

A STUDY OF FOUR SELECTED CURRICULA
OF DENTAL SCHOOLS WITH SPECIAL
REFERENCE TO THE TEACHING OF
PREVENTIVE DENTISTRY

The curricula of four dental schools of 1971 were studied, these are:

1. The Faculty of Dentistry of the University of Alberta
2. The School of Dentistry of the Indiana University.
3. The Faculty of Dentistry of the University of Sydney.
4. The College of Dentistry of the University of Kentucky.

The following structural elements were observed:

1. The Objectives, or goals that the institution seeks to attain.
2. The Content, or the set of educational experiences, which is likely to obtain these objectives.
3. The Organization, of learning experiences to maximize their cumulative effect, horizontal diagonal or vertical pattern.
4. The Integration, of Preventive Dentistry in each curriculum
5. The Evaluation, of each programme in regard to the effectiveness and importance of Preventive Dentistry in relation to other subjects.

In order to be able to draw a comparison between the four curricula, the subjects are divided according to the concepts of the Kentucky University.

- . Basic Sciences
- . Correlated Dental Sciences
- . Clinical Sciences
- . Social Sciences
- . Preclinical Sciences

1. THE UNIVERSITY OF ALBERTA, FACULTY OF DENTISTRY.

The objective of the Faculty of Dentistry of the University of Alberta is:

"to graduate competent and well trained dentists, prepared for a role of leadership and service in their profession and in their community".

The Curriculum is a four year programme of study, leading to the Degree of Doctor of Dental Surgery (D.D.S.)

Two years of pre-professional years of University education is required before the dental curriculum. These two years provide the necessary background in inorganic chemistry, organic chemistry, zoology and physics, the humanities and social sciences.

FIRST YEAR:

	<u>FIRST TERM</u>		<u>SECOND TERM</u>		<u>COURSE</u>
	Lect.	Lab.	Lect.	Lab	<u>WEIGHT</u>
<u>PRECLINICAL DENTISTRY</u>					
Dental Materials	1	0	1	0	2
<u>CORRELATED DENTAL SCIENCES:</u>					
Introduction to Oral Diagnosis			1	0	0
Oral Histology			2	2	4
Oral Anatomy and Introduction to Restorative Dentistry	2	6	1	3	8
<u>BASIC SCIENCES:</u>					
General Anatomy/ Oral Biology	3	4	3	4	9
Microscopic Anatomy	2	4			4
General Biochemistry	3	3	3	3	9
Physiology	3	0	3	3	8
<u>DENTAL SOCIAL SCIENCES:</u>					
Preventive and Community Dentistry					
Orientation/History/ Ethics	1	0			0
Dental Public Health			1	0	0

SECOND YEAR:

	<u>FIRST TERM</u>		<u>SECOND TERM</u>		<u>COURSE</u>
	Hours		Hours		<u>WEIGHT</u>
	Lect.	Lab.	Lect.	Lab.	
<u>PRECLINICAL DENTISTRY:</u>					
Full Denture Prosthesis	1	3	1	3	5
Removable Partial Denture	1	3	1	3	5
Fixed Partial Denture			1	3	3
Operative Dentistry	1	6	1	3	7
Periodontics (Introduction)			1	0	1
Orthodontics			1	0	1
Pedodontics	1	0			1
Radiology	1	0	1	0	2
<u>CORRELATED DENTAL SCIENCE:</u>					
Oral Pathology			2	2	1
Oral Biology	3	0			3
<u>BASIC SCIENCES:</u>					
Bacteriology	2	3	0	0	4
General Pathology	3	2			4
Pharmacology			3	3	5
Dental Therapeutics	1	0	1	0	2
<u>DENTAL SOCIAL SCIENCES:</u>					
Nutrition and Sociology			1	0	0
Psychodynamics			1	0	0

THIRD YEAR:

	<u>FIRST TERM</u>		<u>SECOND TERM</u>		<u>COURSE</u>
	Lect.	Lab.	Lect.	Lab.	<u>WEIGHT</u>
<u>CLINICAL DENTISTRY:</u>					
Management of Oral Disease	0	2	13	2	3
Clinical Oral Pathology	1	0			1
Full Denture Prosthesis	1	6	1	6	8
Fixed Partial Denture	1	6	0	6	7
Operative Dentistry	1	6	1	8	9
Endodontics	2	2	0	1	3
Pedodontics	1	3	1	3	5
Periodontics (Intermediate)	1	3	1	3	5
Oral Surgery	2	0	1	0	2
Orthodontics	1	2	1	2	4
<u>BASIC SCIENCES:</u>					
Medicine			1	0	0
Surgery			1	0	1
<u>DENTAL SOCIAL SCIENCES:</u>					
Preventive and Community Dentistry			1	0	0

FOURTH YEAR:

	<u>FIRST TERM</u>		<u>SECOND TERM</u>		<u>COURSE</u>
	Lect.	Lab.	Lect.	Lab.	<u>WEIGHT</u>
<u>CLINICAL DENTISTRY:</u>					
Management of Oral Disease	13	1	0	1	3
Denture Prosthesis	1	6	1	6	8
Fixed Partial Denture	1	4	1	5	7
Operative Dentistry	13	7	13	8	10
Endodontics	0	1	0	1	1
Periodontics (Advanced)	2	3	2	3	7
Pedodontics	15	3	15	3	5
Orthodontics	15	3	15	3	5
Oral Surgery	15	3	15	3	5

SOCIAL DENTAL SCIENCES:

Ethics and Jurisprudence			1	0	
Practice Management	1	0			

4	CLD				S
3	BS	CLD			S
2	BS	CDS			S
1	BS		CDS	P	S
Preprofessional Years					

Figure 4. PATTERN OF CURRICULUM

B.S. - Basic Sciences

C.D.S. - Correlated Dental Sciences

P. - Preclinical Dentistry

CL.D. - Clinical Dentistry S. - Social Sciences

The organization of the Dental Curriculum is a horizontal one, based on traditional dental teaching. The basic sciences in the first and second year are more a general background.

Anatomy is gross anatomy, with more detail about anatomy of head and neck. Under this heading, Oral Biology and Embryology, the developmental processes involved in the formation of head and neck are taught and the effects of abnormalities of these processes are discussed. While Gross Anatomy has a weight of 9, Oral Biology has a weight of 0.

Microscope Anatomy covers anatomy and development of organs of the human body, with special attention to the teeth and related oral structures.

Physiology is a course on mammalian and human physiology, the content being the same as the course in medical physiology.

