PRACTICE PATTERNS OF BLACK PHYSICIANS: RESULTS OF A SURVEY OF HOWARD UNIVERSITY COLLEGE OF MEDICINE ALUMNI

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Over 600 Howard University medical alumni of seven representative classes graduating from 1955 to 1975 were surveyed by questionnaire in 1975 and 1976. Replies of the 252 black respondents confirm that these graduates are providing substantial care to blacks, the economically disadvantaged, and residents of the inner city. Survey findings reaffirm the necessity to train more black physicians and to provide data on current and future practice patterns. Comparisons are made between the practice patterns of earlier (1955 to 1970) and later (1973 to 1975) black graduates. A general bibliography of publications relevant to the practice patterns of black physicians is included.

In 1975 and 1976 a survey was undertaken by the Howard University College of Medicine (HUCM) to provide the institution with data on the practice characteristics of a cohort of representative alumni. The overall findings from this survey were reported in the August 1978 issue of the *Journal of Medical Education*.[1] This article differs from the previous publication in that it reports the responses of black alumni only instead of the responses from the total population, which included some nonblacks. Also included here are comparisons between the actual practice patterns of earlier (1955 to 1970) and the planned practice patterns of more recent (1973 to 1975) graduates. Such comparisons were not presented in the previous article. (In making these comparisons, the authors are aware that practice patterns change during the course of a career and what recent graduates planned when surveyed may not be identical with their eventual practice patterns.)

Our findings suggest that black alumni of the College of Medicine are providing substantial care to blacks, the economically disadvantaged, and inner city residents. The results of the study also indicate that some noteworthy differences exist between the practices of black alumni of earlier classes and the practice plans of more recent black graduates. Our study will add to the relatively small body of published literature that currently exists on the characteristics of present and future black physicians in the United States.[2-23]

METHOD

As detailed in the earlier report of this survey,[1] the study methodology was that of a questionnaire survey of seven representative classes graduating from 1955 through 1975. Although every fifth class was polled from 1955 through 1975, the graduates for 1973 and 1974 were also included to emphasize the characteristics and plans of recent graduates. A copy of the four-page, 26-item questionnaire is available upon request from the senior author.

Questionnaires were mailed in November 1975 and follow-ups were sent to nonrespondents in December 1975 and January 1976. The alumni newsletter was also used to encourage cooperation and to provide feedback reports to the respondents and other alumni.[24] Of the 629 individuals polled, 311 (49 percent) responded to the survey (Table 1). Slightly over 85 percent of those polled

Questionnaire items related to patient care, education, geography, specialty, choice of location and specialty, and work situation. A final item asked the respondents to provide comments and suggestions. The total of 26 questions were developed carefully to provide maximum consistency with related national studies such as those conducted by the Association of American Medical Colleges and

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TABLE 1. COMPARISON OF BLACK RESPONDENTS TO HOWARD UNIVERSITY ALUMNI SURVEY WITH TOTAL SAMPLE SURVEYED*

Year of Graduation	All Alumni				Black Alumni			
	Graduates	Polled	No. of Respondents	(%)	Graduates	Polled	No. of Respondents	(%)
1955	76	71	36	(50.7)	71	68	34	(50.0)
1960	70	65	35	(53.8)	64	60	29	(48.3)
1965	87	83	47	(56.6)	75	71	38	(53.5)
1970	99	96	43	(44.8)	79	77	33	(42.9)
Subtotal	332	315	161	(51.1)	289	276	134	(48.6)
1973	94	87	45	(51.7)	72	68	33	(48.5)
1974	118	114	49	(43.0)	104	100	42	(42.0)
1975	113	113	56	(49.6)	98	98	43	(43.9)
Subtotal	325	314	150	(47.8)	274	266	118	(44.4)
Total	657	629	311	(49.4)	563	542	252	(46.5)

*Differences between graduates and polled due to deaths (12) and inability to locate (16); of the 252 total black respondents, 45 (18 percent) were women; by subgroup, 21 (16 percent) of the 1955-1970 respondents and 24 (20 percent) of the 1973-1975 respondents were women.

the AMA. Where appropriate, those graduates still in training were asked to respond in terms of their eventual plans rather than their current activities.

Whereas the earlier article included all alumni, this article limits itself to black alumni and compares results for the 1955-70 and the 1973-75 graduating classes. As shown in Table 1, the response rate was slightly higher for the earlier subgroup with 49 percent of the 1955-70 alumni completing the survey, compared with 44 percent of their 1973-75 counterparts. Response rates by year of graduation ranged from a low of 42 percent for the class of 1974 to a high of 54 percent for the class of 1965. In line with national trends, more of the recent alumni are female, as reflected in the shift from 16 percent of the 1955-70 respondents to 20 percent of the 1973-75 respondents being women. Women responded to the questionnaire at a rate comparable to their representation.

