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A PROGRAM FOR TEACHING HOSPITAL DENTISTRY IN
THE UNDERGRADUATE COURSE OF ORAL SURGERY FOR
INTEGRATION IN A HEALTH SCIENCE CENTRE HOSPITAL

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A Thesis submitted in partial
requirement for the
Diploma of Public Health Dentistry

Department of Preventive Dentistry
Faculty of Dentistry
University of Sydney
1971
ACKNOWLEDGEMENT.

I wish to acknowledge with sincere appreciation and thanks the help extended by Prof. P. Barnard, and to the Commonwealth of Australia for sponsoring this study under the Colombo Plan Program.
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INTRODUCTION.

The goal of the dental profession is the attainment of optimum oral health of the individual and the community by the prevention of oral disease and the treatment of those diseases and abnormalities which cannot be prevented.\textsuperscript{1,2} Oral health is part of health which is defined by WHO as "a state of complete physical, mental and social well being, not merely the absence of disease."

The dental profession knows that the health care it renders is an essential part of a comprehensive health care. It has long recognized as well that its service must be integrated with those of the other health professions to provide comprehensive health care for the individual patient.

Comprehensive health care is all inclusive. It focus on the totality of the health system and all the factors which affect that system. It has to meet peoples' needs through the best mix of preventive, environmental, and personal care services both in-patient and out-patient within the community where services are demanded and utilized. It therefore needs the totality of involvement of all elements of the health system.\textsuperscript{3}

The modern hospital which is the center of many profess-
onals, provides a great challenge and opportunity for interprofessional cooperation in the service of the individual patient. Dental educators also feel the need to provide the dental student with an orientation in hospital procedures, operating room protocol and the management of hospitalized patients.

It is therefore the purpose of this paper to evaluate the current undergraduate dental curriculum and determine the relevance of its objectives and scope to present social and economic needs for comprehensive health care in a hospital environment. A proposed program of training in hospital dentistry in the undergraduate dental curriculum within a health science center is presented.
UNDERGRADUATE DENTAL EDUCATION.

To understand the present undergraduate dental curriculum it may be pertinent to recapitulate the history of the dental profession and especially dental education that have led to its present professional stature.

The beginning of dentistry as a profession in the United States as well as in other countries was characterized as a purely technical craft practiced with skill or with charlatanism depending upon each practitioner's foresight or fortune in selecting his apprenticeship for training. This early stage of the profession could be called the empiric period or technical period.

The empiricism of the period was shaken by a lecture in 1910 by a London surgeon William Hunter delivered at McGill University in Canada which charged that "American Dentistry" as he called it, erected "mausoleums of gold over a mass of sepsis." This implied that the American dentist generated more pathology than they cured. The development of dental roentgenology disclosed lesions in the jaws then undreamed of which led to the theory of focal infection. This led to a rampage of tooth extraction. It was a worthwhile reminder of the intimate relationship between dental operations and general health.
The attack by Hunter plus the contagious example of the Flexner Report in medical education published in 1910 stimulated the first extensive investigation of dental education in the United States and Canada undertaken by the Carnegie Foundation for the Advancement of Teaching in 1921. The survey which was made by William J. Gies was completed in 1926. The changes that resulted from this survey marked the beginning of the biological or scientific period of dentistry.

The Gies Report pointed out that dentistry should render a comprehensive service in order to meet the health needs of the people, and it suggested that dentistry, expanded as it should be in biological scope and strengthened in its health service aspects, would be devoted to:

(a) The establishment of the principles and to the application in all forms and degrees, of scientific health service relating directly to the teeth and to the closely adjacent oral tissues, and indirectly to the welfare of other parts of the body and of the whole system.

(b) The discovery of the correlations between dental and oral conditions and systemic diseases, with special references to observed effects of distant disorders on the teeth and closely adjacent oral tissues, and of dental and
oral abnormalities on the health of the body as a whole.

(c) The detection, and provisional diagnosis, of dental and oral symptoms that indicate the prevalence or imply the probable existence of ill health elsewhere in the body.

(d) Suitable, supplemental, advisory health service, including consultation with the patient's physician, based on such observations or diagnosis.

The educational implication of the Gies Report of the enlarged view of dentistry was evident. It suggested that attention should be directed to the content of the dental curriculum and it emphasized the need for improving dental teaching and dental research, in order that the profession might take its rightful place in the promotion of human welfare.

A study of dental education in the United States and Canada by the American Association of Dental Schools with a grant from the Carnegie Corporation of New York led to the publication of the "Red Book" of dental education - A Course of Study in Dentistry, 1935.

The objectives of undergraduate dental education as
presented in the Red Book is to prepare students for the
general practice of dentistry. These depends upon the
oral health needs of the public and the responsibilities
which modern dentistry is called to assume. The program
of undergraduate dental education should aim at training
students in order that they may - a) be competent in the
maintenance of oral health and the treatment of oral
diseases, disorders, and deficiencies, with understanding
and appreciation of the relationship between oral and
systemic conditions in health and disease; (b) cooperate
effectively with persons engaged in other fields of service;
(c) have interest in, and desire for, continuing profession-
al study after graduation; (d) practice dentistry with due
regard for its social, economic and ethical relationships;
(e) cooperate effectively in community life.

The curriculum proposed in the survey was adopted by
many dental schools as a model program of instruction. The
College of Dentistry of the University of the Philippines
adopted this also. With all the idealisms of the dental
profession presented in the objectives of the undergraduate
dental curriculum, the Survey of Dentistry, 1961 found
that the objectives of dental education have not been fully
accomplished. Dental education was concerned more with
the development of motor skills and less with the integr-
ation of basic sciences and clinical practices. Although
the curriculum of 1935 have not changed much, pleas have been made for greater emphasis upon oral diagnosis and the biological aspects of dental practice. Since most dentist are more concerned with the improvement of their practice they are not motivated to the idea of the relevance of increasing emphasis upon biological sciences and their correlation with clinical practice. The dentist practices as an individual within the four walls of his office and is the most striking example of professional insularity. The development of dentistry in a hospital environment was confined to oral surgery which utilized the hospital for surgical procedures under general anesthesia. The dentist has often been said to look at the mouth as if there was no man. The physician and the hospital too often looks at the man as if there were no mouth. Since the hospital has become the center for total health care the extent of undergraduate training in this environment is lacking.

H. Horner in Dental Education Today, 1947 \(^7\) reports that:

"It is the opinion of the council that an effective working relationship with an approved general hospital is essential to satisfactory instruction in a dental school. This relationship should be such as will afford the student opportunities for viewing conditions not usually common to the clinic of the dental school; for broadening his knowledge
of oral and systemic relations in health and disease, thereby adding emphasis to the significance of dentistry as an important health service.

If the university of which a dental school is an integral part also conducts a medical school, the Council will be especially solicitous as to the cooperative relationships between the medical and dental faculties, and will expect to find the dental school enjoying freedom of access to the university or affiliated hospital.