Biochemistry is taught to give appreciation of general biochemical concepts in relation to metabolism and in addition, certain topics in oral biochemistry are considered. The importance of this subject is shown by the weight it has. (9)

The dental content of the basic sciences is limited and correlation will therefore be difficult.

The correlation of dental sciences, which, in the first year consist of Oral Histology and Oral Anatomy, do correlate the general knowledge of the basic sciences to more clinical dentistry - but more to restorative dentistry. Oral Anatomy, consisting of a course in the nomenclature and chronology of the development of the teeth and the internal and external anatomy of the teeth, has as its laboratory work preparation of cavities in stone, natural teeth and dentoform. The weight of this subject is the highest among the correlated dental sciences.

The course on Preventive and Community Dentistry conducted by the Department of Preventive and Community Dentistry, consists of two parts. In the first term, Orientation, History and Ethics are taught; in the second term, Dental Public Health and Community Dentistry. There seem to be little of Preventive Dentistry, as

meant in this paper, moreover, the weight of this subject is zero.

In the second year, the time spent on Basic Sciences is reduced to half, while Preclinical Dentistry becomes the main part of the curriculum, with the emphasis more on Prosthetics and Operative Dentistry, rather than Pedodontics, Periodontics or Orthodontics.

The second year seems to be specially devoted to correlation of Basic Sciences and Clinical Dentistry. In Bacteriology, emphasis is put on Dental Caries and Periodontal Disease. With the introduction of Periodontology in this year, the elementary principles of periodontal disease and the relationship between the basic sciences and the field of periodontology is explained.

In Oral Biology, the application of the principles taught in Anatomy, Biochemistry and Physiology to those areas of cell biology which are of special importance to dental science, are taught.

The Preventive Dentistry course is a more direct programme to prevention. Nutrition and Sociology for dental student classes and their practical application in Dentistry is given.

Again, Psychodynamics in Dentistry is a course in which essentials of personality dynamics as relevant to the practice of dentistry is given. The

mechanisms of sensation and perception, the significance and effects of anxiety, personality types and extremes and methods applicable to the dentist for dealing with patients psychotherapeutically are part of the content of the course.

Like all Preventive Dentistry courses, the two latter courses have no laboratory work and is of little weight.

The programme of the third year is nearly wholly oriented towards Clinical Dentistry. There are no Basic Sciences, no Correlated Dental Sciences and only little Dental Social Sciences.

In Clinical Dentistry, all Preventive and Therapeutic procedures are carried out. That more time is spent on Prosthetics, Operative and Oral Surgery, rather than Pedodontics, Orthodontics and Periodontics (the subjects in which Prevention is integrated) is understandable, but, to put less weight to the value of these subjects is against the concept of improving the philosophy of Preventive Dentistry.

The Preventive and Community Dentistry course provided in the second term, consists of the concepts of community dental health, with major emphasis on the role of dentistry in private practice and in the community. A comprehensive approach to the dental health problem, including biometrics as applied in Dentistry, prevention and control of dental diseases, auxiliary

personnel and recent legislation are taught.

The last year is devoted to comprehensive care of the patient and devoted to more advanced treatment of all subjects in Clinical Dentistry. Primary prevention is of little importance.

The same comment like in third year about the difference in weight between Therapeutic and Preventive Clinical Sciences applies here.

For our interest in Preventive Dentistry, the subjects given in this year by the Department are of little value.

EVALUATION

The objectives of the Faculty of Dentistry of the University of Alberta are very general and lack definite orientation, some students will be able to set their own objective, others will be disoriented.

The content caters for a sound knowledge of Basic Sciences, equalling requirements for General Medicine. Because of the lack of Dental Content in the Basic Sciences and lack of importance in Correlated Dental Sciences, vertical correlation between Basic and Clinical Sciences is difficult. Again, some students will find proper subject inter-relationship of their own, others will have a fragmented knowledge of Dentistry.

Clinical Dentistry is introduced in the third year of the Dental Curriculum or - if we count Preprofessional training, after four years of Basic Sciences. The time of exposure is very late causing lack of motivation, the type of clinical exposure is mainly prosthetics, causing a defeatist attitude towards loss of teeth.

The organisation of Basic Sciences, Correlated Dental Sciences and Clinical Dental Sciences is horizontal. Only Social Dental Sciences and Clinical Dentistry are organised vertically. Most correlation between Basic Sciences and Clinical Dentistry is done horizontally in the second year.

Preventive Dentistry as taught at this University is done by the Department of Preventive and Community Dentistry. Although the subjects taught by this Department are organized vertically from the first to the fourth year, the content material seems to show little emphasis on the Philosophy of Prevention and is more a course in Dental Public Health. Moreover, there is no laboratory work, nor any extramural activities and the weight of these subjects is zero.

Preventive Dentistry as is meant in this paper is taught by integration in Basic Sciences and Correlated Dental Sciences. Preventive Clinical Dentistry is practised adequately in Pedodontics - especially in the third year.

The effectivity to produce a Preventive oriented dentist is doubtful, but that he will be a more generally competent dentist, is certain.

2. INDIANA UNIVERSITY, SCHOOL OF DENTISTRY.

The objective of the School of Dentistry is not well defined, although there are signs that the student is prepared for Preventive Dental Practice.

The Curriculum is a four year programme, leading to a D.D.S. degree. The requirements are a baccal aureate degree at the end of three years in the College of Arts and Sciences, or upon completion of two years of undergraduate preparation.

The Curriculum of the Indiana University has a different pattern from the traditional dental schools.

The Basic Sciences are an important part of the Freshman Year, but in the Correlated Sciences, the oral content of the Basic Sciences is stressed. Important for our purposes, is the inculcation of the philosophy and theory of Preventive Dentistry in the Freshman Year. While engrossed in Basic Sciences, he is ready to accept the comprehensive coverage of Preventive Dentistry.

In Biochemistry, special attention is given to saliva, fluoride metabolism, chemical composition of teeth and supporting structures and intermediary metabolism in the dental plaque, all factors important in Preventive Dentistry.

