G. M. Davies (WPR/DNH/4)
   The assessment of dental caries and periodontal disease for development of a dental health programme for a community.

5. Dr Chua Sui Yeow (WPR/DNH/5a) Dr Tan Yok Lin (WPR/DNH/5b)
   (a) Dental health services in Singapore - an outline (WPR/DNH/5a)
   (b) Organization of school dental health services (WPR/DNH/5b)

6. Professor Phoon Wai-On (WPR/DNH/6)
   Basic biostatistics for assessment and evaluation for public health purposes.

7. Dr Tai Yen Hooi (WPR/DNH/7)
   Dental health services in Malaysia - an outline (emphasizing areas where dental services are integrated in the general health services).

8. Dr Abdul Rahman bin Awang (WPR/DNH/8)
   Preventive programmes and dental health services in rural communities in Malaysia; the role of dental auxiliaries.

9. Professor Ibrahim bin Haji Yassin (WPR/DNH/9)
   Undergraduate dental education and programmes for continuing dental education in Malaysia.

10. Dr D. E. Barmes (WPR/DNH/10)
    Epidemiological profiles and planning exercises for dental services.

11. Dr C. J. Sundram (WPR/DNH/11 and WPR/DNH/12)
    (a) The regional dental health programme (WPR/DNH/11)
    (b) The utilization of dental auxiliaries in the Region (WPR/DNH/12)

12. Dr Wong Hee Deong (WPR/DNH/13)
    Dental health educational activities in Singapore; toothbrushing and preventive programmes in schools.
Front row (L to R): Drs. M. Bamatang, L. Verstuyft (WR/Singapore),
C.J. Sundram (Course Director), Ms S.T. Khoo (WHO Staff Member),
P.J. Dy (Regional Director/WPRO), G.L. Ho (Permanent Secretary/Health, Singapore), S.Y. Chua (Director/Dental Services, Singapore);
Second row (L to R): H.D. Chua (Country Planning Committee Member),
Ms K.M. Taima, Ms. S. Herman, Ms J.K. Yasa, Ms. C.H. Leung, J.B. Kim,
Y.L. Tan (Country Planning Committee Member), K. Henry;
Third row (L to R): R.M. Carreon, P.Y. Wong, P.A. Jennings, T.W. Lee,
K.A. Lim, A.C. Rimorin, C.S. Lee, M. Tafealava, S. Talagi;
Back row (L to R): I. Grant (Short-term Consultant), W.C. Siemons,
Mr A. Bue, S. Pouru, Mr P. Lauriault (WHO Sanitary Engineer),
Mr K.S. Krishnan (WHO Administrative Assistant).

Participants are those where no designations are stated after their names.

* Legends are presented on pages 46 and 47 for illustrations 1 to 26.
Annex 5

LEGENDS FOR ILLUSTRATIONS NUMBERED 1 TO 26

1. Participants, hosts and guests at the opening ceremony of the First WHO Regional Course in Public Health Dentistry on 2 May 1975.

2. A visit to the reservoir and fluoride treatment plant in Singapore to see the system of water fluoridation. Dr Wong Hee Deong and the Water Engineer Public Utilities Board of Singapore explain the procedures. Inset: Professor Phoon Wai-On (WHO temporary adviser).

3. Water fluoridation in Singapore. Insets: Dr W.P. Wan (Singapore University), Dr Grant (WHO short-term consultant).

4. Ms Leong explains the principles underlying poster production at the Dental Health Education Unit in Singapore. Insets: Dr Chua Sui Yeow (WHO temporary adviser), Mr Krishnan (WHO staff) and Professor W.K. Ng (Singapore University).

5. Field visit to study the mechanics of organizing a classroom tooth-brushing programme in Singapore supervised by school teachers. Inset: Dr S. Talagi (Niue).

6. Consultant Dr Innes Grant, demonstrates the technique for gingivectomy in the treatment of periodontal disease.

7. Dr Jennings (American Samoa) assisted by Ms S. Herman (Fiji) practising the technique of doing a gingivectomy on a phantom head.

8. Professor Phoon Wai-On, Dr Tan Yok Lin, Dr Chua Sui Yeow and Dr Lim Kheng Ann - members of the Country Planning Committee of Singapore.

9. Dr Innes Grant (WHO short-term consultant) and Dr Wong Hee Deong (member of the Country Planning Committee of Singapore).