Affiliation often extends to several hospitals of different types, and students are regularly scheduled for training in hospital procedures and operating room technics and also for ward rounds and demonstrations, which provide opportunity for familiarity with the oral manifestations of a wide variety of systemic disorders. The hospital relationship at its best would appear to be an indispensable aid to teaching."

The Survey of Dentistry, 8 1961 by Hollingshead states that:

"If a modern hospital overlooks dental health, it cannot give the comprehensive health care to which patients are entitled. Together medicine and dentistry have the fundamental responsibility for the total health needs of
the community. The future development of community health resources will center around hospital and physicians and dentists should be united in making both the in-patient and out-patient hospital service complete.

For this reason, the Survey recommends that dental students should receive more experience in hospitals and should have a fuller understanding of the services that dentists may render in this setting. It has been predicted that there will be greater demand and opportunities for this phase of dental practice in the future and to meet this need, dentists should be familiar with hospital procedures, in order to give their students a maximum of experience, schools might, if at all possible, establish dental departments in the hospitals with which they are affiliated. Such departments could be organized according to local policies, but they should offer a complete variety of dental treatment not just oral surgery. However it is accomplished, dental students be given a sufficient amount of hospital experience to prepare them adequately to perform dental services in hospital upon graduation."

While there had been more changes in the dental curriculum, the dental graduate of today, although he has a better biological education on a broader scientific basis, still enters the profession with the background of dentistry

9.
as an art and his practice chiefly dependent upon the execution of technics in the highest type of private practice, seeing few patients at high fees.

In the Third Conference-Workshop for Dental Educators in 1967, dental educators in the United States indicated from a study of present trends the direction dental education should take if it is to provide the kind of professional activities of its graduates that will be required in 1980. The Conference-Workshop portrayed the graduate produced by the curriculum of 1980 as one that:

1. will have a team of auxiliary personnel under his supervision, performing tasks presently accomplished only by the licensed dentist;

2. must have a greater biologic understanding and a highly developed diagnostic ability;

3. must understand all of the technical procedures that he delegates to his auxiliary personnel team;

4. must possess advanced skills in office administration and practice management, a situation which might involve the education of a non-dental person to assume these responsibilities;

10.
5. must be prepared to assume his role in group practice, including hospital based practice, in association with a variety of specialist.

6. will devote a large share of his time in restricted dental areas, for example in oral diagnosis referring patients to specialists for specific treatment, and in engaging in longitudinal preventive programs for his patients;

7. must be willing and able to learn, and

8. must be adaptable to change.

Society has grown larger and indeed more complex; therefore the institutions and businesses which serve the needs of society have been compelled to keep pace. Unquestionably the development of more efficient procedures have been based in part on the demands of the population for greater convenience, better service, and presumed low cost. There is a very real economic impact being brought to bear which will accelerate the role of the hospital as a community health center. For many years, privately supported insurance programs have increased the rate of hospital utilization. The complexity of health service is strengthening the image of the hospital as the center from which all health gifts flow. A more educated and sophisticated public has come to under-
stand that the benefits of biological and medical research are best obtained from the extensive facilities and personnel available at a hospital. The hospital will undoubtedly continue a significant role as the community health center.  

Undergraduate dental curriculum should provide the dental student with an orientation to hospital procedures and the introduction of the student to operating room technics and protocol. In addition hospital dental education programs serve to acquaint the student with the treatment of the "special patient" such as the chronically ill, the mental patient and the physically handicapped. After graduation the student is aware of his strength and limitations of his knowledge and skill in this area.

The extent of education in hospital dentistry in the under-graduate program of 47 American dental schools as reported in the Survey of Dentistry, 1961 is presented in Table 1.

<table>
<thead>
<tr>
<th>REGION</th>
<th>SCHOOL</th>
<th>TIME SPENT IN HOSPITAL DENTISTRY AND EXPERIENCE ACQUIRED.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>3rd year; 4 mornings, introduction to history taking, consultations, hospital procedures. 4th year; 1 morning on</td>
</tr>
</tbody>
</table>
## TABLE 1.