FRESHMAN YEAR:

	<u>FIRST SEMESTER</u>		<u>SECOND SEMESTER</u>	
	Lect.	Lab	Lect.	Lab.
<u>PRECLINICAL DENTISTRY</u>				
Dental Sciences	2	2	2	2
<u>CORRELATED DENTAL SCIENCES</u>				
Oral Anatomy	0	0	1	2
Oral Histology/ Embryology	0	0	1	1
Oral Biology			2	0
<u>BASIC SCIENCES</u>				
Histology	0	0	2	2
Physiology	3	3	0	0
Human Anatomy	2	3	2	3
Biochemistry	6	1		
<u>DENTAL SOCIAL SCIENCES</u>				
Dental Seminar			1	0
History of Dentistry			1	0

SOPHOMORE YEAR:

	<u>FIRST SEMESTER</u>		<u>SECOND SEMESTER</u>	
	Lect.	Lab.	Lect.	Lab.
<u>PRECLINICAL DENTISTRY</u>				
Complete Denture	1	2	1	1
Fixed Partial Prosthodontics	2	2	1	1
Removable Partial Prosthodontics	0	0	2	2
Operative Dentistry	1	3	1	2
Endodontics	0	0	1	0
Periodontics	0	0	1	0
Dental Materials	2	0	1	0
<u>CORRELATED DENTAL SCIENCES</u>				
Oral Pathology	0	0	2	2
Fundamentals of Occlusion	1	0	1	0
<u>BASIC SCIENCES</u>				
Microbiology	0	0	2	2
General Pathology	2	2	0	0

JUNIOR YEAR:

	<u>FIRST SEMESTER</u>		<u>SECOND SEMESTER</u>	
	Lect.	Lab.	Lect.	Lab.
<u>CLINICAL DENTISTRY</u>				
Oral Diagnosis	1	1/2	1	1/2
Radiology	2	0	0	1/2
Complete Denture	1	1	0	1
Fixed Partial Prosthodontics	2	3	0	1
Removable Partial Prosthodontics	1	0	1	1/2
Operative Dentistry	2	2	0	3
Pedodontics	0	0	1	0
Periodontics	1	1/2	1	1/2
Orthodontics	1	0	1	1/2
Oral Surgery	1	1/2	1	1/2
Preventive Dentistry	0	0	1	1/2
<u>CORRELATED DENTAL SCIENCES</u>				
Oral Pathology	1	0	0	0'
Nutrition	0	0	2	0
<u>BASIC SCIENCES</u>				
Pharmacology	1	0	1	0
Therapeutics and Dental Pharmacology	0	0	1	1/2
Internal Medicine	1	0	1	0

SENIOR YEAR:

	<u>FIRST SEMESTER</u>		<u>SECOND SEMESTER</u>	
	Lect.	Lab.	Lect.	Lab.
<u>CLINICAL DENTISTRY</u>				
Oral Diagnosis	0	1/2	0	1/2
Radiology	0	0	0	1/2
Anaesthesiology	0	0	1	0
Complete Denture	1	2	1	2
Fixed Partial Prosthodontics	1	3	1	3
Removable Partial Prosthodontics	0	1	0	1
Operative Dentistry	1	3	0	3
Endodontics	0	0	0	1/2
Pedodontics	0	1/2	0	1/2
Periodontics	0	1/2	0	1/2
Orthodontics	1	0	0	0
Maxillofacial Prosthodontics	0	0	0	1
<u>CORRELATED DENTAL SCIENCES</u>				
Applied Anatomy	1	0	0	0
Senior Pathology Conference	0	0	1	0
Rehabilitation	1	0	0	0
Preventive Dentistry	0	0	1	0
<u>DENTAL SOCIAL SCIENCES</u>				
Practice Administration	0	0	1	0
Jurisprudence	0	0	1	0
Public Health	0	0	1	0

4	CDS	CLD			S
3	BS	C	CLD		
2	BS	P	P		
1	BS	CDS	P	S	
Pre dental Preparation					

Figure 5. PATTERN OF CURRICULUM

B.S. - Basic Sciences
 C.D.S. - Correlated Dental Sciences
 P. - Preclinical Dentistry
 Cl.D. - Clinical Dentistry
 S. - Social Sciences

In Oral Biology, the course correlates chemical, biochemical and physiologic principles to oral health and disease. A special textbook is written for this purpose. Thus, the relationship between basic sciences and their application in Clinical Preventive Dentistry is established, even in the Freshman Year.

The Freshman Dental Seminar is a course given by the Department of Preventive Dentistry in the second semester and is meant to acquaint the first year student with the goals of, and the need for, Preventive Dentistry. Moreover, the student is made familiar with current concepts, principles, research and techniques pertinent to Preventive Dentistry.

The Freshman is not exposed to clinical experience in the first year, but preventive measures among the students themselves does lead to motivation.

The Sophomore Year has at first sight, no follow up of the intense exposure to Preventive Dentistry in the first year. But in the Correlated Dental Sciences the course of Oral Pathology, which consists of Developmental abnormalities and acquired disorders of teeth and structures are important in the knowledge of Preventive Dentistry. Moreover, the introduction of Periodontics in the second semester is more or less concerned with Diagnosis, treatment and prevention of periodontal disease and maintenance of oral health.

However, great emphasis is given to

Prosthetics, Operative Dentistry and Endodontics as Preclinical Science, with Laboratory work.

In the Junior Year, there are no basic sciences and Clinical Dentistry becomes important. Clinical Dental practice consists of Prosthetics, Operative, Periodontics, Oral Surgery, Pedodontics and Preventive Dentistry. While in the first semester, Prosthetics, Operative Dentistry and Oral Surgery are important, in the second semester the emphasis shifts towards Pedodontics and Preventive Dentistry. In the Clinical Preventive Dentistry course, every student is required to apply Preventive Dentistry techniques and principles on patients according to manuals prepared by the department, called "Preventive Dental Practice".

Oral Diagnosis, in the Junior Year, is an important part of the curriculum, from the Oral Diagnosis Clinic patients are selected to follow a service of Preventive Dentistry programme, according to the priority of the recommended procedures.

In the last year, Clinical Dentistry becomes even more important. Preventive Dentistry is first of all integrated in lectures and clinical therapeutic procedures. Especially in Pedodontics, Caries Control, Diet Survey and analysis, topical fluoride technique applied in the Pedodontic Clinic is most effective. But even in Crown and Bridge, Operative Dentistry, Orthodontics and Periodontics, lectures on purely Preventive aspects of dentistry, pertaining to the

particular subjects are given.

Next to integration, a separate course in Preventive Dentistry, to stress the Clinical aspects of Preventive Dentistry is given, to leave the student with some fundamental, but "practical" aspects of the subject which are directly applicable to their clinical practice of Dentistry. Moreover, statistical implication of dental caries and periodontal problems are discussed, stressing the impossibility of controlling these diseases by clinical methods alone, but the need for dentistry based on good preventive principles.