Except for the fact that more of them are recent graduates, the 252 black respondents are generally quite representative of the 542 black physicians surveyed and of the black living alumni of Howard University.

PATIENT CHARACTERISTICS

The data presented in Table 2 describe the characteristics of patients cared for in 1975 by Howard University black medical alumni. Both subgroups indicated that they were caring for (or expected to be caring for) more female than male patients. The difference was less for the 1973-75 group, however, with the proportion of male patients rising from 36 percent for the earlier graduates to 40 percent for the later alumni. Regarding the race of their patients, there was an even more substantial difference between the two subgroups, shifting from 67 percent black patients for the earlier graduates to an expected 77 percent for the later group.

The age breakdown of the patient population was quite similar for both subgroups with about a quarter of the patients being under age 20, over half being age 20 to 59, and a fifth being 60 years or older. Similarly, the economic status of patients did not show any substantial change, particularly when one considers that the comparison is between actual patients for the 1955-70 graduates and expected patients for the 1973-75 alumni. In general, however, the tendency is toward caring for patients from lower socioeconomic backgrounds, with approximately a third having average economic status, over 40 percent coming from below average and only about 25 percent having above average economic status.

PATIENT CARE HOURS

According to self reports, the mean number of hours devoted to patient care per week during 1975-76 by black Howard medical alumni of the classes of 1955-70 was 52 with a median of 50. Planned hours of the 1973-75 graduates were

TABLE 2. CHARACTERISTICS OF PATIENTS CARED FOR BY BLACK HOWARD UNIVERSITY MEDICAL GRADUATES OF 1955, 1960, 1965, 1970, 1973, 1974, and 1975*

Patient Characteristics	1955-1975 Graduates (252 Respondents)				Actual Patients of 1955-1970 Graduates (134 Respondents)				Expected Patients of 1973-1975 Graduates (118 Respondents)			
	No.	%	Mean Percent per Respondent	Weighted Percent of Patients**	No.	%	Mean Percent per Respondent	Weighted Percent of Patients**	No.	(%)	Mean Percent per Respondent	Weighted Percent of Patients**
Sex												
Male	198	78.6	43.5	36.9	108	80.6	42.1	35.7	90	76.3	45.2	39.5
Female	234	92.9	62.9	63.1	128	95.5	64.1	64.3	106	89.8	61.6	60.5
Ethnicity												
Black	234	92.9	72.0	71.6	127	94.8	67.9	67.1	107	90.7	76.7	77.1
White	215	85.3	24.9	22.8	122	91.0	28.9	27.4	93	78.8	19.7	17.2
Other	145	57.5	9.1	5.6	79	58.9	9.0	5.5	66	55.9	9.1	5.6
Age												
Under 20	222	88.1	26.8	25.7	123	91.8	27.2	26.6	99	83.9	26.3	24.6
20 to 59	218	86.5	58.4	54.9	119	88.8	57.3	54.1	99	83.9	59.7	55.9
60 or over	205	81.3	21.9	19.4	111	82.8	21.9	19.3	94	79.7	22.0	19.5
Economic Status												
Well to do	165	65.5	9.2	6.5	92	68.7	9.5	6.8	73	61.9	8.8	6.2
Comfortably well off	205	81.3	19.7	17.3	116	86.6	20.9	18.9	89	75.4	18.1	15.5
Average	217	86.1	36.2	33.7	116	86.6	33.9	30.7	101	85.6	38.7	37.6
Not very well off	207	82.1	21.4	19.0	112	83.6	20.8	18.2	95	80.5	22.1	20.2
Very poor	200	79.4	27.4	23.5	108	80.6	30.1	25.4	92	78.0	23.1	20.5

*As derived from responses during 1975-1976 to the following question: "If you are in practice, approximately what proportion of your patients would you estimate are in each of the various categories listed below? (If you are still in training, indicate the proportions of patients you expect to serve after completing your training.)"

**The weighted percentage of patients cared for was derived by multiplying Column 2 (or 6 or 10) by Column 4 (or 8 or 12) and then calculating what proportion of 100 percent was each product for the patient characteristic in question.