**EDUCATION IN HOSPITAL DENTISTRY.**

<table>
<thead>
<tr>
<th>REGION</th>
<th>SCHOOL</th>
<th>TIME SPENT IN HOSPITAL DENTISTRY AND EXPERIENCE ACQUIRED.</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>3rd year: 4 mornings introduction to history taking, consultations, hospital procedures. 4th year: 1 morning on alternate weeks, study and treatment of hospital patients: 35 hours in children's hospital, 4 mornings at city hospital, experience in oral surgery.</td>
</tr>
<tr>
<td>New England</td>
<td>2</td>
<td>Assignments to surgical and medical rounds, pathological conference, skin and tumor clinics (3rd &amp; 4th year, but time not stated.)</td>
</tr>
<tr>
<td>11 Middle</td>
<td>3</td>
<td>4th year: 1 week observing general anesthesia: 1 week in outpatients department: 1 week in treatment of patients and observation of major surgical procedures.</td>
</tr>
<tr>
<td>East</td>
<td>4</td>
<td>Ward rounds, 18 hours: hospital administration, 9 hours: dental service, 18 hours: post mortems, 3 hours.</td>
</tr>
<tr>
<td>REGION</td>
<td>SCHOOL</td>
<td>TIME SPENT IN HOSPITAL DENTISTRY AND EXPERIENCE ACQUIRED.</td>
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<td>--------------------------------------------------------</td>
</tr>
<tr>
<td>5</td>
<td>No. answer</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>4th year: 1 week, ward rounds, 10 days pedodontic clinic: 3 days, tumor clinic 1 day, oral surgery: 3 days, operative dentistry. 3rd year: 10 days, pedodontic clinic, 2 days, operative clinic.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>4th year: 2 half days, observation of hospital and surgical procedures.</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>1st year: blood chemistry. 2nd year: 2 post mortems. 3rd year: and 4th years: ½ day per week, hospital procedures, observation, wash-up rounds, minor oral surgery.</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>4th year: 2 hours per week, 12 weeks ward rounds, observation of operating room procedures, scrub-up, demonstration of fracture management and other oral surgery procedures.</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>2nd year: groups assigned to autopsy. 3rd and 4th years: sections assigned to surgery, internal medicine, cancer, psychiatry, and ward rounds.</td>
<td></td>
</tr>
<tr>
<td>REGION</td>
<td>SCHOOL</td>
<td>TIME SPENT IN HOSPITAL AND EXPERIENCE ACQUIRED</td>
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<td>-----------------------------------------------</td>
</tr>
<tr>
<td>11</td>
<td>4th year: 2 - 3 half days in in-patient clinic, make rounds with dental resident: 1 day outpatient clinic for oral surgery: student required to do complete history and work-up for oral surgery patient.</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Observation in clinics and operating room: scrub-up: rotation through hospital clinics.</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>No time or class given: student makes ward walks, attends and assists in oral surgery operations, attends at least 1 autopsy.</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Does not apply presently.</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>South east No time or class given: oral surgery demonstrations to small groups: tumor clinic in groups for 1 quarter: ward rounds.</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>No time or year given: lectures and demonstrations of the duties, responsibilities and integration of dentists into hospital staff: observe major and minor oral surgery: ward rounds: tumor clinic</td>
<td></td>
</tr>
<tr>
<td>REGION</td>
<td>SCHOOL</td>
<td>TIME SPENT IN HOSPITAL DENTISTRY AND EXPERIENCE ACQUIRED</td>
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<tr>
<td>--------</td>
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<td>-------------------------------------------------------</td>
</tr>
<tr>
<td>17</td>
<td>No time or year given: briefed on admission and dismissal procedures, operational philosophy, staffing, policies, hospital routines, and responsibilities.</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>No time or year given: students assigned regularly to hospitals for clinical practice: group instruction in physical diagnosis: group assignments to operating room training sessions.</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>4th year: 34 hours ward rounds: (2\frac{1}{2}) days emergency hospital service.</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>4th year: 3 weeks continuous duty for outpatient and inpatient care: includes emergency treatment, ward rounds, scrubbing and gowning for operating rooms, manners and decorum, administration of general anesthesia.</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>3rd and 4th years: once per week, ward rounds in internal medicine, 4th year: 24 hours emergency room for traumatic</td>
<td></td>
</tr>
<tr>
<td>REGION</td>
<td>SCHOOL</td>
<td>TIME SPENT IN HOSPITAL DENTISTRY AND EXPERIENCE ACQUIRED</td>
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<tr>
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<td>---------------</td>
<td>---------------------------------------------------------</td>
</tr>
<tr>
<td>21</td>
<td>cases: several times per year Cont'd</td>
<td>depending on size of class, ward rounds, work with oral surgery residents, cancer clinic</td>
</tr>
<tr>
<td>22</td>
<td>No time or year given: ward rounds, with staff: instruction in oral surgery and general anesthesia: attend tumor clinic: experience in handling ambulatory, bed, and stretcher patients.</td>
<td></td>
</tr>
<tr>
<td>1v South-West 23</td>
<td>4th year: 4 hours daily for 1 week in hospital extraction clinic: 1 week in hospital emergency room from 6P.M. to midnight: instruction in hospital routine.</td>
<td></td>
</tr>
<tr>
<td>V Central 24</td>
<td>4th year: 25 hours access to all types of oral and general medical service in fully accredited hospital training program.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>4th year: no time given: emergency service in hospital 7p.m. - 7 a.m.: make rounds with residents in oral surgery: get oral surgery training in hospital</td>
</tr>
<tr>
<td>REGION</td>
<td>SCHOOL</td>
<td>TIME SPENT IN HOSPITAL DENTISTRY AND EXPERIENCE ACQUIRED</td>
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<tr>
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<td>--------------------------------------------------------</td>
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<tr>
<td>26</td>
<td>No year or time given: students attend oral-maxillofacial and general anesthetic clinics.</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>4th year: 3 weeks in oral surgery clinic: follow hospital technics and surgical procedures.</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>4th year: 8 hours, ward rounds: 1 day assisting in oral surgery clinic.</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>No answer</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>4th year: 6 consecutive days in hospital dental department: 16 hours lecture in hospital dentistry.</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>No answer.</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>No answer.</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>No answer.</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>4th year: 3 weeks hospital clerkship: 15 hours observer in country hospital clinic.</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>4th year: 20 hours children's hospital ½ day observing oral and maxillofacial surgery.</td>
<td></td>
</tr>
<tr>
<td>REGION</td>
<td>SCHOOL</td>
<td>TIME SPENT IN HOSPITAL DENTISTRY AND EXPERIENCE ACQUIRED.</td>
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<tr>
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</tr>
<tr>
<td>36</td>
<td>4th year: time not given: 10 lectures on types of hospitals, hospital decorum staff personnel, admittance procedures, history recording, records and charts, dentist's role in hospital: experience in hospital service, operating room room procedures, assisting in operations (time not stated).</td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>4th year, time not given: ward rounds to see selected cases: lecture and observation in maxillofacial surgery.</td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>4th year: 10 days for hospital clerkships and seminars.</td>
<td></td>
</tr>
<tr>
<td>VI</td>
<td>North-west</td>
<td>4th year: 3 week externship, experience in hospital routines, ward rounds and assisting in surgery.</td>
</tr>
<tr>
<td>40</td>
<td>4th year: 2 weeks lives in at hospital ward rounds: observes major surgical procedures: assists in minor surgical operations: attends staff meetings.</td>
<td></td>
</tr>
</tbody>
</table>

19.
<table>
<thead>
<tr>
<th>REGION</th>
<th>SCHOOL</th>
<th>TIME SPENT IN HOSPITAL DENTISTRY AND EXPERIENCE ACQUIRED.</th>
</tr>
</thead>
<tbody>
<tr>
<td>V11</td>
<td>41</td>
<td>4th year: ward rounds once per week, attend tumor clinics: observe oral surgery procedures.</td>
</tr>
<tr>
<td>Far West</td>
<td>42</td>
<td>3rd and 4th years, time not given: assist in oral surgery clinic, ward rounds with attending oral surgeon: observe patient work-up: observe for 1 week in general anesthesia: taught hospital technics, scrub-up: and operating room procedures.</td>
</tr>
<tr>
<td></td>
<td>43</td>
<td>3rd year: 5 hours in ward rounds. 4th year: 5 hours observation of major oral surgery and general anesthesia: 5 hours children's hospital, observing treatment of handi- capped children.</td>
</tr>
<tr>
<td></td>
<td>44</td>
<td>No year or time given: theory and demonstration of operating room procedures: observation of surgical procedures.</td>
</tr>
<tr>
<td></td>
<td>45</td>
<td>Year not given: 18 hours instruction in hospital procedures, ward rounds, and attendance at tumor clinic.</td>
</tr>
<tr>
<td>REGION</td>
<td>SCHOOL</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>--------</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>TIME SPENT IN HOSPITAL DENTISTRY AND EXPERIENCE ACQUIRED</strong></td>
<td></td>
</tr>
<tr>
<td>46</td>
<td>Year and time not given: visit, observe, and work in hospital oral surgery clinic: observe operating room procedures.</td>
<td></td>
</tr>
<tr>
<td>47</td>
<td>In planning stage</td>
<td></td>
</tr>
</tbody>
</table>

21.
In 1965 a survey\textsuperscript{13} was conducted of dental schools in the U.S. and Canada on the following: (1) Number of hours students are assigned to hospital service and whether this period of time is greater than, less than or the same as five years ago. (2) The major objectives of the hospital assignment. (3) Whether they would like additional time for hospital assignments and what would be done if additional time were available.