In Public Health, problems relating to public health as applied to dentistry, are discussed and preventive dentistry applied on population groups in state and national programmes are discussed.

There is a lot of evidence that students are often involved in laboratory and field work, surveys, brush-ins and the like.

EVALUATION

The School of Dentistry of the Indiana University shows signs of strong emphasis on Preventive Dental Practice. The objective of the school is, however, not clearly defined.

The content of the curriculum in both Basic Sciences, Correlated Dental Sciences and Clinical Dentistry is strongly biased towards prevention. The Department of Preventive Dentistry is responsible for the inculcation of the Philosophy, Rationale and Clinical implementation of Preventive Dentistry.

The organization of the Basic Sciences in relation to Clinical Dentistry is horizontal, but correlation is even attempted during the Freshman Year. Dental Social Sciences are given only in the first and last year - the effectiveness of which is doubtful.

The integration of Preventive Dentistry in the Freshman year is maximal for its Philosophy and rationale, but the Clinical implementation takes place in the third year and is summed up in the fourth year as a Senior Preventive Dentistry Course. The integration of Preventive Dentistry into courses of Crown and Bridge and Prosthetics seems to be exaggerated - on the other hand, it does make the graduate realise that Crown and Bridge or Prosthetics without concept of prevention, is useless.

3. THE UNIVERSITY OF SYDNEY - FACULTY OF DENTISTRY.

The goal of the graduates is:

The optimal 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.

The Faculty of Dentistry provides an undergraduate educational programme which leads to the B.D.S. degree, which is designed to enable the graduate to practice dentistry.

The Curriculum is a five year programme, the content of which is as follows.

FIRST YEAR:

Physics

Chemistry

Biology

Introductory Medical Science, which consists of:

Biomathematics

Human Behaviour

Human Evolution

Comparative Morphology

Histology and Embryology

Introductory Biochemistry

SECOND YEAR

	LENT		TRINITY		MICHELMAS	
	TERM		TERM		TERM	
	Lect.	Lab	Lect.	Lab	Lect.	Lab
<u>BASIC SCIENCES</u>						
Physiology	2		2	5	2	5
Anatomy	3	8	3	10	3	7
Histology and Dental Histology	2	4	2	4		
Biochemistry	3		3		1	
<u>PRECLINICAL SCIENCES</u>						
Dental Materials	1					
Prosthetic Dentistry	1	6	2	6	2	9

THIRD YEAR:

	LENT		TRINITY		MICHELMAS	
	TERM		TERM		TERM	
	Lect.	Lab	Lect.	Lab	Lect.	Lab

BASIC SCIENCES

Bacteriology	2	4	2			
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CORRELATED DENTAL SCIENCES

Oral Biology	2		1		1	
Oral Physiology			1		1	

DENTAL CLINICAL SCIENCES

Radiology					1	
Operative Dentistry	2	9	2	9		12
Prosthetic Dentistry	2	6	2	8	1	12
Exodontics					1	
Orthodontics						
Pedodontics						

PRECLINICAL SCIENCES

Dental Materials					1	
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FOURTH YEAR:

LENT		TRINITY		MICHELMAS	
TERM		TERM		TERM	
Lect.	Lab	Lect.	Lab	Lect.	Lab

BASIC SCIENCES

Pharmacology and
Therapeutics

1

General Medicine/
Surgery

2

1

CORRELATED DENTAL SCIENCES

Oral Pathology

1

Preventive Dentistry

4

2

2

CLINICAL SCIENCES

Radiology

Anaesthetics

1

Oral Surgery

1

24

1

42

1

42

Operative Dentistry

2

12

6

1

6

Crown and Bridge
(Ceramics)

1

1

2 1/2

1

2 3/4

Prosthetic Dentistry

1

9

1

8

1

8

Orthodontics

6

12

12

12

Periodontics

6

9

9

Pedodontics

15

15

15

FIFTH YEAR:

	SUMMER TERM		LENT TERM		TRINITY TERM		MICHELMAS TERM	
	Lect.	Lab.	Lect.	Lab.	Lect.	Lab.	Lect.	Lab.
<u>CORRELATED DENTAL SCIENCES</u>								
Preventive Dentistry	1		1		1		1	
<u>CLINICAL SCIENCES</u>								
Operative Dentistry		9		9		9		9
Prosthetic Dentistry	1	9	1	9	1	9	1	9
Orthodontics		11/2		2		1-1/6		2
Periodontics		21/2		2		1-1/6		2
Pedodontics		4		3		1-2/3		3
Oral Surgery	1	6		4 3/4	1	3	1	6
<u>SOCIAL DENTISTRY</u>								
Dental Jurisprudence								1
<u>GENERAL MEDICINE</u>	1							

(The number of hours spent on each subject has been calculated from the 1971 timetable as the curriculum does not provide the necessary information)

4	BS	CDS	CLD			S
3	BS	CDS		CLD		
2	BS	CDS		CLD		
1	BS					P
	Pre dental Preparation					

Figure 6. PATTERN OF CURRICULUM

B.S. - Basic Sciences

C.D.S. - Correlated Dental Sciences

P. - Preclinical Dentistry

CL.D. - Clinical Dentistry

S. - Social Sciences

The curriculum of the Faculty of Dentistry of the University of Sydney is oriented towards prevention of oral disease first, and treatment where prevention is impossible.

The first year student has a thorough course in Chemistry, Physics, Biology, Introductory Medical Science, which are the same for the Faculty of Medicine, Veterinary Science and Dentistry. Little Dental content is given in this year.

In the second year, the Basic Sciences: Physiology, Anatomy, Histology and Biochemistry are studied. The student is expected to integrate Biochemistry with his other studies. Biochemistry

is meant as a lingua franca, bonding the various disciplines, horizontally and vertically. The student is introduced to Prosthetic Dentistry, more consisting of Laboratory work through demonstrations and the practical classes, conducted on the properties and manipulation of Dental Materials and construction of simple partial dentures. The introduction of this subject is somewhat contradictory to the philosophy of the school.

In the third year, the number of hours spent on Basic Sciences diminishes greatly to two hours of Bacteriology only. In this year, Oral Biology is the subject which emphasizes the relationship and dependence of Prevention of Dental disease on the Basic Sciences. The oral structures are studied, their formation and environment are the emphasis. Their reactions both before, during and after formation to specific nutritional and environmental influences are important for prevention.