TABLE 3. COMPARISON OF PRACTICE LOCATION OF BLACK HOWARD UNIVERSITY MEDICAL ALUMNI WITH THEIR CHILDHOOD AND COLLEGE LOCATIONS AND WITH THEIR LOCATION DESIRES WHEN THEY APPLIED TO MEDICAL SCHOOL*

	Lived Age 5-18			Undergraduate College			Application Plans			Practice Location		
Type of Community	1955-1975 Graduates (N=244)	1955-1970 Graduates (N=128)	1973-1975 Graduates (N=116)	1955-1975 Graduates (N=245)	1955-1970 Graduates (N=129)	1973-1975 Graduates (N=116)	1955-1975 Graduates (N=242)	1955-1970 Graduates (N=125)	1973-1975 Graduates (N=117)	1955-1975 Graduates (N=245)	1955-1970 Graduates (N=129)	1973-1975 Graduates (N=116)
Large city (500,000 or more)	47.2	48.4	45.7	54.7	56.6	52.6	44.6	45.6	43.6	61.2	66.7	55.2
Inner city	24.6	28.1	20.7	29.4	25.6	33.6	21.1	19.2	23.1	38.0	41.1	34.5
Other city area	15.6	13.3	18.1	20.0	27.1	12.1	20.2	23.2	17.1	17.1	19.4	14.7
Suburb of large city	7.0	7.0	6.9	5.3	3.9	6.9	3.3	3.2	3.4	6.1	6.2	6.0
Moderate-size city (50,000-500,000)	16.4	15.6	17.2	23.3	19.4	27.6	30.2	30.4	29.9	23.3	22.5	24.1
Small city (10,000-50,000)	15.6	16.4	14.7	11.8	14.0	9.5	15.7	14.4	17.1	10.6	7.0	14.7
Small town (less than 10,000)	11.5	13.3	9.5	8.6	7.8	9.5	3.7	2.4	5.1	2.0	2.3	1.7
Rural area	7.0	4.7	9.5	1.6	2.3	0.9	3.7	4.0	3.4	2.0	0.0	4.3
Other	2.4	1.6	3.4	0.0	0.0	0.0	2.1	3.2	0.9	0.8	1.6	0.0

*As derived from responses to the following question: "Please choose from the answer code given below the one answer which best describes the type of community in which you: (1) lived between the ages of 5 and 18; (2) attended undergraduate college; (3) wished to practice at the time you applied to medical school; (4) now practice/work (or plan to practice if now in training)?" Columns do not add to 100 percent due to rounding.

TABLE 4. COMPARISON OF INNER CITY BACKGROUND AND PRACTICE PLANS OF BLACK AND WHITE HOWARD UNIVERSITY MEDICAL GRADUATES*

Inner City Background or Plans	Percent of Blacks	Percent of Whites
Lived from age 5-18 in inner city	24.6	11.9
Undergraduate college located in inner city	29.4	10.2
Desired inner city practice when applied	21.1	5.2
Current or planned practice is in inner city	38.0	10.5

*Based on the replies of 252 black and 59 nonblack respondents

slightly higher, with a mean of 54 and a median of 59. In a recent survey reported in the *American Medical News,* 71 percent of all physicians provided more than 40 hours of patient care weekly.[25] Comparable figures for Howard medical alumni in this survey are 85 percent for all blacks, 83 percent for the 1955-70 black alumni, and 88 percent for the 1973-75 black graduates.

PRACTICE LOCATION

Table 3 summarizes data comparing actual or planned practice locations of black Howard University medical alumni with their locations while growing up and when in undergraduate school. Over 60 percent of all black respondents practiced or planned to practice in a large metropolitan area with 38 percent indicating an inner city practice. Thus, of those whose practice location choice is in a large metropolitan area, approximately two thirds practice or plan to practice in the inner city. Ranking second to an inner city practice in frequency of response was practice in a moderate-sized city (23 percent) followed by a practice location in a non-inner city area within city limits (17 percent). Smaller percentages of the respondents located or planned their practices in small cities (11 percent), suburbs of large cities (6 percent), small towns (2 percent), or rural areas (2 percent).

Table 3 also provides data which allow a comparison of the practice location choices of those black respondents who graduated between 1955 and 1970 and those who graduated between 1973 and 1975. A higher percentage of the earlier graduates (41 percent as compared to 35 percent) reported an actual or planned inner city practice. This could be attributable to the fact that greater opportunities outside the inner city were available to later black graduates and that fewer later graduates came from inner city backgrounds (21 percent later vs 28 percent earlier). The percentage of the earlier graduates who indicated a practice somewhere within a large metropolitan area was also higher (67 percent to 55 percent). There appears to be a greater tendency among later graduates to practice in small cities and rural areas. Whether this difference could be attributed in part to obligations to practice in designated health manpower shortage areas incurred by later graduates under Public Health Service scholarship and loan programs was not determined. Another factor could be that more later graduates came from rural backgrounds (10 percent as opposed to 5 percent).