Of the 42 schools replying to the survey all but three restrict the student hospital experience to the junior and senior years of the dental program. On the basis of that survey there was no dental school which did not provide some hospital experience to the undergraduate dental student, but it is of interest to note that the length of exposure ranges from 5 hours to 378 hours. Four dental schools offer less than 10 hours while 5 institutions assign their students to hospitals for more than 100 hours in the undergraduate program.

The amount of time devoted to hospital training were compared to that five years ago. Five institutions have increased the hospital experience of their dental students by 100%; six reported an increase of more than 50%; and three stated that their hospital education programs have expanded by more than 25%. Three decreased the number of hours devoted to hospital training - one by 80%. Eighteen
schools indicated that the number of hours devoted to hospital experience is the same as it was 5 years ago.

In response to the request to describe the major objectives of their hospital training program, the schools presented a long and varied list of educational experiences. There were two objectives which were cited far more frequently, namely, the orientation of the dental student to hospital procedures and the introduction of the student to operating room technic and protocol. These 2 objectives were identified by more than 75% of the schools which replied to the survey.

In a weak second position, in terms of the frequency of response, the schools listed educational objectives designed to reinforce the students' concept of total patient care and his understanding of the team concept of health service. The next most frequently cited objective was the introduction of the student to treating the "special patient", such as the chronically ill, the mental patient and the physically handicapped.

Those institutions which indicated an interest in expanding the number of hours in hospital training identified the kinds of additional experience that they would like their students to have. The most frequently stated objective
of an expanded hospital program was to increase the students understanding of patient evaluation. Following very closely in second place was the desire to broaden the students clinical experience in hospital dentistry - variously described as preparing the future dental graduate to work more effectively as a member of the hospital professional staff.

Also identified was an increased emphasis on the handling of special patients, including substantial training in the diagnosis of oral cancer. Four of the dental schools mentioned specifically the desirability of including a "rotating clerkship" as a part of their undergraduate hospital education program.
THE ROLE OF THE DENTIST IN THE HOSPITAL.

A hospital is defined by the Council of Education of the American Medical Association as: 14

"An institution suitably located, constructed, organized managed and personelleed, to supply scientifically, efficiently and unhindered, all or any recognized part of the complex requirements for the prevention, diagnosis and treatment of physical, mental, and the medical aspects of social ills; with functioning facilities for training new workers in the many special professional, technical, and economic fields essential to the discharge of its proper functions; and with adequate contacts with physicians, other hospitals, medical schools and all accredited health agencies engaged in the better health program."

The dental profession and the dentist do belong to those engaged in the better health program. A diagnosis of the health status of a patient who seeks hospital care cannot be complete without a careful, scientific evaluation of the condition of the patient's mouth.

In most hospitals, dentistry has been represented only by the oral surgeons for many years. In this role, the oral surgeon has been an important factor in maintaining
the over all health of his community. He is frequently called to do other dental procedures in an emergency because he was the only dental staff member. This position is now changing and dentists are now being drawn into the hospital community by the need for their services in comprehensive health care. Patients go to present day hospitals because these hospitals are conducive to their confidence and safety. They tend to place their trust in such an institution when they become aware of the highly specialized equipment available and the quality of the staff which first rate hospitals have. The modern hospitals which are well funded can provide the profession specialized equipment which are too expensive to possess as individual operators. The aging, ill and infirm population who are poor physical risks and have been continuously treated in the hospital are not only indoctrinated to the hospital but have an added measure of confidence in receiving the treatment there. Many patients also require some form of dental treatment while in the hospital varying from a major oral surgical procedure to a broken denture or a simple restoration or periodontal treatment and the elimination of oral foci of infection.

Perhaps a discussion of some medical - dental problems and their dental complication would serve to illustrate the role of dentistry in the hospital organization. 15
Firstly, there is the importance of the routine oral examination. Most patients admitted to the hospital have relatively advanced medical problems. Many of these have complicated medical problems; most are beyond middle age. A great majority have never had dental care beyond pure emergency treatment for toothache or infections. Since many medical problems are connected directly or indirectly with focal infection and since it is only good medicine to insist on having a good state of health, an oral examination on such patients can be a major contribution to their care. An oral examination on a hospitalized patient provides:

1. The opportunity to eliminate focal infection.
2. An evaluation of the health of the oral mucosa to eliminate oral malignancies.
3. An evaluation of the functional efficiency of the oral masticatory mechanism. The mouth being the beginning of the gastro-intestinal tract and its function therefore is not merely to admit food and drink but to masticate food comfortably and to begin digestion of the food by enzymatic action.
4. An evaluation of the patients psychosomatic problems. Often tension is manifested in the oral cavity. Clenching and grinding of the teeth, muscle spasm and myofacial pain are all common
and usually reflect the patient's over-all problem, an early evaluation of these factors cannot help but be useful in the evaluation of the patient's problem and in the development of his over all case.

5. An evaluation of the patient that might reveal the need for dental care because of periodontal problems, dental caries or dental dysfunction. This consultation may save the patient not only his dentition but also considerable sums of time and money.

Cardiac disease. Great numbers of people have survived an original coronary occlusion and live to enjoy a comfortable productive bleeding time while collateral circulation of the heart muscle develops; others remain on an anticoagulant for the remainder of their lives. Since this group of patients is a fairly typical cross section, many have not had recent dental care and therefore require dental extractions or at least routine dental procedures.

Any type of dental care on this kind of patient calls for some special consideration. Since they are typically hyperkinetic, nervous and apprehensive, a dental experience may be a major problem for them. Much concern has been expressed relative to using epinephrine containing anesthetic solutions because of their vasoconstricting action. It should
be recognized, however, that much greater amounts of sympatomimetic amines may be released endogenously during a typical adrenergic response to pain or apprehension. Therefore, certain basic rules should be followed in care of post-coronary patients or patients with coronary insufficiency:

1. The dentist must be given adequate information on the patient's problem by the attending physician.

2. If the patient is being given anticoagulant, the prothrombin time should not be in excess of 25 seconds. This will give adequate coronary protection and local bleeding will be controllable by local measures.

3. The dentist must have the patient's confidence.

4. Mild but adequate sedation should be used.

5. The patient should be given effective local anesthesia.

6. The length of the surgical procedure should be limited.

7. Adequate equipment, medication and informed personnel must be in attendance in case of emergency.

These seven basic rules when followed provide maximum protection, efficiency and comfort and little change for
complications. There is no atmosphere more conducive to carrying out these rules than in the properly equipped, properly staffed hospital. In a hospital, such a procedure is not only safe but relatively routine. In the same fashion, patients with rheumatic heart disease or hypertension can be treated easily, effectively and with little likelihood of severe complications.

Children with congenital heart disease are a special problem. Their dental management calls for a team approach— a team including the pediatrician, cardiologist, anesthesiologist, pedodontist and oral surgeon. It is virtually impossible to assemble such talent and the necessary facilities for adequate safety anywhere except in the hospital. In many instances, even though local anesthesia is used, the patient must be carefully monitored by the anesthesiologist and cardiologist during the procedure.