In Oral Physiology, the functional aspects of the oral structures are covered. The basic aim of this course is to develop an understanding of normality and abnormality in the stomatognathic system. This is to be accomplished by correlative studies of growth and development of the dental occlusion and head structures and associated physiology of mastication, deglutition, respiration, speech and facial expression. This subject is of importance as a basis for Orthodontics

and Pedodontics.

In this year, the student enters the clinic and is introduced to Radiology for diagnosis, Operative Dentistry and Prosthetic Dentistry. There is a heavy emphasis on these subjects throughout the year. The number of hours spent in the clinic and on lectures in Operative and Prosthetics, seems to be excessive.

Orthodontics and Pedodontics are taught and the clinical application of Preventive Dentistry taught and implemented in Pedodontics.

In the fourth year, the only Basic Science taught is Pharmacology and Therapeutics in the first and second term, but greater stress is put on Preventive Dentistry and its clinical application in Orthodontics, Periodontics and Pedodontics.

A more advanced discussion of the biological basis of Preventive Dentistry is emphasized. Nutrition, diet, hygiene, fluoride-carries relationship, heredity and function are important parts of this year's teaching.

In the clinic, the follow-up of third year's patients are part of the Preventive Programme, carried out in Pedodontic, Orthodontic and Periodontic sessions.

Oral Surgery is being introduced, including Anaesthesia, Exodontia and minor oral surgery procedures

in lectures, as well as in the oral surgery clinic. Much attention is given to Operative, Crown and Bridge and Prosthetic Dentistry. The same comment of the heavy emphasis on these subjects as made in third year, counts here.

UNIVERSITY
OF SYDNEY
DENTAL LIBRARY

To maintain an understanding of the whole patient, General Medicine and General Surgery lectures are given.

In the fifth year, a minimum amount of time is spent on lectures, but Preventive Dentistry occupies an important part of the timetable. Control and preventive measures for dental and oral disease and abnormalities both at individual and public health level, diet and nutrition, dental health education are taught. In this year, Public Health becomes important and other aspects of Social Dentistry.

Survey and evaluation techniques and statistical methods, dental needs and resources, financing dentistry and other public health principles are taught. Specialized programmes for pre-school, the handicapped, geriatric population, chronically ill, are efforts to instill in the student, social sensitivity, while the role of the dentist, the Dental Associations and the Government in Dental Health Programmes, are subjects discussed, to make him aware of the possibilities of such projects in the community of which he is a leader.

Whether such a short course in Public Health is enough to achieve an effect of social awareness, is questionable.

EVALUATION

The objective of the Faculty of Dentistry is clearly defined in two phrases:

1. prevention of oral diseases
2. treatment of those diseases which cannot be prevented.

The content of the curriculum is very general in the first year, the basic sciences correlated to clinical aspects in the second year, while Preventive Dentistry in third, fourth and fifth years correlate Basic Sciences with Clinical Preventive Practice in Pedodontics, Orthodontics and Periodontics. The student is exposed to clinical work in the third year, but heavy emphasis is still placed on Prosthetics and Operative Dentistry.

The organization of the Basic Sciences and Clinical Sciences is horizontal, of the Correlated Dental Sciences and Clinical Sciences vertical, hence correlation very effective.

Preventive Dentistry is taught by the Department of Preventive Dentistry, which bases its programme of Preventive Dentistry on Oral Biology and Oral Physiology, which are correlated with Pedodontics Periodontics and Orthodontics. All other subjects, like

Oral Surgery, Prosthetics and Operative Dentistry, fall under separate Departments, prevention in these departments does not fall within primary prevention and is not the business of the Department of Preventive Dentistry.

The correlation and integration of Preventive Dentistry is effective but whether the application in clinical dental practice is great enough to make an impact on the dental student is a question. The predominance of other subjects, like prosthetics, operative dentistry and oral surgery might undo the efforts of the Pedodontic and Periodontic clinics. Is the concept of prevention in Community dentistry stressed enough?

4. THE UNIVERSITY OF KENTUCKY, COLLEGE OF DENTISTRY

The College of Dentistry has as its aim:

"The education of dental practitioners who are technically capable, biologically oriented, socially sensitive and who are keenly aware of their potential contributions to the total health of their patients".

To achieve the objectives set forth for the college, a curriculum was designed, after reviewing the subjects required for approval by the Council on Dental Education. It was determined that subjects in the dental curriculum could be grouped into five major divisions: Clinical Dentistry, Preclinical Dentistry, Conjoint Dental Sciences, Basic Sciences and Dental Social Science.

Clinical and Preclinical Dentistry are particularly directed toward technical capability.

Basic Sciences and Conjoint Dental Sciences toward biological orientation, with the latter group being a medium specifically designed for correlation among sciences.

Dental Social Sciences are directed toward social sensitivity.

The curriculum is a four year programme which leads to a D.M.D. degree and it is a new technique for emphasizing the philosophy in the very implementation of its objectives.

The organization of the curriculum is a "diagonal" one, which affords the student a broad base of basic science instruction during the early phases of his education, but, at the same time, introduces selected clinical experiences for the purposes of correlation and motivation.

4	CLD			BS	CDS	S
3	CLD			BS	CDS	S
2	CLD	BS		P	CDS	S
1	CLD	BS	P	CDS		S

Figure 7. PATTERN OF CURRICULUM

- B.S. - Basic Sciences
- C.D.S. - Correlated Dental Sciences
- P. - Preclinical Dentistry
- CL.D. - Clinical Dentistry
- S. - Social Sciences

FIRST YEAR:

HOUR PER YEAR

CLINICAL DENTISTRY

Diagnosis	51
Operative Dentistry	56
Periodontics	58

PRECLINICAL DENTISTRY

Dental Physical Sciences	48
Operative Dentistry	128
Removable Partial Prosthesis	128

CORRELATED DENTAL SCIENCES

Oral Biology (Preventive Dentistry)	76
Occlusion	136

BASIC SCIENCES

Anatomy	276
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DENTAL SOCIAL SCIENCES

41

SECOND YEAR:

HOURS PER YEAR

CLINICAL DENTISTRY

Diagnosis	52
Operative Dentistry	128
Periodontics	96
Exodontia and Local Anaesthesia	30
Removable Partial Prosthesis	30

PRECLINICAL DENTISTRY

Dental Physical Sciences	288
Fixed Partial Prosthesis	64
Pedodontics	32
Full Denture Prosthetics	128
Endodontics	64

CORRELATED DENTAL SCIENCES

Oral Biology	72
Occlusion	32

BASIC SCIENCES

Biochemistry	125
Physiology	125
General Pathology	125

DENTAL SOCIAL SCIENCES

8

THIRD YEAR:

HOURS PER YEAR

CLINICAL DENTISTRY

Diagnosis	78	
Operative Dentistry	32	(lectures)
Periodontics	32	(lectures)
Oral Surgery	92	(lectures)
Fixed and Removable Prostheses	32	(lectures)
Full Denture Prosthetics	32	(lectures)
Endodontics	32	(lectures)
Pedodontics	32	
Clinic	480	

CORRELATED DENTAL SCIENCES

Oral Biology (Dental Caries, Preventive Dentistry)	80
Occlusion	32
Seminars	32

BASIC SCIENCES

Microbiology	100
Medicine	32

DENTAL SOCIAL SCIENCES

12

FOURTH YEAR:

HOURS PER YEAR

CLINICAL DENTISTRY

Comprehensive General Practice	832
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CORRELATED DENTAL SCIENCES

Oral Biology	30
Occlusion	16
Seminars	74

BASIC SCIENCES

Pharmacology	80
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DENTAL SOCIAL SCIENCES

Behavioural Sciences	8
Practice Management	26
Jurisprudence	
Auxiliary Personnel	
Administration	
Economics	
Community Services	16

The more specific area of Preventive Dentistry with which we are dealing is introduced in the first year. This is an introduction to the major disease entities, found in population groups, especially dental caries and periodontal disease, their epidemiologic and basic health aspects and the problems associated with their treatment by present day methods. Fluoridation, topical fluoride application and fluoride toothpaste are discussed. The concepts of prevention, both on the level of the individual patient and population groups are presented.

The student is introduced to the patient in the freshman year and the philosophy and technique of history taking and examination of oral hard and soft tissues are presented. An abbreviated experience in oral radiography is included in the introduction to diagnosis.

The clinical programme is oriented toward prevention rather than repair and replacement. A combined laboratory-clinic-seminar session is utilized to introduce periodontics. The students perform dental services, including oral prophylaxis, instrumentation, polishing, instruction in oral hygiene. Through this programme, the development of prevention is again emphasized.

The course in Operative Dentistry is a presentation in clinical and preclinical introduction to the etiology, pathology, prevention and treatment

of dental caries. Although prevention is an important aspect, clinical competence in hard tissue surgery and restoration of these tissues with silver amalgam, silicate cement and acrylic resin is expected in the freshman year.

Because of the early introduction to the patient, selected concepts of behavioural sciences are taught with special reference to the understanding of the nature of human behaviour with respect to health and disease. Principles of human communication are considered in terms of dentist-patient relationship, an important dimension of Dental Health Education for the purpose of Preventive Dentistry.

The great difference with traditional curriculum is:

1. The time of clinical exposure.

By exposing the dental student to clinical work in the freshman year, psychological impetus to motivate the student to a greater interest and understanding of the biologic aspects of dental practice are provided. Moreover, it is hoped that the correlation between basic sciences and clinical work is firmly established as soon as the freshman starts his course.

2. The type of clinical exposure

The first year student is taught Preventive Procedures to prevent Periodontal and Dental disease.

In the past, the student was introduced to a full denture candidate because of limited damage to the patient that could be caused by it, but the student became irreparably influenced by the defeatist attitude of replacement by dentures.

To accomplish a more satisfactory introduction the first year programme has been directed towards the concept of Prevention.

In the second year of the basic sciences, Biochemistry for dental students is important in the effort to integrate prevention. The topics that are discussed are; carbohydrates, lipids, proteins, and nucleic acids, the nature of enzyme action, intermediary metabolism, respiration and nutrition. Special emphasis is given to topics in connective tissue and mineral metabolism, fluorides, dental caries and biochemical principles of drug action.

In Oral Pathology, a detailed course of the pathology of diseases of the oral cavity, including the pathology of dental caries, periodontal lesions, soft tissue lesions, oral tumors as well as diseases of the bones is given. Emphasis will be placed on the correlation of histopathologic features with the clinical and radiographic appearance of these diseases for early diagnosis.

In Clinical Dentistry, treatment planning for comprehensive care is emphasized and more time is spent

on therapeutic procedures of Operative, Periodontics, Oral Surgery and Prosthetics.

In the third year, Preventive Dentistry is integrated in Microbiology for dental students. The relevance of micro-organisms to human disease status is approached through relation of the nature of the several kinds of pathogenic micro-organisms to their respective exology, epidemiology, pathology, immunity, induction and resulting clinical manifestations. Special consideration is given to microbial aspects of dental caries and various soft tissue infections. Mechanisms of action of the more common physical and chemical methods of microbial control are also discussed and form an important aspect of Preventive Dentistry.

In the Preventive Dentistry course, advanced course material will supplement the teaching that has been carried out by the other clinical departments. Particular attention is given to providing the most recent data available on areas of Preventive Dentistry in which new developments are taking place rapidly.

In Clinical Dentistry, the student is expected to diagnose, plan treatment and render preventive and therapeutic services. The time devoted to Clinical Dentistry is doubled, while Preclinical Dentistry is now taken out of the Curriculum.

In this year, Community Dentistry is taught and lectures and seminars are designed specifically to prepare students to participate in a five day Community Laboratory experience in a Kentucky community for an extensive study of health problems and resources.

The fourth year is devoted to Comprehensive Dental Practice. The programme is developed along the lines of "internship" in an atmosphere simulating, as closely as possible, a private dental practice. This is to avoid departmentalized teaching, which would allow fragmentation of thinking.

Little time is devoted to Basic Sciences, namely Dental Pharmacodynamics, but during the time spent on Conjoint Dental Sciences, a last effort is made to keep the objective of approaching certain important oral biologic problems in a joint interdisciplinary way. In seminars on Dental Caries, all the various clinical, scientific, diagnostic, preventive and pathological features are discussed together. In biochemistry of Oral Disease, biochemistry as related to calculus, caries formation and gingival inflammation, tumor formation, after having seen the clinical problems will inculcate in the students, the philosophy and implementation of Prevention of Oral Disease.

In Community Dentistry, each student spends four weeks caring for children in a rural county in dental trailers, under Faculty supervision. Evening seminars are utilized to review community health problems, unusual conditions noted in children under treatment, care of the home-bound and handicapped.

EVALUATION

The objective of the College of Dentistry of the University of Kentucky is concise:

1. technically capable
2. biologically oriented
3. socially sensitive

The content of the curriculum looks at first sight, not any different from the other curricula, but at closer study, Basic Sciences are taught in a selective way, insofar as they are meaningful to dentistry and social sciences are of more importance than in other schools.