A comparison of indicated practice locations with the previous background and practice plans of the black respondents reveals that a higher percentage (38 percent) practice or plan to practice in the inner city than the percentage who either lived in the inner city from ages 5 to 18 (25 percent), attended undergraduate school in the inner city (29 percent), or planned to practice in the inner city at the time they applied to medical school (21 percent). This may be explained by greater opportunities being available in the inner city than were anticipated at the time of application or by opportunities outside of the inner city being more restricted than anticipated. Another hypothesis is that many black alumni developed an increased level of commitment to serving patients in the inner city while in medical school and residency training.

Table 4 shows that the percentage of black respondents who either lived in the inner city during

TABLE 5. RELATIVE IMPORTANCE OF FACTORS INFLUENCING CHOICE OF GEOGRAPHICAL LOCATION OF BLACK HOWARD UNIVERSITY MEDICAL ALUMNI*

Factors Affecting Choice of Geographic Location	1955-1975 Graduates							Actual Location of 1955-1970 Graduates			Expected Location of 1973-1975 Graduates		
		Mean Importance		of Major Importance		of Importance**			Mean Importance			Mean Importance	
	Number	Mean	Rank	%	Rank	%	Rank	Number	Mean	Rank	Number	Mean	Rank
1. Personal ties or contacts in the community	246	1.64	4	37.0	3	68.7	5	132	1.61	3	114	1.68	4
2. Professional contacts in the community	245	1.39	6	28.6	5	63.3	6	131	1.41	5	114	1.38	6
3. Desire to serve particular group of people in community	245	1.80	3	35.5	4	76.7	3	131	1.53	4	114	2.12	2
4. General characteristics of community (schools, cultural opportunities, etc.)	245	2.06	2	42.0	2	86.9	2	131	2.02	2	114	2.07	3
5. Recruitment by community	246	0.65	10	8.9	10	34.6	9	132	0.61	9	114	0.70	11
6. Preference for region of country	242	2.23	1	50.4	1	90.1	1	131	2.23	1	111	2.23	1
7. Financial advantages	247	1.43	5	14.2	9	74.5	4	132	1.33	7	115	1.54	5
8. Best available practice opening	238	1.24	7	25.6	6	56.3	7	132	1.39	6	106	1.06	8
9. Preceptorship experience	243	0.52	12	6.2	12	28.0	11	130	0.39	12	113	0.68	12
10. Influence of medical school faculty	246	0.59	11	8.5	11	30.5	10	132	0.45	11	114	0.76	10
11. Influence of house staff	246	0.43	13	3.7	13	26.0	12	131	0.24	13	115	0.64	13
12. Influence of classmates	247	0.29	14	2.0	14	19.0	14	132	0.17	14	115	0.43	14
13. Influence of spouse	240	1.13	8	22.9	7	48.8	8	132	1.14	7	108	1.12	7
14. Other	50	0.68	9	20.0	8	24.0	13	27	0.59	9	23	0.78	9

*As derived from responses to the following question: "How important a role did each of the following factors play in helping you choose your current location? Please fill in the appropriate code number for each factor. If in training, respond in terms of future plans." Codes: 0=of no importance, 1=of minor importance, 2=of some importance, and 3=of major importance.
**Includes codes 1, 2, and 3

childhood, went to undergraduate school in the inner city, desired an inner city practice at the time of medical school application, or currently practice (or plan to practice) in the inner city is in each instance higher than the corresponding percentage for white respondents.

These data indicate that black alumni, as compared to white alumni, were more likely to have had ties to and a concern for the inner city prior to entering medical school and were more likely to practice or plan to practice in the inner city after graduation. Although many factors influence the decision to practice in the inner city, our findings suggest that being black may be an important determinant.

The data on practice location also show that the proportion of individuals who practice or plan to practice in a small city, small town or rural area is consistently lower than what might be predicted from the backgrounds of those who responded. Again, this may be the result of fewer opportunities and incentives for black physicians to serve patients in these areas. It also may reflect the tendency of black professionals to move from small cities and towns and rural areas to more densely populated areas as they progress in their careers.

In interpreting the above findings relative to practice locations desired by respondents while in undergraduate college and when applying to medical school, it should be remembered that they are based on memories of the respondents rather than information gathered at the time they were actually attending college or making application to medical school.