Hematology Problems. Hematology problems often have dental complications. In many patients with leukemia the original local symptoms appear in the mouth. As a result, the general practitioner or periodontist may be the first to see such a patient. Also, those under hematologic treatment frequently require dental consultation and care. Although hemophiliacs are aware of their problem and bleeding most frequently occurs in the mouth, as a group
they still do not take adequate care of their teeth. As a result, many hemophiliacs develop toothaches or acute dental infections which demand intensive treatment. Under proper hospital in-patient control, they usually can have extractions done with relative safety. Bleeding may be prolonged, but a combination of medical and dental care almost universally results in satisfactory convalescence.

Handicapped Children. Mentally retarded children or children with neurological disorders often have severe dental problems because of the lack of adequate hygiene, diet and home care. Treatment may vary from complete dental extractions to regular restorative dental care. The pedodontist, neurologist, oral surgeon and pediatrician form a team which effectively manages the problem. The hospital is obviously the best place for this.

Allergies. Patient allergic to local anesthetic solutions are often sensitive to barbiturate, opiates, aspirin and drugs. These patients are in a precarious position when in need of dental care.

Since an anaphylactic reaction is usually sudden and severe and often fatal, the personnel involved must be well acquainted with the patients' problems, with emergency methods and with the medications that may be required. First, the patient must be carefully evaluated pre-operatively
by the allergist and, in consultation with the oral
surgeon and perhaps the operative dentist, a mutually
agreeable decision can be made on the indicated plan of
treatment. This almost always includes in-patient or
out-patient hospitalization and the use of general
anesthesia. Properly handled in the hospital, a potential
anaphylactic problem usually is managed smoothly and safely.

Prosthodontics. The prosthodontist is of increasing
importance in the hospital. In addition to routine care
of edentulous patients, he must also contribute to care of
patients with speech problems, with jaw defects resulting
from extensive oral surgery or with congenital jaw
deformities. Patients who have had a partial resection
of the maxilla as a result of a disease process in either
the maxillary mucosa of antrum are immediate post-operative
cripples since they can neither speak nor eat properly
because of a large defect which involves the oral, nasal
and antral cavities. Adequate preoperative cooperation with
the prosthetic section permits construction of a prosthetic
appliance that can be inserted immediately after surgery,
filling in the defect and sealing off the oral cavity from
the nose and antrum. The patient then has the advantage of
being able to communicate post operatively and to take an
adequate diet without a debilitating delay or prolonged use
of a nasal gastric feeding tube. In patients with congenital
jaw deformities, the prosthodontist is most helpful in the
correction of prognathism and micrognathia by preoperative evaluation and planning of the future dental occlusion and function. The oral surgeon thus has expert guidance in his surgical approach and procedure. The prosthodontist also is helpful to the neurosurgeon in the reconstruction of cranial defects by making molds, models and eventually a properly fitted skull plate to be placed in the defect. In this situation it would almost be impossible for the neurosurgeon to manage the problem alone. The prosthodontist can also be called upon to make different prosthetic replacement of lost parts of the face. He can also be utilized by the radiotherapist in the fabrication of carriers of radon seeds or radioactive needles in the management of malignancies by radiotherapy. Cleft lip and cleft palate patients require the assistance of the operative dentist, the prosthodontist, the pedodontist and frequently the periodontist in addition to that of the oral surgeon.

Organ Transplantation. With the increased use of organ transplants where there is extensive use of immuno-suppressive drugs the need of preoperative conditioning of the dental tissues and final dental clearance is very important. This also holds true for prospective patients with malignancies for irradiation therapy. If the radiation would involve the oral structures the dentist will play an important role in the preoperative evaluation of the patient. Breakdown of the oral structures after extensive use of immuno- suppressive drugs or irradiation could lead to the most undesirable consequence.
ROLE OF THE HOSPITAL IN DENTISTRY.

Aside from providing the proper environment for the management of the hospitalized and the "special patient" the hospital also have an educational function. The hospital has long been a centre for all nursing education. It has been recognized as the centre for postgraduate clinical training in medicine through the internship and residency training programs. Post graduate dental education has followed the example of medicine and nursing by using the hospital for post graduate clinical training particularly in the development of internship and residency programs for oral surgery. Hospitals with university affiliations can be utilized by the dental schools for the orientation of undergraduate dental students in the hospital and its value for improving his understanding of the total patient.

The dental departments of hospitals can contribute greatly to the continuing education of the dentist in the community by sponsoring regular postgraduate seminars and conferences.

The dentist in the hospital staff has also an opportunity to exchange knowledge and experiences gained with problems of clinical practice where oral and systemic relationships are involved. In conferences with other medical specialties
he can bring into sharper focus pertinent data from clinical literature and research in dentistry. The dentist can also participate in the dental health education of nurses. This is a contribution that can spread health education to patients the dentist may not get in contact with.

Research is another important function of a hospital. The hospital is an excellent atmosphere for research, for here workers in the clinical discipline in dentistry and medicine meet and work daily with basic service personnel so that maximum co-operative effort can be developed. Dental research activities are also useful in the graduate training program, for they allow the assignment of a specific research project to each resident to be completed during his residency, thus forcing him into the discipline of research which is not only stimulating to him but also of importance in his development as a solidly professional man.
UNIVERSITY OF THE PHILIPPINES HEALTH SCIENCE CENTRE.

The College of Dentistry of the University of the Philippines is located in the Medical Centre of the Manila Campus of the University. The nucleus of this centre is the Philippine General Hospital and around it are the Colleges of Medicine, Dentistry, Nursing, Institute of Hygiene and Public Health and the Cancer Institute. A close inter-relationship exists between the College of Dentistry and these units of the centre, servicing each others academic and service needs. The buildings in this centre were constructed in the 1920's and with increased demands for service by the community it serves requires the expansion of its physical facilities. Advances in medical technology and sophistication of equipment demands an increase in its physical facilities. Studies have been done about the possibilities of expanding on its present buildings but it was found impractical to expand vertically. Horizontal expansion would also be limited by restricted space availability and would also not be aesthetic with the existing buildings. Any reconstructions in the present premises would disrupt the activities within. Since there is also a need for a health centre in the rapidly developing communities around the Quezon City (Main) Campus of the University it was decided to construct a Health Science
Centre there. The Philippines General Hospital which is under the control of the University will be turned over to the Department of Health which will operate it to cater to the medical needs of the communities around it. The Rockefeller Foundation has offered to support half of the cost of the Health Science Centre. The Philippines Congress has approved a bill creating the Philippines Health Science Centre of the University of the Philippines and appropriating the other half of its cost. In the plan of the Centre there is envisioned a teaching hospital with all the health science professions attached to it. Included as satellites to this hospital are the Colleges of Medicine, Dentistry, Pharmacy, Nursing, Institute of Hygiene and Public Health, Cancer Institute, and other Para-Medical services as Physical and Occupational Therapy, and Medical Technology. The move to the university campus and the integration of the health sciences in a centre would have academic, social and administrative advantages. Academically, the health science student who traditionally becomes separated from the university campus after college education would be continually be exposed to the cultural and social activities there. Intermixing with students from related courses - health sciences - would broaden their perspective of these fields. It would also help the dental students develop their rapport with their medical counterparts and thus eliminate the inferiority complex that dental students bear in relation to them. Administratively, there could be sharing of common facilities, reduction of administrative cost.
and the possibility of computerization.
PRESENT UNDERGRADUATE COURSE IN DENTISTRY IN THE UNIVERSITY OF THE PHILIPPINES.