10. Visit to a school dental clinic in Singapore. Dr Kaa Henry (Cook Islands) and Ms S. Herman (Fiji) discuss with lady dental officer of the school dental service. Insets: Ms Susan Herman (Fiji) and Dr Tan Yok Lin (WHO temporary adviser).

11. Visit to a main dental clinic in Kuala Lumpur, Malaysia. The Selangor State Dental Director, Dr Lam (wearing tie) briefs the participants on the facilities at the dental centre.


13. Dr Tai Yen Hooi, Director of the Dental Services, Malaysia (also WHO temporary adviser) briefs the participants on the successful dental health programmes of Malaysia. Insets: Dr A. Rahman and Professor Ibrahim Yassin (WHO temporary advisers).
14. Professor Blanche Barbers (WHO short-term consultant) summing up a presentation by Dr Abdul Rahman (WHO temporary adviser) and Dr Yoong Kim Poon (state dental director). Insets: Dr Cheong Weng Hoon (state dental director, Pahang) and Dr Barbers (WHO short-term consultant).

15. Dr David Barmes (Chief, Dental Health, WHO Headquarters/Geneva), outlines the principles of dental health planning, assisted by Professor George Davies (WHO short-term consultant).

16. A school dental nurse demonstrates to a group of six children the correct way of toothbrushing. Brigadier Fuller (WHO short-term consultant) and some participants are the interested on-lookers.

17. Participants sit-in in the classroom while a school dental nurse gives a talk on "preservation of teeth for a lifetime" in a primary school in Kuala Lumpur. Insets: Dr A. Rimorin (Philippines) and Ms Khoo (WHO staff) with the school dental nurse.

18. Most of the Malaysian parts of the lecture-sessions of the Course were held in the lecture room of the new Dental Faculty of the University of Malaya, Kuala Lumpur. Inset: Mr T. Ooman (Malaysia).

19. Dr A. Tajjudin Yassin, Assistant Director of Dental Services and Member of the Country Planning Committee of Malaysia conducts the participants to demonstrate a "lightning dental squad" in Negeri Sembilan. Inset: Dr Tajjudin assisting participants at the survey site.

20. Dr Moi Tapealava (Tonga) discusses with school dental nurses the problems of delivering dental care in the periphery in Negeri Sembilan.


22. Professor Kim Johng Bai, Dr Chung Suck Lee (Republic of Korea) and Ms Leung (Hong Kong).

23. Professor Davies supervising the survey exercise - Professor Kim Johng Bai (Republic of Korea), Dr Carreon (Philippines) and Dr Taloumea (Solomon Islands).

24. Training of chairside assistants. Inset: Dr Taloumea (Solomon Islands).

25. Training of dental technicians. Dr Tae Won Lee (Republic of Korea), Dr Wong Pak-Yiu and Ms Leung (Hong Kong), Insets: Dr Pouru and Dr Tae Won Lee.

26. Training of school dental nurses (operating dental auxiliaries).
This questionnaire has been prepared for the purpose of assessing, on an individual basis, the administrative aspects of the Course as an aid in the planning and operation of future courses of this nature. Please check the appropriate statements and write your comments legibly. Since this form is to be unsigned, your frank criticisms, suggestions and comments are cordially invited.

1. Travel arrangements were: Excel- 

2. Physical arrangements of the site of the Course were: Excel- 

3. Accommodation and services were: Excel-

4. The amount of free time available for personal matters and rest was: Ade-

5. The total length of the Course was: Very 

6. The schedule of the Course was: Very 

7. The working hours were: Very 

8. The information bulletins and circulars were: Very 

---

<table>
<thead>
<tr>
<th>Question</th>
<th>Excellent</th>
<th>Satisfactory</th>
<th>Reasonably Satisfactory</th>
<th>Unsatisfactory</th>
</tr>
</thead>
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<td>1. Travel arrangements</td>
<td>14</td>
<td>6</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2. Physical arrangements</td>
<td>17</td>
<td>4</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>3. Accommodation and services</td>
<td>11</td>
<td>7</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>4. Free time available</td>
<td>Adequate</td>
<td>Just enough</td>
<td>Not enough</td>
<td>More than enough</td>
</tr>
<tr>
<td>5. Course length</td>
<td>Very satisfactory</td>
<td>Satisfactory</td>
<td>Too short</td>
<td>Too long</td>
</tr>
<tr>
<td>6. Schedule</td>
<td>Very satisfactory</td>
<td>Satisfactory</td>
<td>Too crowded</td>
<td>Too loose</td>
</tr>
<tr>
<td>7. Working hours</td>
<td>Very satisfactory</td>
<td>Satisfactory</td>
<td>Too short</td>
<td>Too long</td>
</tr>
<tr>
<td>8. Information</td>
<td>Very helpful</td>
<td>Helpful</td>
<td>Of some help</td>
<td>Of little help</td>
</tr>
</tbody>
</table>
Annex 6