Table 5 presents the responses of Howard University black medical alumni to questions concerning the relative importance that each of 13 specified factors had in the choice of their current or eventual practice location. In order of mean importance, the eight factors with the relatively highest ratings (mean importance greater than 1.00) are preference for region of country, general characteristics of the community, desire to serve a particular group of people in the community, personal ties or contacts in the community, financial advantages, professional contacts in the community, best available practice opportunity, and influence of spouse. All other factors appear to be of less than minor importance in influencing the choice of practice location. These findings suggest that community characteristics are somewhat more important than professional opportunities in influencing practice location choices among black respondents in this study.

A comparison of the two groups of black graduates with respect to factors influencing their choice of a practice location reveals that, among those factors which were "of importance," factor 3 (desire to serve a particular group of people in the community) and factor 7 (financial advantages) were more important influences for later graduates than for those who graduated in the earlier years. Conversely, factor 8 (best available practice opening) was viewed as being less of an influence by the later alumni group. A suggested explanation of these findings is that the options regarding practice opportunities were less restrictive for the later group. Many earlier black graduates may have been forced to accept the best available practice opportunities with less consideration of the community to be served or the financial advantages.

SPECIALTY CHOICE

Data concerning the specialty choice of black respondents are presented in Table 6. Forty-seven percent reported that they currently specialize or plan to specialize in one of the primary care disciplines, which are defined here as family medicine/general practice, general internal medicine, general pediatrics, and obstetrics and gynecology. This is a relatively high percentage in primary care, but slightly lower than the 49 percent who planned a primary care practice at the time of graduation. As with most physicians of the modern era, the process of medical education for the black medical graduates of this study seems to have moderated the number entering a primary care discipline.

Table 6 also shows that a higher percentage of the 1970-73 black graduates practice or plan to practice a primary care discipline as compared to the earlier graduates (52 percent versus 43 percent). Each of the primary care specialities attracted greater percentages of later graduates than earlier graduates in the study. Conversely, a lower percentage of later graduates was attracted into one of the surgical disciplines or into psychiatry. The creation in 1971 of a Department of Family Practice in the College of Medicine and the national focus on primary care can be cited as possible determinants of these findings.

TABLE 6. COMPARISON OF SPECIALTIES OF BLACK HOWARD UNIVERSITY MEDICAL ALUMNI WITH THEIR PLANS WHEN APPLIED TO AND GRADUATED FROM MEDICAL SCHOOL*

Nature of Specialty	1955-1975 Graduates (%)				1955-1970 Graduates (%)				1973-1975 Graduates (%)			
	When Applied				When Applied				When Applied			
	All Resp. (N=245)	Decided Resp. (N=212)	When Grad. (N=249)	When Surveyed (N=241)	All Resp. (N=127)	Decided Resp. (N=103)	When Grad. (N=131)	When Surveyed (N=129)	All Resp. (N=118)	Decided Resp. (N=109)	When Grad. (N=118)	When Surveyed (N=112)
Anesthesiology	0.8	0.9	1.6	3.3	0.8	1.0	1.5	5.4	0.8	0.9	1.7	0.9
Basic medical science	0.4	0.5	0.0	0.0	0.8	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Family medicine/general practice	19.2	22.2	15.7	17.0	22.3	27.3	19.1	16.3	16.1	17.4	11.9	17.6
Internal medicine	15.5	17.4	18.0	16.2	10.3	12.6	13.7	13.2	20.3	22.0	22.9	19.6
General	11.8	13.2	11.2	8.7	8.7	10.7	9.9	7.0	14.4	15.6	12.7	10.7
Subspecialty	3.7	4.2	6.8	7.5	1.6	1.9	3.8	6.2	5.9	6.4	10.2	8.9
Obstetrics/Gynecology	12.7	14.6	16.5	17.0	10.2	12.6	13.0	15.6	15.3	16.5	20.3	18.6
Ophthalmology	2.4	2.8	2.4	3.3	3.1	3.9	2.3	2.3	1.7	1.8	2.5	4.5
Otolaryngology	0.4	0.5	0.8	0.4	0.8	1.0	1.5	0.0	0.0	0.0	0.0	0.9
Pathology	1.6	1.9	0.8	1.7	1.6	1.9	0.0	2.3	1.7	1.8	1.7	0.9
Pediatrics	6.9	8.0	6.8	5.8	4.7	5.8	4.6	4.7	9.3	10.1	9.3	6.2
General	4.9	5.7	5.6	4.6	4.7	5.8	3.1	3.9	5.1	5.5	8.5	5.4
Subspecialty	2.0	2.3	1.2	1.2	0.0	0.0	1.5	0.8	4.2	4.6	0.8	1.8
Psychiatry/Child psychiatry	6.9	8.0	4.8	5.8	7.9	9.7	6.1	8.5	5.9	6.4	3.4	2.7
Public health/preventive medicine	1.2	1.4	1.2	1.7	0.8	1.0	1.5	1.6	1.7	1.8	0.8	1.8
Radiology	0.8	0.9	4.0	3.7	1.6	1.9	5.3	3.9	0.0	0.0	2.5	3.6
Surgery	15.1	17.4	20.0	18.3	13.4	16.5	22.2	19.4	16.9	18.4	17.8	16.9
General	11.4	13.2	10.8	8.3	8.7	10.7	15.3	9.3	14.4	15.6	5.9	7.1
Subspecialty	3.7	4.2	9.2	10.0	4.7	5.8	6.9	10.1	2.5	2.8	11.9	9.8
Other known specialty	0.0	0.0	2.4	2.1	0.0	0.0	3.1	3.1	0.0	0.0	1.7	0.9
Specialty, but unknown	2.0	2.4	0.8	0.0	3.1	3.9	1.5	0.0	0.8	0.9	0.0	0.0
Combination of specialties	0.8	0.9	1.2	3.3	0.0	0.0	0.8	3.9	1.7	1.8	1.7	2.7
Undecided	13.5	—	2.8	0.4	18.9	—	3.8	0.0	7.6	—	1.7	0.9
Primary care**	48.6	55.7	49.0	47.3	45.9	56.3	45.1	42.8	50.1	55.0	53.4	52.3