The College of Dentistry of the University of the Philippines has for its objective the preparation of students for the general practice of dentistry as a profession of health service with emphasis on prevention.\(^{16}\)

The undergraduate dental curriculum is structured on a horizontal pattern with the first two years composed mostly of basic science courses and the last two years dedicated to the clinical courses. The basic medical subjects are offered in the College of Medicine, Institute of Hygiene and Public Health and in the Basic Science Section of the College of Dentistry. All the clinical dental subjects are conducted in the College of Dentistry, Medicine and surgery classes are conducted in the Departments of Medicine and the Department of Surgery respectively, College of Medicine.

To determine the relevance of the present undergraduate dental curriculum of the College of Dentistry of the University of the Philippines to the needs for training in comprehensive health care, it is necessary to review the present dental curriculum.
The course in the undergraduate dental curriculum with close relationship to hospital dentistry is Oral Surgery for the faculty in this section have the training and experience in working in a hospital environment, hence the need for discussion of the Oral Surgery course.

The definition and scope of Oral Surgery is presented by the American Dental Association as:

Oral surgery is that specialty of dentistry which deals with the diagnosis, the surgical and adjunctive treatment of the diseases, injuries and defects of the human jaws and associated structures.

The scope of Oral Surgery includes the diagnosis, the surgical and adjunctive treatment of the disease, injuries and defects of the human jaws and associated structures within the limits of the professional qualifications and training of the individual practitioner and within the limits of agreement made at the local level by those concerned with the total health care of the patient.

The general objectives of the course are:

40.
1. To stimulate the student to recall his basic science knowledge in the light of diseases and morbid processes occurring in and about the oral cavity particularly those lending themselves to surgical care.

2. To help the student to become familiar with the printed material available on the subject of oral surgery, not only in his textbook but in reference works and in current literature.

3. To prepare the student to examine intelligently patients with oral surgical disease and to make a diagnosis.

4. To prepare the student to render treatment for uncomplicated surgical disease or to assist with the more complicated, both in his undergraduate training and later on as a practitioner.

5. To provide a basis for continuing education as a graduate or postgraduate student, or in his preparation for a teaching career.

6. To train the student in the ability to select cases for his surgery which lie within the limits of his easy operating range.

Upon completion of the course, the student should be able to:

1. Administer local anesthesia effectively and safely.
2. Extract teeth in uncomplicated cases and recover root fragments resulting from fracture during removal. This should be done without mutilation of the alveolar process or soft tissues and with minimal hazard of complication, with loss of time, and with minimal effort.

3. Prepare average mouth for the reception of prosthesis in the matter of alveolar bone, muscle attachment, and other soft tissue considerations.

4. Properly perform biopsy.

5. Care for uncomplicated fractures of the jaws.

6. Care for the commoner and less severe acute infections resulting from dental disease.

7. Carry out the necessary steps for elimination of chronic infections resulting from dental disease.

The didactic course in undergraduate Oral Surgery is given in two semesters - in the first semester of the third year and in the first semester of the fourth year. The clinical phase starts from the second semester of the third year to the last semester of the fourth year as indicated in the curriculum below.19
THE REVISED FOUR YEAR CURRICULUM IN DENTISTRY.
Leading to the Degree of Doctor of Dental Medicine (D.M.D.)

FIRST YEAR.

FIRST SEMESTER

Gross Anatomy 11 (Human Anatomy) .......... 5
Microscopic Anatomy 11 (General Histology) .... 5
Dental Materials 11 (Restorative Materials in Dentistry) ... 3
Oral Anatomy 11 (Dental Anatomy) .......... 3

SECOND SEMESTER

Gross Anatomy 12 (Human Anatomy) .......... 5
Microscopic Anatomy 12 (Oral Histology and Embryology) .... 3
Oral Anatomy 12 (Fundamentals of Occlusion) ... 3
Biochemistry 12 (Cellular Biochemistry) .... 3
Restorative Dentistry 12 (Operative Dentistry 1) .... 2

SECOND YEAR.

FIRST SEMESTER

Biochemistry 21 (Biochemistry of Metabolism) .... 3
Restorative Dentistry 21 (Operative Dentistry 11) .... 3
Prosthodontics 21 (Fixed Denture Prosthesis) ... 3
Physiology 21 (Physiology for Dental Students) .... 4
Orthodontics 21 (Growth and Development of the Head) ... 2

16

15

43.
SECOND SEMESTER.

Pathology 22 (General Pathology for Dental Students) ............... 5
Microbiology 22 (Microbiology for Dental Students) .................. 4
Prosthodontics 22 (Removable Denture Prosthesis) .................... 2
Physiology 22 (Oral Physiology) .......... 3
Radiodontics 22 (Radiographic Technic) ........... 1

16

THIRD YEAR.

FIRST SEMESTER

Pharmacology 31 (Pharmacology for Dental Students) ................ 3
Pathology 31 (Oral Pathology) ............. 3
Prosthodontics 31 (Complete Denture Prosthesis) .................... 3
Endodontics 31 (Root Canal Therapy) ........ 2
Radiodontics 31 (Radiographic Interpretation) ..................... 1
Surgery 31 (Oral Surgery) .................. 2
Anesthesiology 31 (Dental Anesthesia) ....... 1
Orthodontics 31 (Preventive and Interceptive Orthodontics) ....... 3
Pedodontics 31 (Fundamentals of Child Dental Care) ............. 1

19

SECOND SEMESTER

Diagnosis 32 (Oral Diagnosis and Treatment Planning) ............. 2
Nutrition 32 (Nutrition in Preventive Dentistry) .................... 2

44.
Pedodontics 32 (Dental Management of Child Patient) .................. 1
Oral Medicine 32 (Diagnosis and Treatment of Periodontal Disease) ............ 2
Pathology 32 (Diseases of the Oral Mucosa) ..................................... 1
Principles of Medicine 32 (Principles of Medicine for Dental Students) ....... 2
Clinical Dentistry 32 (Clinical Conference and Practice) ..................... 10

**During the regular semester Clinical Dentistry 32 is assigned 20 hours a week or 320 hours for the whole semester. Since 480 hours is required for the course, the remaining 160 hours will be completed during the 6 weeks of Summer.

