SURVIVAL OF BLACK COLLEGES FROM A DENTAL PERSPECTIVE

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If we are to achieve health for all in the US by the year 2000, as proposed by the World Health Organization (WHO), we must consider dental health needs as a component of total health. The failure to address dental health needs has reached a crisis level, particularly in the black and underserved communities throughout the nation.

The dental delivery system in the US requires a continuous upgrading of the quality of education received by the students who will be the deliverers of dental services, the dental educators, and the researchers of the future. In order to accomplish this, we must utilize fully the present academic system to assure access, quality, and availability of dental health care for all Americans now and in the future.

Black colleges must survive if this nation is to meet the future dental health needs of its 11.5 million black citizens. Approximately 30 percent of all blacks in higher education are in either historically black colleges or newer predominately black colleges.[1] These colleges, therefore, constitute a significant resource for minority students who select careers in dentistry. This presentation will focus briefly on four areas: (1) status of oral health in the US; (2) dental manpower; (3) dental education; and (4) recommendations for survival of black colleges as they relate to dentistry.

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STATUS OF DENTAL HEALTH IN THE US

The US National Commission on the International Year of the Child in its 1980 Report to the President cited the fact that 47 percent of children under the age of 12 have never been to a dentist for treatment! The US Surgeon General's Report on the status of the nation's health lists tooth decay as the nation's most common health problem, affecting 95 percent of Americans. These reports are similar to others which include startling data regarding the oral health status of Americans such as:

1. one half of school age children have some form of malocclusion and gingival disease[2];
2. six thousand babies are born annually with cleft lips or cleft palates[3];
3. dental caries is the most common dental disease in the United States and is the primary cause of tooth loss through young adulthood;
4. periodontal disease, the second most common dental illness, is a progressive, destructive lesion of the dental supporting apparatus and is the primary cause of tooth loss in persons over 35[4]; and

5. both caries and peridontal disease are progressive illnesses that, left untreated, ultimately result in the loss of teeth.

Only 50 percent of American people reside in fluoridated communities even though a 50 to 60 percent reduction in dental caries can be expected in children who inhabit communities where the water supply is optimally fluoridated.[5,6]

In 1978, total dental expenditures in the US had risen to $13.3 billion annually in contrast to the 1968 total of $3.7 billion. This figure represents 7.9 percent of all personal health care expenditures. At the present time, funding for dental services comes from three sources: 77 percent of all dental fees are paid out of the pocket; 19 percent are paid by a third party; and four percent are paid by the government.

In spite of the fact that less than one half of the population visits the dentist on an annual basis, the per capita expenditure for dental services in 1977 was $45.41. It has been estimated that 100 million man hours of productive time are lost annually because of disease related to dental illness!

In 1980, 70 million Americans, nearly one in three, are covered by prepaid dental care programs, whereas only 5.8 million Americans had dental coverage in 1967.[7]

The oral health needs of this country have not been adequately addressed particularly in regard to access to services for the black community and the financing of dental services for the poor and needy.

MANPOWER: ENROLLMENT, GRADUATES, PRACTITIONERS AND APPLICANTS

The number of dentists in 1980 reached 126,000 and is expected to be 154,000 by 1990.[8] The projected requirement for dental manpower for 1990 is 147,600. (The oversupply predictions do not assume that a national health insurance plan will be in effect by 1990, nor do they address black needs.) The 5,424 dentists graduating in 1980 are expected to plateau in 1982, with 5,400 graduating per year.[9] It is interesting to note that of the 126,000 dentists in the US, only 3,000 are black (Table 1).

TABLE 1. US BLACK DENTAL PRACTITIONERS

Year	Number of Black Dentists
1970	2,098*
1971	55**
1972	74
1973	110
1974	154
1975	187
1976	213
1977	215
1978	203
1979	182
Total	3,491***

*Figure refers to total number of black dentists practicing in 1970
**Figure refers to number of black dentists graduating in corresponding year. Source: Annual Reports, Dental Education, 1971-1979, American Dental Association
***Figure does not include deaths/retirements, etc

This under-representation is expected to continue in the future; only 1,009 black students (4.4 percent of total dental enrollment) attend the 60 dental schools throughout the country (Tables 2 and 3).