*As derived from responses to the following question: "Please choose from the answer code the one number which best corresponds to the type of specialization which you: (1) contemplated when you applied to medical school; (2) planned when you graduated from medical school; (3) now practice (or plan to practice if now in training)." Percentages do not add to 100 due to rounding

**Includes family medicine/general practice, general internal medicine, obstetrics/gynecology, and general pediatrics

Table 7 is similar to Table 5 but focuses on the factors influencing the choice of medical specialty rather than on the choice of a practice location. In order of mean importance the identified factors with relatively high rankings (greater than 1.00) with respect to their influence on choice of specialty are desire to serve a particular group in the community, financial advantages, influence of medical school faculty, preference for region of country, general characteristics of the community, professional ties in the community, and personal ties or contacts in the community. The fact that the desire to serve a particular group of people in the community ranked highest among black respondents may relate to the commitment of many in this group to address a particular health need. For example, some black alumni may have chosen obstetrics and gynecology to help reduce the high rate of infant mortality among blacks and some may have chosen a primary care discipline in order to best meet the needs of black populations in the inner city.

Although the influence of a preceptorship experience was a major factor in specialty choice for only 15 percent of the respondents, 46 percent indicated that this was of at least minor importance. Similarly, while the influence of house staff was of major importance for only 11 percent of the respondents, 38 percent indicated that this factor was of at least minor importance.

A high percentage (41 percent) indicated that factors other than those presented as choices on the questionnaire were of major importance in their selection of a specialty. Many of these other factors related to the nature of the specialty, (eg, degree of intellectual challenge, expected practice hours, and variety of patients treated) while others related to the cognitive and affective skills involved and required.

Among these factors which were "of importance" in choice of specialty, several can be identified as having been more influential for later graduates than for earlier graduates. Financial advantages (factor 7), which ranked only seventh among all factors for the earlier group, was the second most influential factor for the 1973 to 1975 respondents. Likewise, influence of medical school faculty (factor 10) was ranked higher by later graduates. Professional contacts in the community (factor 2), general characteristics of the community (factor 4), and preference for region of the country (factor 6) were of less importance to the more recent black graduates among the survey respondents. It appears that later graduates were less restrained by community considerations in their choice of specialty.

PROFESSIONAL ACTIVITIES

As shown in Table 8, the 1955-75 black medical alumni indicated that they were devoting (or planned to devote) two thirds of their time to direct patient care while the other third was divided among teaching (10 percent), indirect patient care (8 percent), medical administration (7 percent), nonmedical work (4 percent), research (4 percent), and other medical care (1 percent).

Comparing the actual time allotment of 1955-70 graduates with the anticipated time allotment of 1973-75 alumni, it appears that the latter group expect to reduce the time allotted to direct patient care and to medical administration.

PRACTICE TYPE

As shown in Table 9, there was a decided trend among black medical alumni away from individual practice and toward group practice. For example, whereas 41 percent of 1955-70 graduates were employed during 1975-76 as individual practitioners, only 8 percent of the 1973-75 black alumni planned on working in such a setting. A total of only 55 percent of the recent graduates were planning private practice compared with 64 percent of the earlier graduates who were actually in private practice at the time of the survey.