FOURTH YEAR.

FIRST SEMESTER

Public Health Dentistry 41 (Principles of Public Health Practice) ............ 3
Jurisprudence 41 (Dental Jurisprudence and Ethics) .......................... 2
Surgery 41 (Maxillo-Facial Surgery) .......... 2
Seminars 41 (Special Studies) ................. 1
Clinical Dentistry 41 (Clinical Conference and Practice) ..................... 10

SECOND SEMESTER

Practice Management 42 (Dental Practice Management) ....................... 1
Public Health Dentistry 42
   Application of Public Health Principles in Dentistry) ........... 2

Seminars 42 (Special studies) ............ 1

History of Dentistry 42 (Development of Dentistry) .................. 1

Clinical Dentistry 42 (Clinical Conference and Practice ............ 10

   15

* Numbering of Courses - The first number indicates the year and the second number indicates the semester the course is offered.
The present outline of instruction in the first semester of Oral Surgery is patterned after the outline of instruction recommended by the Curriculum Survey Committee of 1935 - the Red Book.

The course in Oral Surgery in the fourth year deals with maxillo-mandibular and related structure surgery which also reviews some topics taken in the third year.

The following is the outline of instruction in Oral Surgery 31:20

OUTLINE OF CLASS INSTRUCTION IN ORAL SURGERY.

1. The course in oral surgery (1 hour)
   (a) Definition, scope and objectives.
   (b) Relation to medicine and to general surgery.
   (c) Relation to other types of dental service.
   (d) General principles of surgical practice.
   (e) Responsibility to the patient.
   (f) Importance of examination and case histories.

2 Principles of asepsis and operative technique: materials employed(1).
   (a) Meaning and purpose of asepsis.
   (b) Methods of attaining asepsis.
(c) The armamentarium for surgical treatment.

(d) Fundamental principles of surgical technique, such as adequate exposure of the field, minimum damage to tissues, control of hemorrhage, identification of structures, and closure of the wound.

3. Inflammation, infection, resistance, and proper care (1).

(a) Sources of infection.

(b) Local reaction.

(c) General systemic reaction.

(d) Prognosis.

(e) Measures to increase resistance: Local, General,

(f) Nursing care.

4. Special infections in their surgical relationships (1).

(a) Syphilis (Review)

(b) Tuberculosis.

(c) Actinomycosis (Review)

(d) Blastomycosis.

(e) Others.

5. Shock ($\frac{1}{2}$)

(a) Types

(b) Etiology and pathology.

(c) Symptoms.

(d) Prevention.

(e) Treatment
6. Hemorrhage (1/2)
   (a) Classification;
   (b) Symptoms: Local, General.
   (c) Prevention.
   (d) Control
   (e) Treatment of the effects.
   (f) Blood transfusion

7 Extraction of teeth (1).
   (a) Indications and contraindications.
   (b) The armamentarium
   (c) Technique
   (d) Postoperative care

8 Complicated extractions (1).
   (a) Broken roots.
   (b) Anomalies of shape and size.
   (c) Pathological condition.
   (d) Flap operations.
   (e) Complications connected with the extraction of the tooth.

9. Unerupted and impacted teeth (1).
   (a) Types
   (b) Local and remote effects.
   (c) Indications and contraindications for removal.
   (d) Technique of removal.
   (e) Post operative care.

10. Abnormalities of the mouth (1).
    (a) Irregular or excessive alveolar process.
(b) Exostosis.
(c) Torus palatinus
(d) Hypertrophied gums.
(e) Abnormal labial frenum
(f) Abnormal lingual frenum
(g) Adhesions and abnormal muscle attachments.
(h) Others.

11. Acute infections and inflammatory conditions arising about the teeth and treatment(2).

(a) Acute dento-alvcolar abscess: Periapical, Pericemental, Pericoronal.
(b) Acute cellulitis (Including Ludwig's angina)
(c) Periostitis
(d) Osteomyelitis
(e) Necrosis

12. Chronic periapical infections and their sequelae (1).

(a) Granuloma and cyst formation
(b) Treatment by root resection where indicated.
(c) Treatment by enucleation.
(d) Treatment by Partsch operation.

13. Diseases of the maxillary sinus of dental origin(2)

(a) Surgical anatomy of the maxillary sinus.
(b) Delimitation of the field of the dentist; overlapping with the rhinologist.
(c) Accidental invasion
(d) Acute and chronic infection
(e) Methods of diagnosis.
(f) Methods of treatment.
(g) Closure of oro-antral fistulae.

14. Wounds and injuries of the soft tissues (1)
   (a) Classification
   (b) Infection in wounds.
   (c) Special infections: Tetanus. Gas Bacillus.
   (d) Foreign bodies.
   (e) Principles of treatment of wounds.
   (f) Gunshot wounds.

15. Fractures.
   (a) Causes
   (b) Varieties.
   (c) Diagnosis.
   (d) General principles of treatment: Reduction, Fixation. Care of the tissues.
   (e) Complications
   (f) Medico-legal aspects.

16. Injuries of the teeth and alveolar process (1)
   (a) Avulsion of teeth.
   (b) Dislocation of teeth.
   (c) Fractures of teeth
   (d) Injuries of the alveolar process.

17. Fractures of the mandible (3)
   (a) Causes
   (b) Location
   (c) Displacement
   (d) Symptoms and diagnosis
(e) Treatment: Reduction. Methods of fixation.

(f) Problems of feeding.

(g) Time for repair

(h) Complications.

18. Fractures of the maxillae (1)

(a) Causes

(b) Varieties

(c) Symptoms and diagnosis

(d) Treatment: Reduction. Methods of fixation.

(e) Complications.

19. Disturbances of the temporomandibular articulation (1).

(a) Surgical anatomy.

(b) Dislocation and subluxation

(c) Arthritis

(d) Extra-articular limitation of movement

(e) Ankylosis

20. Congenital clefts of the lips and palate (1)

(a) Forms

(b) Age for operation on various parts

(c) Selection of cases for operation.

(d) Principles in operation and postoperative care.

(e) Results to be expected

(f) Speech training

21. Acquired defects of hard and soft tissues of the face (1).

(a) Causes

(b) Varieties
(c) General principles of tissue transplantation:
    Flaps. Grafts.
(d) Repair of defects of soft tissues.
(e) Repairs of defects of bone tissue.
(f) Cooperation of the dentist in the care of
    the mouth, fixation and prosthesis.

22. Developmental deformities of the maxillae and mandible (1)
    (a) Malrelations of the maxillae and mandible:
    (b) Selection of cases for operation.
    (c) Cooperation with the orthodontist.
    (d) Principles of surgical treatment.