The organization of Basic Sciences, Correlated Dental Sciences, Clinical Dentistry and Dental Social Studies is Diagonal. There is therefore a maximal correlation between the four groups of subjects. The introduction of the student in the first year to clinical work, which consists of preventive procedures, should have a better effect than the exposure to prosthetic dentistry, which is a negative attitude.

A few criticisms do arise about the organization of basic sciences in a vertical way: How can one understand Pathology without knowledge of Microbiology? How can a student work in a Comprehensive General Practice, if Pharmacology is being taught at the same time?

But, for our purposes, the integration of Preventive Dentistry in the first year is integrated in the Basic Sciences, in the Correlated Dental Sciences and in the Clinic Oral Prophylaxis and instrumentation in oral hygiene emphasizes the philosophy of prevention. In the second year, Preventive Dentistry is again integrated in Biochemistry, Oral Diagnosis and Pedodontics. In the third year, Preventive Dentistry is integrated in Microbiology and in Preventive Dentistry, reviews of developments are taken into account. The fourth year comprehensive dental care and recall systems are important in the concept of Preventive Dentistry, while lectures on Dental Caries and the Biochemistry of Dental Disease summarize, once again, the process of dental disease and how to prevent it.

The effectiveness of this programme should be maximal, seen from the view of Preventive Dentistry and the importance of Preventive Dentistry in relation to other subjects stressed. Whether this curriculum would suit other subjects, which are therapeutic, for which a thorough basis of all basic sciences is necessary, is another question.

The Social Sciences, ranging from Behavioral Sciences in the first year, to Community Dentistry in the third and fourth year, do show horizontal, as well as vertical, correlation with Clinical Dentistry.

CONCLUSION

From the studies above, we may conclude that the teaching of Preventive Dentistry ranges from casual integration to extreme exaggeration. Very little has been written about the ideal way of teaching it, and one wonders whether preventive dentistry is only a fanciful jargon.

In the last years, dental curricula are changing rapidly and nearly every year, dental educators have written articles on dental curricula innovation. Vandersall (68) however, observed that these curricula changes only embrace extramural and intramural programmes. With extramural programmes are meant community dental clinics, externships, hospital dentistry and field work in different social conditions. While intramural programmes include the effective use of dental auxiliaries, dental assistant programmes, student clinics, practice management etc., Both extramural and intramural curriculum changes are focused around the efficient delivery of a service to a large population - either in the community or within the dental school. It seems that emphasis is placed on "delivery of a remodeling or reconstructive service rather than providing means of deterring the devastation of dental diseases" (68) Hence, unless these activities

for large population groups are based on a philosophy of prevention, we have failed to give the best kind of dentistry. Hence, it would be important to add to the institutional objective of a dental school, preventive orientation, next to those usually listed of technically capable, biologically knowledgable and socially sensitive.

Once preventive orientation is our aim, the Basic Sciences will choose selectively, material that is of relevance to Preventive Dentistry. Anatomy, physiology, histology, biochemistry, can all contain little or more material that forms the basis of the Preventive Dentistry course. But the philosophy, science and clinical implementation fall under a Department of Preventive Dentistry, while implementation of Preventive Dentistry on large population groups, falls within community dentistry.

The function of a Department of Preventive Dentistry is manifold.

1. The inculcation of its Philosophy to Students
2. The integration of basic principles of Preventive Dentistry in the Basic Sciences
3. The correlation, implementation and crystallization of the body of Science of Preventive Dentistry
4. The analysis and transfer of research findings into the Teaching programme
5. The binding force among other departments.

Many authors have suggested that integration of Preventive Dentistry is ideally the responsibility of all teaching departments and this is especially true for such a broad field of Preventive Dentistry, but unless one department is responsible for the implementation of the teaching of a multidisciplinary approach to preventive dentistry, the result might be fragmentary and Preventive orientation only wishful thinking.

Exaggeration of a philosophy of Prevention is possible, like Muhler's concept, when he speaks about Preventive Prosthodontics and Preventive Endodontics. These areas fall beyond the scope of Preventive Dentistry as defined in this paper. On the other hand, the Departments of Prosthetics and Endodontics are forever a warning, that we have not reached the stage of having prevented their existence. Muhler integrates prevention in Crown and Bridge lectures, in Prosthetic lectures, while the role of these Departments should be the other way around: inspiring the Department of Preventive Dentistry to Prevention of Prosthetics or Endodontics, the ultimate aim of Preventive Dentistry.

Hence, co-operation between the Departments should be towards prevention. The Department of Preventive Dentistry limiting her scope towards primary prevention, while the Department of Prosthetics, Operative Dentistry and Oral Surgery will carry out

procedures that fall under secondary or tertiary prevention, expanding her scope towards primary prevention by educating the profession and the public of the often unnecessary need for their existence. Thus, eventually, a shift will take place towards Preventive Dentistry and the demand for technical capability, partially replaced by preventive orientation.

As far as method and organization of lectures in Basic Sciences, Preventive Dentistry and Clinical Sciences, I have as many objections to one system as I have to another. A balance between the two might be the answer. Of course, this will also depend on the need of the area for preventive or curative dentistry.

THE CONTENT OF A COURSE IN PREVENTIVE DENTISTRY

The content of a course in Preventive Dentistry can be presented in Oral Biology, which emphasizes the relationship and dependence of dental disease on the basic sciences. The need for such a correlation between basic sciences and clinical practice is vital, especially in the case of Preventive Dentistry, for it is not possible to rationally understand the etiology and approaches to the prevention of oral disease unless one has a thorough understanding of the basic determinants of health and disease.

The presentation of such a course can be by initial presentation of a given condition, the manner in which it affects population, its epidemiology and its significance. Then this is followed by a discussion of the basic biological features involved in the condition and closed by a summation of its etiology and prevention or control. Hence, Preventive and Community Dentistry are integrated and presented at the same time.

Another approach is starting from the development of oral structures, their histology, physiology and biochemistry and their environment, intrinsic (saliva) and extrinsic (substances entering the oral cavity), cuticles (acquired and developmental) and plaque. From here, we can proceed to developmental and acquired abnormalities, the manner in which these processes can be influenced by the prenatal and postnatal environment of these oral structures. The control and preventive measures for dental and oral diseases and abnormalities, both at the individual and public health level are given much later in the course. Thus, Preventive Dentistry and Community Dentistry are separate entities.