Howard and Meharry presently enroll 45 percent of all black dental students. At the present time, black dentists comprise approximately 3.7 percent of the 5,400 yearly dental graduates (Table 3). The black enrollment data have plateaued since 1976 at 4.5 percent; however, we have seen a decline in black dental graduates from 1976 to the present. This decline reflects the attrition of black dental students in US dental schools.

Applications to dental schools have declined approximately 40 percent since 1976 (Table 4); and black applications have declined from 507 in 1978-1979 to 438 in 1979. This decline is expected to continue when 1980-1981 data are reported. The overall quality of applicants to dental schools has improved; however, the applicant pool suggests serious limitations in access, especially for young blacks choosing careers in dentistry.

**TABLE 2. US BLACK DENTAL STUDENT DATA*
1979-1980**

Educational Institution(s)	Number of Blacks	Percent of Blacks
Howard University	273	27
Meharry Medical College	183	18
		45
All Schools	1,009	4.4

*Total enrollment of *all* students in dental school is 22,482

TABLE 3. BLACK DENTAL STUDENTS AND GRADUATES, BY SCHOOL YEAR: 1964-1965 THROUGH 1979-1980

	First Year Class		Total Dental Student Enrollment*		Dentist Graduates**		
School Year	Number of Black Students	Percent of All Students	Black Students	Percent of All Students	Black Graduates	Percent of All Graduates	Number of Dental Schools With Black Students
1964-1965	90	2.3	306	2.2	—	—	20
1965-1966	92	2.4	298	2.1	—	—	22
1966-1967	114	2.9	330	2.3	—	—	24
1967-1968	—	—	—	—	—	—	—
1968-1969	—	—	—	—	—	—	—
1969-1970	136	3.1	357	2.3	85	2.3	37
1970-1971	185	4.1	453	2.7	55	1.5	45
1971-1972	245	5.2	597	3.5	74	2.0	48
1972-1973	266	5.0	765	4.2	110	2.8	54
1973-1974	273	5.0	872	4.5	154	3.4	52
1974-1975	279	5.0	945	4.7	187	3.8	50
1975-1976	298	5.2	977	5.2	213	4.0	55
1976-1977	291	4.9	955	4.5	215	4.1	55
1977-1978	296	5.0	968	4.5	203	3.8	56
1978-1979	280	4.6	977	4.5	182	3.3	55
1979-1980	274	4.4	1009	4.4	—	—	—

*1979-1980—Total dental enrollment was 22,482; — indicates that figures are not available
**1979 graduates equal 5,424
Source: Council on Dental Education, *Annual Report on Dental Education,* 1976-1980. American Dental Association, Chicago, Illinois (also, prior annual issues)

DENTAL EDUCATION: COST, ADMISSIONS AND CURRICULUM

Dental education is costly to both the student and the institution, and is extremely rigorous because of its didactic and technical components. The total program cost to the student in 1979-1980 (not including housing and personal expenses) averaged $12,044 in state schools and $31,244 in private dental schools.[10] These data represent significant increases over 1977-1978 fees which were $10,415 for state schools and $23,312 for private schools.