23. Tumors and cysts (4)

    NOTE: This instruction should be correlated with
    the instruction on tumors in the course of pathology.
    In this way the total amount of time devoted to
    it may perhaps be reduced.
    (a) Clinical features of tumors.
    (b) Classification of tumors.
    (c) Precancerous lesions.
    (d) Tumors commonly found about the mouth and jaws:
    (e) Tumors of dental origin.
    (f) Conditions in the maxillae and mandible
        resembling tumors.

24. Affections of the salivary glands and ducts (1)
    (a) types of affections: Epidemic parotitis.
        local infections. Obstructions of ducts.
Salivary fistulae

(b) Diagnosis

(c) Treatment.

25. Cysts of the floor of the mouth, lips and cheeks (1)

(a) Types of cysts: Mucous. Ranula. Dermoid.

Thyroglossal. Branchial

(b) Diagnosis

(c) Treatment

26. Affections of the nerves of the face (1)

(a) Types: Minor neuralgia. Trigeminal neuralgia

Anesthesia. Paralysis

(b) Diagnosis

(c) Treatment

Total time: Class, 32 hours
The present outline of instruction in the third year is so crowded within one semester. It would be better to rearrange the contents of this outline and be carried over to the fourth year with the inclusion of hospital dental practice which will be the basis for all types of dentistry for a comprehensive health care in a hospital environment.
The proposed outline of instruction in the didactic course of Oral Surgery, first semester of the third year is as follows: 21

1. Introduction, Definition, scope and objectives, principles of surgery.


3. History, examination, evaluation and treatment planning. Subjective information, technic of taking and recording history, clinical and radiographic examination, indications and contraindications for exodontia and patient evaluation.


5. Special infections and surgical relations. Tetanus, syphilis, tuberculosis, fungal infections, viral infections. etc.


7. Extractions of teeth. Anatomical considerations, selection of forceps, chair positions, extraction movements, complications to be expected, management of complications, post operative care.


10. Preparation of mouth for denture. Sequence of extraction, alveoloplasty, torus palatinus and mandibularis, undercut areas, bulbous tubersities and soft tissue deformities.

11. Inflammation, infection, resistance and proper care. Local and systemic reactions. Measures to increase resistance—local and systemic.


2. Wounds and injuries of the soft tissues of the facial area. Classification. Treatment.


5. Fracture of maxilla. Causes, diagnosis, classification, signs and symptoms, treatment, complications.


7. Cleft lip and cleft palate. Embryology, etiology, surgical correction, other rehabilitative measures.

8. Acquired defects of hard and soft tissues of the jaws. Soft tissue repair (free, local, distant flaps, contour replacement (soft tissue, cartilage, bone, artificial implants), reconstruction of the mandible (alloplasts, bone), immediate repair of compound defects resulting from cancer surgery.

9. Tissue transplantation. Immunologic principles. Teeth, bone, soft tissue: auto-, homo-, and
heterotransplants.

10. Developmental deformities of jaws. Types, Causes, Post-operative evaluation and preparation Treatment.


In the clinical phase of the undergraduate program in the University of the Philippines, College of Dentistry, the students are divided into three groups corresponding to the three clinical areas of activity - Oral surgery, Restorative Dentistry and Prostodontics. The students stay for six weeks in each clinical area. Assignments in the hospital could either be taken while the students are in the Oral Surgery Clinic or a section of Hospital Dentistry be added to the three clinical sections. The latter would depend on the other sections relinquishing some of their time by reducing their clinical requirements without prejudice to student training. It is my experience that fulfillment of clinical requirements is hard to control for the unpredictability of patient availability. It would therefore seem more reasonable that the students be taken to the hospital while they are assigned in the Oral Surgery section. The Oral Surgery Clinic would not be handicapped by lack of clinicians for in the second semester the juniors are also coming into the clinic. The rostering of seniors to the hospital would be such that some of them will still be available in the Oral Surgery Clinic.

In an integrated health science centre, it is proposed that quarters be provided for dental students. Living in the hospital would make them available at all times to attend to patients either for emergency treatment or for
consultation from other services with the supervision of a dental consultant on duty.
DENTAL DEPARTMENT OF A HEALTH

SCIENCE CENTRE HOSPITAL.

To make dentistry a part of comprehensive health care in a University Health Science Centre for reasons already stated above, it is proposed that a dental department be created also in the hospital.

The ideal organization so far as dentistry is concerned as found in large departmentalized hospitals which have comprehensive dental services is:

Medical and Dental Staff.

Dept. of ________ Dept. of ________ Dept. of Surgery Dept. of Dentistry

Sections

Surgical Specialties

- Oral Surgery
- Restorative
- Periodontics
- Prosthodontics
- Pedodontics
Oral surgery should have a close liaison with the department of surgery, since the chief of surgery is responsible for all surgery performed in the hospital. In this respect, the chief of surgery must have authority over all surgical subspecialties including oral surgery. Otherwise, the oral surgery section administratively belongs in the department of dentistry as do all other dental specialties. The chief of the dental service would represent the department on the executive committee.

The dental department of the university health science centre hospital should be organized into sections by areas of recognized dental specialties as presented in the College of Dentistry. The section on oral surgery should be administered as a section of the department of dentistry and should have full consultative and advisory relations within the department of surgery.

The chief of the dental service should be responsible for conducting the dental service and the quality of the professional care of patients on his service. He should be selected for his training, experience, and executive ability. It is not necessary that the chief of the dental service is an oral surgeon, but he must be familiar with working in a hospital environment. The sections of the dental service should be headed ex-officio by the corresponding
sections in the college of dentistry. The proposed organization of the dental service is as indicated below:\textsuperscript{23}

\begin{center}
\begin{tikzpicture}
  \node (chief) {Chief of Dental Service}
  \node (pedodontics) [below of=chief] {Head\linebreak Pedodontics}
  \node (prosthodontics) [right of=chief] {Head\linebreak Prosthodontics}
  \node (oral_surgery) [right of=chief, xshift=1cm] {Head\linebreak Oral Surgery}
  \node (restorative) [right of=chief, xshift=2cm] {Head\linebreak Restorative}
  \node (committees) [below of=chief, yshift=-1cm] {Committees}
  \node (instrument) [below of=committees, xshift=-1cm] {Instrument}
  \node (education) [below of=committees, xshift=0cm] {Education}
  \node (library) [below of=committees, xshift=1cm] {Library}

\end{tikzpicture}
\end{center}
SUMMARY:

A review of the goals of dentistry and dental education was presented with the history of its evolution to its present high professional standard. The relevance of this concept of dental education to social and economic changes that have changed treatment needs for a more comprehensive health care rendered in a hospital environment have shown a need for preparing dental students to meet these demands in the future.

The recurrent emphasis on the relation of oral health to total health could best be illustrated to undergraduate dental students in a hospital environment.

A program for an undergraduate course in the College of Dentistry as part of a University Health Science Centre oriented to a future hospital based practice is proposed. The organizational set up of a hospital dental department is also presented.
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