The content of Preventive Dentistry can be spread over the whole Dental Curriculum. The innumerable processes that take place in the oral

cavity, the many factors that influence these processes, the effects of these processes and the possibilities of changing the processes are inexhaustable that the content can be spread over the whole curriculum.

A short summary of the possible content material is given below:

Physical growth and development of the child.
 Genetics and environmental factors affecting growth.
 Facial growth and development.
 Formation of oral structures.
 Development of the tooth, histodifferentiation, matrix formation, calcification.
 Reactions during, before and after formation to specific nutritional and environmental influences.
 Hypoplasia and hypocalcifications of development (idiopathic and fluoride opacities) of the enamel.
 The enamel, chemical composition, crystallographic nature, structure, surface enamel.
 Acquired hypomineralization (subsurface decalcification), its mechanism, chemistry and histopathology and the clinical features of the condition.
 Dietary patterns and cariogenicity of foodstuffs.
 Fermentable carbohydrates, physical characteristics, chemical composition, food additives. Rampant caries
 Fluoride, systemic and dental implications, fluoride metabolism, reactions with calcified tissues, mechanism of caries prevention.
 Systemic fluoride therapy, utilization.
 Topical Application of fluoride, rationale, mechanism

technique, efficacy.

Susceptible teeth, alignment in arch, proximity to salivary ducts, surface texture, surface anatomy.

Increasing resistance through fluorides, fluoride therapy (impregnation techniques).

Prevention through modifying tooth environment, antibiotics, antiseptics, vaccines, enzymes, chemicals, toothbrushing, flossing, determination of cariogenic diets, dietetic means.

Dental Health Education, principles, attitudes to health, fluoridation, important groups, learning and communication.

(One can insert lectures on Oral Cancer, the biochemistry, etiology, and early diagnosis, and treatment).

Dental Public Health, Community Dentistry or Social Dentistry Departments should strive to use Preventive Dentistry and evaluate its effectiveness on large population groups and show how prevention might be the answer to the dental problem.

The clinical implementation of the theory can be introduced after a short introduction to Preventive Dental Practice. Manuals for this purpose would give the student an overall view of the procedures used and their biologic explanation. Examinations, diagnosis, history taking - dental and general - nutritional analysis are all procedures which have to be demonstrated to introduce a student to the clinic.

The time of clinical exposure could be like the Kentucky University in the first year, or could be less official by programmes among the students. Both methods will have the advantage of personal involvement and motivation towards prevention.

The procedures are carried out as Preventive Dental Practice hours in which Prevention are specialized procedures, but some consideration has to be given to the fact that if Preventive Dental Programmes are carried out as a prerequisite in other Departments, like Pedodontics, Orthodontics and Periodontic Departments, Preventive Dentistry is more integrated, instead of making it a specialized practice, separate from other branches of Dentistry.

The programme for Preventive Dental Practice is based on the consideration of the patient as an entity. The order of priority in the surgery with which to handle a patient, can be outlined as follows, according to the two most prevalent oral diseases, dental caries and periodontal disease.

I A Preventive Programme for Dental Caries:

1. Control of severe pain and infection.
2. Introduction of the patient to Dentistry and of Preventive Dentistry to the patient.
3. Diagnosis, clinical radiographic and etiological.
4. Attempt to stop the progression of already existing lesions as early as possible.

5. Attempt to prevent the initiation of new lesions
6. Prophylaxis with Stannous Fluoride Zirconium Silicate Paste.
Topical application of 10% Stannous Fluoride solution.
6. Treatment, according to treatment plan, based on diagnostic findings.
7. Diet evaluation and nutrition counselling.
8. Dental health education.
9. Preparation of patient for home care.
10. Follow up.

II A Preventive Programme For Periodontal Disease:

1. Control of severe pain and infection.
2. Introduction of the patient to Dentistry and Preventive Dentistry to the patient.
3. Diagnosis, clinical radiographic and etiological.
4. Treatment for periodontal disease.
5. Elimination of local factors;
 Poor oral hygiene
 Plaque control
 Calculus formation
 Faulty dental restoration, causing irritation.
 Food impaction
 Bad habits
6. Elimination of systemic factors through consultation of patient's physician.
7. Nutrition counselling - diet evaluation.
8. Home care programmes, dental health education.
9. Recall programme

Besides the biological explanation of these procedures, the patient as an entity, the concept of comprehensive care, the recall programme to achieve optimal oral health, requires more than the simple technical procedures - which can really be delegated to auxiliaries. These aspects might well be discussed by the Department of Community Dentistry, or the Department of Social Dentistry and co-operation between the various departments about clinical teaching becomes once again, important.

In clinical teaching, tutors who correlate clinical findings with the biological knowledge and behavioral sciences are necessary, to achieve maximal motivation.

In this kind of clinical teaching, it would be important to evaluate the student according to the achievement

1. to restore a natural dentition to normal function and obtain the interested co-operation of the patient to maintain it.
2. to maintain a disease-free mouth in a disease-free condition.

The experience of such satisfaction should start early.

The above-mentioned procedures are clinical ones, but the concepts can be applied on large population groups as a Public Health measure. Fieldwork in schools, army and other institutions could be part of the practical side of a Dental Public Health Course.

Integration of Preventive Dentistry into Public Health measures, is important and students should play a role in organising community programmes, of Fluoride, Dental Health Education programmes, Diet Counselling for groups of people, whether as talks, slides or films, each student would be encouraged to develop his imagination and creativity to put across his ideas on Prevention to the Community.

In this conclusion, no attempt is made to decide on the time spent on Preventive Dentistry, nor on the spread of the course over the years of study or details of introduction to a clinical situation. This will depend on discussions with the Faculty, as well as the Students on the present Dental Curriculum and relationship of the Dental School to the present and future community needs.

But the general concepts of integration, departmental correlation and clinical implementation of Preventive Dentistry are suggestions to contribute in the effort to provide education for students with the aim to produce dentists who are technically capable, biologically knowledgable, socially sensitive and lastly, preventive orientated, as suggested by the World Health Organisation, in 1962.

The principal theme of the XVth World Dental Congress of the Federation Dentaire Internationale, held in Mexico City in 1972, will be "Prevention and

practitioner in World Dental Health". Prevention of Dental Caries, Periodontal Diseases and Malocclusion and Dentofacial anomalies, will be topics on the agenda. But the discussion on the design of a Dental Curriculum, including Preventive Dentistry in Undergraduate Education might be the first time that the teaching of Preventive Dentistry will be discussed on an International level.

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