Another striking finding was the jump in hospital based group practice from 2 percent of the earlier graduates to a planned 15 percent of the later group. A small gain was also suggested for federal government service and a small decline was suggested for the academic health center as the primary work setting. None of the respondents reported plans to have industrial medicine as their primary type of practice.

MEDICAL SCHOOL APPOINTMENTS

Approximately 11 percent of all black respondents have or plan to have full-time medical school appointments, whereas AMA data[26] indicate that in 1973, less than 2 percent of all physicians (and of Howard medical alumni) were involved in medical school teaching as a major professional activ-

TABLE 7. RELATIVE IMPORTANCE OF FACTORS INFLUENCING CHOICE OF MEDICAL SPECIALTY OF BLACK HOWARD UNIVERSITY MEDICAL ALUMNI*

Factors Affecting Choice of Specialty	1955-1975 Graduates							Actual Specialty of 1955-1970 Graduates			Expected Specialty of 1973-1975 Graduates		
	Mean Importance			of Major Importance		of Importance**		Mean Importance			Mean Importance		
	No.	Mean	Rank	%	Rank	%	Rank	No.	Mean	Rank	No.	Mean	Rank
1. Personal ties or contacts in the community	232	1.10	8	20.3	4	50.0	7	120	1.03	8	112	1.17	8
2. Professional contacts in the community	233	1.16	7	18.5	7	54.9	4	122	1.07	3	111	1.25	7
3. Desire to serve particular group of people in community	230	1.61	1	32.2	2	68.3	1	120	1.35	1	110	1.89	1
4. General characteristics of community (schools, cultural opportunities, etc.)	227	1.19	6	17.2	8	57.3	3	118	1.08	2	109	1.31	6
5. Recruitment by community	230	0.58	13	7.4	13	29.6	13	120	0.48	13	110	0.69	13
6. Preference for region of country	224	1.20	5	20.1	5	54.5	5	120	1.07	3	104	1.37	5
7. Financial advantages	231	1.26	3	12.1	10	65.4	2	120	1.05	7	111	1.50	2
8. Best available practice opening	221	0.91	10	18.6	6	39.8	10	120	0.92	9	101	0.91	11
9. Preceptorship experience	227	0.98	9	15.4	9	45.8	8	117	0.82	10	110	1.15	9
10. Influence of medical school faculty	230	1.21	4	21.7	3	52.6	6	120	1.06	6	110	1.38	4
11. Influence of house staff	229	0.81	11	10.5	11	38.4	11	119	0.66	11	110	0.97	10
12. Influence of classmates	229	0.43	14	3.5	14	24.5	14	119	0.29	14	110	0.58	14
13. Influence of spouse	223	0.64	12	8.1	12	31.8	12	120	0.56	12	103	0.74	12
14. Other factors	57	1.28	2	41.2	1	43.1	9	27	1.07	3	24	1.50	2

*As derived from responses to the following question: "How important a role did each of the following factors play in helping you choose your current specialty? Please fill in appropriate code number for each factor. If in training, respond in terms of future plans." Codes: 0=of no importance, 1=of minor importance, 2=of some importance, and 3=of major importance.
**Includes codes 1, 2, and 3

TABLE 8. RELATIVE AMOUNT OF TIME DEVOTED TO VARIOUS PROFESSIONAL ACTIVITIES BY BLACK HOWARD UNIVERSITY MEDICAL ALUMNI, 1955-75*

Nature of Professional Activity	1955-1975 Graduates (252 Respondents)				Actual Time of 1955-1970 Graduates (134 Respondents)				Anticipated Time of 1973-1975 Graduates (118 Respondents)			
	No.	%	Mean % per Respondent	Weighted Percent of Time	No.	%	Mean % per Respondent	Weighted Percent of Time**	No.	%	Mean % per Respondent	Weighted Percent of Time**
Direct patient care	233	92.4	71.1	66.0	122	91.0	74.3	68.0	111	94.1	67.6	63.7
Indirect patient care	90	35.7	21.6	7.7	38	28.4	27.5	7.8	52	44.1	17.3	7.6
Medical administration	117	46.4	15.1	7.0	68	50.7	16.8	8.6	49	41.5	12.8	5.4
Research	82	32.5	10.7	3.5	37	27.6	11.2	3.1	45	38.1	10.2	3.9
Teaching	180	71.4	14.0	10.0	91	67.9	13.6	9.3	89	75.4	14.4	10.9
Other medical care	20	7.9	17.5	1.4	6	4.5	6.8	0.3	14	11.9	22.0	2.6
Nonmedical work	96	38.1	11.1	4.2	37	27.6	10.3	2.9	59	50.0	11.6	5.8

*As derived from responses to the following question: "Among the following list of activities, indicate the percentage of *your time* devoted to each of them. If in training, please *anticipate* your activities upon completion of training."
**The weighted percentage of time devoted to the various professional activities was derived by multipying Column 2 (or 6 or 10) by Column 4 (or 8 or 12) and then calculating what proportion of 100 percent was each product for the activity in question.