9. Library and reference facilities were: Adequate 11 right 6 Limited 4 Poor - answer 1

10. Documentation to cover the subject matters were: Excellent 15 Satisfactory 7 Fairly good 2 Poor -

11. Opportunities to become acquainted with other participants and staff were: Ample 13 Satisfactory 9 Not at enough all - None

12. The leadership of the Course was: Excellent 15 Satisfactory 5 Fairly good 2 Poor -

13. What improvements would you suggest for future courses of this nature?

14. Comments:
• INDIVIDUAL EVALUATION QUESTIONNAIRE NO. 2
(TECHNICAL)

This questionnaire is intended to assess the technical aspects of the Course on an individual basis. You are kindly requested to check the appropriate statements and write legibly your frank opinion and comments. Your criticisms and suggestions are cordially invited. Please do not sign your name.

1. Were you interested in this course? Very much "Very much" 19 a bit "a bit" 1 extent "to some extent" 1 little "little" - answer/1

2. Did you gain any new ideas or concepts? Many "definitely" 17 Some "some" 5 few "very few" - at all "not at all" -

3. Did you have enough opportunity to express your own ideas at the Course? Ample "ample" 12 Just enough "just enough" 10 Not enough "not enough" - at all "not at all" -

4. Did you have enough opportunity to exchange knowledge and experience with other participants and staff outside the Course? Ample "ample" 16 Just enough "just enough" 6 Not enough "not enough" - at all "not at all" -

5. Each of you came with specific objectives and expectations. To what extent do you feel these have been attained? Completely "completely" 6 Part "partially" 15 Some "some" - little "little" -

(If the answer is either "Some" or "A little", please give further details.)
6. The scope of study and discussion was: Adequately covered [12] Just right [9] Too large [ ] Too small [ ]

7. The Course has been to you: Highly valuable [13] Valuable [9] Of some value [ ] Of little value [ ]

8. Would you be willing to respond to a follow-up questionnaire about the meeting to be sent to you one year from now? Yes [22] No [ ]

9. What do you consider were good features in the content of the Course?


10. What features do you consider not so good?


11. How will this course be reflected in your plan for development and improvement of dental care delivery systems or/and preventive programmes in your country?


12. Comments:


13. Other comments:


14. What other topics would you propose to discuss at future courses/seminars/meetings?
### Summary of Country Information