TABLE 4. HOWARD UNIVERSITY COLLEGE OF DENTISTRY—STATUS OF DENTAL APPLICANTS, 1975-1980

Academic Year	Female Applicants	Total Received	Indentifiable Black Applicants	Total Black Applicants (USA)*	Total Applicants (USA)*
1975-1976	174	1,897	323	537	13,102
1976-1977	249	1,880	335	554	12,626
1977-1978	308	2,013	397	495	10,675
1978-1979	311	1,716	417	507	9,690
1979-1980	291	1,385	374	484	8,532
1980-1981	274	1,264	354	438	7,835**

*Source: Handbook for Predental Advisors, Part III: *Decline in Applicants.* American Dental Association, Fall, 1980
**Represents a 40.2 percent decline since 1975

Admission to dental school continues to be determined primarily by the candidate's undergraduate grade point average (GPA), letters of recommendation, and Dental Aptitude Test (DAT) scores. This standardized test measures the student's reading and science aptitude as well as his/her perceptual motor ability. Because students from black colleges score below the national mean on both sections of the test, minority dental schools must rely heavily on GPAs, baccalaureate status, and recommendations from predental advisors. Also, special preadmission programs have been developed, such as the Academic Reinforcement Program at Howard, to help prepare special students for the rigors of dental school. Special post-admission reinforcement in the form of counseling and tutoring enhances the retention of special students.

The chances of admission today are augmented by the possession of a baccalaureate degree. Eighty-four percent of the 1979 dental graduates possessed such degrees.

Dental curriculums throughout the US average 4,500 clock hours. This represents nearly 1,800 equivalent semester hours in a four-year curriculum. This academic load is a tremendous shock for the student who has carried 120 semester hours for the undergraduate degree. In addition to academic skills, the study of dentistry requires technical skills and a high level of self-discipline. Clinical technical performance examinations are unique to dentistry and are required to evaluate proficiency and to prepare students for state board examinations.

RECOMMENDATIONS FOR SURVIVAL OF BLACK COLLEGES AS THEY RELATE TO DENTISTRY

Black colleges play a significant role in the training of educationally, culturally, and socially deprived black students in the US. They provide educational opportunities to those who would otherwise be denied access to higher education. Therefore, it is the responsibility of black leaders and parents to ensure that these institutions are maintained at a high level of quality.

The authors believe that the survival of black colleges is dependent upon the following recommendations: Such schools must

1. continue to maintain low tuition levels in an effort to accommodate the largely low-income student body.[11] Federal subsidies in the form of long-term development awards and grants in aid are needed to upgrade the quality of faculty, facilities, and research in historically black colleges and newer predominantly black colleges;

2. seek additional sources and resources for financial aid to students that would expand the opportunity and access of students to health careers. This recommendation includes scholarships for gifted students, grants and loans to needy students, and loans to middle-class students;

3. focus on special academic reinforcement programs for educationally deprived black students. Also, tailor these programs to meet the academic needs of the student particularly in the areas of reading comprehension, science application, test-taking skills, academic counseling, and tutorial assistance;

4. expand special programs for gifted black students to include research and writing opportunities, preceptorships, and fellowships;

5. focus on counseling and advising as a major means of identifying potential students and recruiting qualified ones for careers in dentistry. Predental advisory programs should be established in all black colleges to enhance opportunities for academic progress and to afford development of visual motor skills for the student; and

6. establish networks between smaller black and community colleges and larger universities to enhance faculty development and faculty exchanges and to provide student interactions that will broaden the educational experience and compliment the resources of both types of institutions.

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CONTINUING MEDICAL EDUCATION MEETINGS

The National Medical Association's Regional, Component, and Constituent Societies have determined their continuing medical education meetings for 1981.

They are as follows:

Date	Society	Location	City/State
June 10-12	Georgia State Medical Association	Holiday Inn	Hilton Head Island, South Carolina
June 10-13	Louisiana State Medical Association	Biloxi Hilton	Biloxi, Mississippi
June 11-14	Missouri Pan Medical Society	Sheraton Plaza Hotel	St. Louis, Missouri
June 17-19	Arkansas State Medical Society	DeGray Lake	Arkadelphia, Arkansas
June 17-20	Old Dominion Medical Society	Holiday Inn 1776	Williamsburg, Virginia
June 19-21	Old North State Medical Society	Hotel Chamberlain	Hampton, Virginia