TABLE 9. PRIMARY TYPE OF PRACTICE (OR OTHER WORK SETTING) OF BLACK HOWARD UNIVERSITY MEDICAL ALUMNI, 1955-75*

Practice or Work Setting	1955-1975 Graduates		Actual Setting of 1955-1970 Graduates		Planned Setting 1973-1975 Graduates	
	Number	Percent	Number	Percent	Number	Percent
Private practice	149	59.9	85	64.4	64	54.7
Individual practice	63	25.3	54	40.9	9	7.7
Partnership	41	16.5	19	14.4	22	18.8
Private group practice	45	18.1	12	9.1	33	28.2
Hospital-based group practice (except federal)	20	8.0	3	2.3	17	14.5
Academic health center	36	14.5	20	15.2	16	13.7
Federal government service	16	6.4	7	5.3	9	7.7
Public health (except federal)	9	3.6	5	3.8	4	3.4
Industrial medicine	0	0.0	0	0.0	0	0.0
Other	19	7.6	12	9.1	7	6.0
Total	249	100.0	132	100.0	117	100.0

*As derived from responses to the following question: "If in practice, indicate the primary type of medical environment you are now working in. If in training, indicate your *future* plans. *Check only one.*"

ity. An additional 39 percent of the black survey respondents planned to have part-time academic appointments.

It is noteworthy that the 1973-75 graduates are less inclined toward medical school appointments than the 1955-70 graduates, with 49 percent of the more recent alumni and 55 percent of the earlier alumni having (or planning to have) such appointments. Even more dramatic is the change regarding full-time appointments, which dropped from an actual 16 percent for the earlier graduates to a planned 6 percent for the later group.

CONTINUING MEDICAL EDUCATION

Approximately one third of the 1955-70 black respondents who had completed their graduate medical education reported 100 or more hours of continuing medical education during 1975 and 34 percent reported between 50 and 59 hours. The median number of hours reported by this group was 71. The AMA requires a minimum of 150 hours over a three-year period to qualify for its Physician's Recognition Award for Continuing Medical Education.[27] Thus, it can be concluded that over 60 percent of the respondents who have completed their housestaff training are probably meeting or exceeding this AMA standard.

COMMENTS AND SUGGESTIONS

The final item on the questionnaire allowed respondents to add their own comments and suggestions concerning topics covered in the survey and other matters which they felt should be considered by the institution. Many black respondents offered ideas.

The suggestion repeated most often was that there should be more instruction on how to establish and manage an office practice. Two other suggestions made by several respondents include that greater stress be given to preparing students to pass licensure examinations, and that more information and counseling be provided to students regarding specialty choice and practice location selection. As expected, there were more comments on the need for courses in the business aspects of medicine from earlier graduates than from recent graduates, most of whom had not yet established a practice when surveyed.

CONCLUSION

By way of a conclusion, several significant comparisons are highlighted below. Most of these comparisons are between the practice patterns of earlier black alumni (graduating from 1955 to 1970) and later alumni (graduating from 1973 to 1975).

- Blacks constitute a high proportion (72 percent) of the actual or planned patients of black alumni.
- Blacks constitute a larger percentage of the planned patients of later alumni (77 percent) than of the actual patients of earlier alumni (67 percent).
- Almost one half of the actual or planned patients of black alumni are poor.
- Later alumni plan to devote more hours to patient care (median 59) than earlier alumni were providing when surveyed (median of 50).
- Later alumni are less apt to practice in the inner city (35 percent) than are earlier alumni (41 percent).
- Black alumni are much more likely than nonblack alumni to have lived or attended college in an inner city or to plan an inner city practice.
- A relatively high proportion (41 percent) of the black alumni practice or plan to practice in a primary care specialty.
- Later alumni are more apt to plan a primary care specialty (52 percent) than earlier alumni (43 percent).
- Later alumni are much less likely to be individual practitioners (8 percent) than earlier alumni (43 percent).
- Later alumni are less apt to enter private practice (55 percent) than earlier alumni (64 percent).

These findings on black alumni have been useful to the planning process for the College of Medicine and reaffirm the need to train more black physicians to serve blacks, the economically disadvantaged, and residents of the inner city. The differences which emerged between both earlier and later black graduates may allow better predictions of the future practice patterns of black physicians.

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