Table 1 - Geographical and Population Data

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of Islands</th>
<th>Total land area (sq. km)*</th>
<th>Population 1973 Estimate</th>
<th>Name and population of largest town</th>
<th>No. of children at school</th>
<th>Fluoridation of water (commenced or implemented)</th>
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<tbody>
<tr>
<td>1 American Samoa</td>
<td>6</td>
<td>197</td>
<td>32 000</td>
<td>Pago Pago 1970</td>
<td>2 451</td>
<td>8 531 No</td>
</tr>
<tr>
<td>2 Australia (STC)</td>
<td>6</td>
<td>7 686 848</td>
<td>13 132 000</td>
<td>Sydney 1972 2 850 630</td>
<td>2 590 000</td>
<td>Yes</td>
</tr>
<tr>
<td>3 Cook Islands</td>
<td>15</td>
<td>234</td>
<td>20 000</td>
<td>Rarotonga 1971 11 388</td>
<td>6 000</td>
<td>No</td>
</tr>
<tr>
<td>4 Fiji</td>
<td>300</td>
<td>18 272</td>
<td>55 000</td>
<td>Suva 1971 60 000</td>
<td>134 400</td>
<td>Yes</td>
</tr>
<tr>
<td>5 Gilbert and Ellice Islands</td>
<td>29</td>
<td>886</td>
<td>63 000</td>
<td>Tarawa 1968 12 642</td>
<td>14 006 No</td>
<td></td>
</tr>
<tr>
<td>6 Guam</td>
<td>1</td>
<td>549</td>
<td>94 000</td>
<td>Agana 1970 2 119</td>
<td>27 000 No</td>
<td></td>
</tr>
<tr>
<td>7 Hong Kong</td>
<td>236</td>
<td>1 045</td>
<td>4 160 000</td>
<td>Hong Kong - -</td>
<td>1 000 Yes</td>
<td></td>
</tr>
<tr>
<td>8 Malaysia (Host)</td>
<td>170</td>
<td>329 749</td>
<td>11 609 000</td>
<td>Kuala Lumpur 1974 1 008 701</td>
<td>2 500 000 Yes</td>
<td></td>
</tr>
<tr>
<td>9 New Zealand (STC)</td>
<td>3**</td>
<td>268 676</td>
<td>2 964 000</td>
<td>Auckland 1973 747 339</td>
<td>650 000 Yes</td>
<td></td>
</tr>
<tr>
<td>10 Niue</td>
<td>1</td>
<td>259</td>
<td>5 000</td>
<td>Alofi 1969 5 194</td>
<td>1 580 No</td>
<td></td>
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<tr>
<td>11 Papua New Guinea</td>
<td>1</td>
<td>461 691</td>
<td>2 563 000</td>
<td>Port Moresby 1971 76 507</td>
<td>Yes</td>
<td></td>
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<tr>
<td>12 Philippines</td>
<td>7107</td>
<td>300 000</td>
<td>40 219 000</td>
<td>Manila 1973 1 435 500</td>
<td>8 286 416 No</td>
<td></td>
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<tr>
<td>13 Republic of Korea</td>
<td>3 579</td>
<td>98 484</td>
<td>32 905 000</td>
<td>Seoul 1970 5 433 198</td>
<td>5 692 285 Yes</td>
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<td>6</td>
<td>28 446</td>
<td>179 000</td>
<td>Honiara 1972 15 300</td>
<td>10 000 No</td>
<td></td>
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<tr>
<td>15 Singapore (Host)</td>
<td>1</td>
<td>581</td>
<td>2 185 000</td>
<td>Singapore 1973 2 185 000</td>
<td>500 000 Yes</td>
<td></td>
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<tr>
<td>16 Tonga</td>
<td>250</td>
<td>699</td>
<td>92 000</td>
<td>Nuku'alofa 1972 25 000</td>
<td>24 560 No</td>
<td></td>
</tr>
</tbody>
</table>
| 17 Trust Territory of the Pacific Islands | 96 | 1 779 | 110 000 | Dudd 1972 32 780 | 32 780 No | No | Mainly participating countries - including host countries and countries of consultants (STCs)

References:
- **Mainly participating countries - including host countries and countries of consultants (STCs)
- **Main islands only.
- Sources: 'UN Demographic Yearbook 1973, New York: United Nations, 1974, Table 2, pp. 85 and 87; Table 7, pp.207-208, 215-216.
<table>
<thead>
<tr>
<th>Country</th>
<th>Conducted</th>
<th>By Whom</th>
<th>Method</th>
<th>All Ages</th>
<th>Results applicable to whole country</th>
<th>Mean of age 5 - 6</th>
<th>Mean of age 13 - 14</th>
<th>Prevalence Periodontal Disease</th>
</tr>
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<tbody>
<tr>
<td>1 American Samoa</td>
<td>Yes</td>
<td>Wong ('68)</td>
<td>0115</td>
<td>Yes</td>
<td>Yes</td>
<td>1.0</td>
<td>1.1</td>
<td>98.8% - 98.5%</td>
</tr>
<tr>
<td>2 Australia (ST)</td>
<td>Yes</td>
<td>Barnard('57), Davies('69)</td>
<td>242+015</td>
<td>6 - 19</td>
<td>No</td>
<td>5.0 - 6.0</td>
<td>11 - 12</td>
<td>80-85% -</td>
</tr>
<tr>
<td>3 Cook Islands</td>
<td>Yes</td>
<td>Davies('51), Hanson('74)</td>
<td>242+015</td>
<td>7.6</td>
<td>No</td>
<td>0.7</td>
<td>21%</td>
<td>92% -</td>
</tr>
<tr>
<td>4 Fiji</td>
<td>Yes</td>
<td>Masi, Wong ('65)</td>
<td>0115</td>
<td>Yes</td>
<td>Yes</td>
<td>4.2</td>
<td>2.5</td>
<td>58.7% - 86.4%</td>
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<tr>
<td>5 Gilbert and Ellice Islands</td>
<td>Yes</td>
<td>Wong, Malaki ('68)</td>
<td>0160</td>
<td>Yes</td>
<td>No</td>
<td>-</td>
<td>0.6</td>
<td>37.4% - 57.1%</td>
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<td>6 Guam</td>
<td>Yes</td>
<td>Health Depart. ('72)</td>
<td>Other</td>
<td>6 - 15</td>
<td>Yes</td>
<td>-</td>
<td>16.1 (DMFS)</td>
<td>-</td>
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<tr>
<td>7 Hong Kong</td>
<td>Yes</td>
<td>Wong ('68)</td>
<td>Other</td>
<td>5 - 14</td>
<td>-</td>
<td>5.3</td>
<td>4.6</td>
<td>81% -</td>
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<td>8 Malaysia (Host)</td>
<td>Yes</td>
<td>Min of Health ('72)</td>
<td>0115</td>
<td>6 - 15</td>
<td>Yes</td>
<td>6.3</td>
<td>3.9</td>
<td>57.4% -</td>
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<tr>
<td>9 New Zealand (STC)</td>
<td>Yes</td>
<td>Hewat, Eastcott ('67)</td>
<td>Other</td>
<td>5.2</td>
<td>Yes</td>
<td>5.2</td>
<td>9</td>
<td>-</td>
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<tr>
<td>10 Niue</td>
<td>Yes</td>
<td>Talagi ('69)</td>
<td>Other</td>
<td>2-9, 10-15, 16-20, 24-25</td>
<td>Yes</td>
<td>1.1</td>
<td>1.3</td>
<td>60.2% - 75%</td>
</tr>
<tr>
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<td>Yes</td>
<td>Barnes ('62) Health Depart., Hubble, Mason ('66)</td>
<td>Other</td>
<td>Yes</td>
<td>Yes</td>
<td>-</td>
<td>2.2</td>
<td>-</td>
</tr>
<tr>
<td>12 Philippines</td>
<td>Yes</td>
<td>Health Depart. ('69)</td>
<td>0115</td>
<td>Yes</td>
<td>Yes</td>
<td>4.5 - 4.93</td>
<td>1.82 - 2.43</td>
<td>24.0% - 44.6%</td>
</tr>
<tr>
<td>13 Republic of Korea</td>
<td>Yes</td>
<td>K.D.H.A. ('72)</td>
<td>0160</td>
<td>7 - 52</td>
<td>Yes</td>
<td>(7) 2.85</td>
<td>3.72</td>
<td>93.16% - 99.8%</td>
</tr>
<tr>
<td>14 Solomon Islands</td>
<td>Yes</td>
<td>Wong ('69) Hollis ('71)</td>
<td>0115</td>
<td>0 - 20</td>
<td>Yes</td>
<td>-</td>
<td>0.6</td>
<td>23.3% -</td>
</tr>
<tr>
<td>15 Singapore (Host)</td>
<td>Yes</td>
<td>Min of Health ('70)</td>
<td>0115</td>
<td>6 - 18+</td>
<td>Yes</td>
<td>5.43</td>
<td>3.35 - 4.10</td>
<td>75.1% - 78% - 91%</td>
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<tr>
<td>16 Tonga</td>
<td>Yes</td>
<td>Tapealava ('69)</td>
<td>0115</td>
<td>Yes</td>
<td>Yes</td>
<td>1.2</td>
<td>1.0</td>
<td>14.2% - 97%</td>
</tr>
<tr>
<td>17 Trust Territory of the Pacific Islands</td>
<td>Yes</td>
<td>Health Depart. ('68)</td>
<td>Other</td>
<td>5 - 18</td>
<td>Yes</td>
<td>3.7</td>
<td>-</td>
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</table>

1 WHO 0115
2 WHO Technical Series 240
3 JPRO 0160
4 Korean Dental Health Association

Table 2 - Dental Survey
<table>
<thead>
<tr>
<th>Country</th>
<th>Dental Personnel</th>
<th>Treatment in Government Service</th>
<th>School Dental Service</th>
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<tbody>
<tr>
<td></td>
<td>Professional</td>
<td>Operating (*)</td>
<td>Non-operating (*)</td>
</tr>
<tr>
<td>------------------------------</td>
<td>------------------</td>
<td>-------------------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>1 American Samoa</td>
<td>7/0</td>
<td>7/0</td>
<td>No</td>
</tr>
<tr>
<td>2 Australia (STC)</td>
<td>710/3100</td>
<td>48/0</td>
<td>9835/5270</td>
</tr>
<tr>
<td>3 Cook Islands</td>
<td>9/0</td>
<td>6/0</td>
<td>6/0</td>
</tr>
<tr>
<td>4 Fiji</td>
<td>26/5</td>
<td>11/0</td>
<td>5/5</td>
</tr>
<tr>
<td>5 Gilbert and Ellice Islands</td>
<td>4/0</td>
<td>1/0</td>
<td>1/0</td>
</tr>
<tr>
<td>6 Guam</td>
<td>7/18</td>
<td>23/5</td>
<td>-/18</td>
</tr>
<tr>
<td>7 Hong Kong</td>
<td>69/1/17</td>
<td>21/4</td>
<td>550/125</td>
</tr>
<tr>
<td>8 Malaysia (Host)</td>
<td>229/150</td>
<td>551/0</td>
<td>650/</td>
</tr>
<tr>
<td>9 New Zealand (STC)</td>
<td>120/9010</td>
<td>1340/0</td>
<td>-/1320</td>
</tr>
<tr>
<td>10 Niue</td>
<td>3/0</td>
<td>1/0</td>
<td>3/0</td>
</tr>
<tr>
<td>11 Papua New Guinea</td>
<td>27/5</td>
<td>63/2</td>
<td>67/8</td>
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<tr>
<td>12 Philippines</td>
<td>1625/2905</td>
<td>5/0</td>
<td>30/1030</td>
</tr>
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<td>13 Republic of Korea</td>
<td>187/2500</td>
<td>45/0</td>
<td>200/1717</td>
</tr>
<tr>
<td>14 Solomon Islands</td>
<td>2/0</td>
<td>1/0</td>
<td>4/0</td>
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<td>15 Singapore (Host)</td>
<td>131/290</td>
<td>217/0</td>
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<td>16 Tonga</td>
<td>9/0</td>
<td>0/0</td>
<td>5/0</td>
</tr>
<tr>
<td>17 Trust Territory of the</td>
<td>27/1</td>
<td>20/0</td>
<td>41/0</td>
</tr>
</tbody>
</table>

1. The answer is "Yes" if the majority of adults can receive dental services other than relief of pain on demand. Some countries answering "No" do provide services for selected groups of adults.
2. Number before stroke refers to number in government service; number after stroke, the number in private practice.
3. Non-operating auxiliaries - laboratory technicians and dental surgery assistants with or without formal training.
PICTORGRAPH OF INTEREST LEVELS AGAINST PARAPHRASED TARGETS IN COUNTRIES REPRESENTED AT THE COURSE

<table>
<thead>
<tr>
<th>Targets</th>
<th>Public health care delivery</th>
<th>School dental service</th>
<th>Dental service organisational framework: dentist directing</th>
<th>Dental service organisational framework: expanding education program</th>
<th>Increasing productivity (clinicians, staff, trained dental auxiliaries and other record keeping)</th>
<th>Use of dental mechanics in public</th>
<th>Use of trained dental assistants</th>
<th>Use of trained schools assistants</th>
<th>School for dental therapists or therapists</th>
<th>School for dental engineers</th>
<th>Preventive programmes: fluorides, mouthrinsing, classroom teaching</th>
<th>National dental health education activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Samoa</td>
<td>▲▲▲▲▲▲ ▲ ▲</td>
<td>▲▲▲▲▲▲ ▲ ▲</td>
<td>▲▲▲▲▲▲ ▲ ▲</td>
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<td>▲▲▲▲▲▲ ▲ ▲</td>
<td>▲▲▲▲▲▲ ▲ ▲</td>
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<tr>
<td>Australia (STCs)</td>
<td>▲▲▲▲▲▲ ▲ ▲</td>
<td>▲▲▲▲▲▲ ▲ ▲</td>
<td>▲▲▲▲▲▲ ▲ ▲</td>
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Notes: Symbols ▲ and □ against countries quickly show the areas (targets) for further development.
(Source: C.J. Sundram - by enquiry from participants at the Course 1 May - 30 June 1975)
ANNEX 9

SELECTED ILLUSTRATIONS OF THE NATIONAL DENTAL HEALTH EXHIBITION MOUNTED DURING THE DENTAL HEALTH WEEK IN SINGAPORE, 1975.

(Legends for illustrations 1 to 8 are on page 62).

2. Free examinations and counselling were given at the Dental Health Exhibition for the public. The dental operatory was situated behind a huge cut-out of an open mouth.

3 to 8. Photographs of a few of the mammoth exhibits on display with school dental nurses in attendance to answer questions from the viewers.