



Selected Characteristics of the Members of the National Medical Association: Preliminary Findings

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INTENSIVE investigation of the literature reveals an extreme paucity of research knowledge describing the National Medical Association organizationally, historically, in terms of membership composition, and members' characteristics. Kenney, in 1912,¹ and again in 1933,² provided some information of historical and organizational interest. Reitzes³ work, published in 1958, presented myriad data relative to the Negro physician and his practice, but little definition of the population in terms of N.M.A. membership. Melton⁴ presented concise data on Negro physicians as a component of health manpower in the United States. More recently, Morais⁵ discoursed extensively on the Negro physician in an historical context. And most recently, a study⁶ encompassing the organizational history and the membership elements of the National Medical Association was completed.

This brief paper presents some of the findings of that latest study. The large amount of data collected for inclusion in the larger document were concerned with the demographic, social, and educational characteristics of the N.M.A. member as well as the definition of his participation in medical practice and the delivery of health care.

It was felt by the authors of this paper that the latter segment of the data would be of the greatest immediate interest. Hence, the data reported here are confined to those characteristics describing the physicians' form of practice, the organization of that practice, the extent of specialization, the level of earnings, and the relationships with hospitals.

RESEARCH METHODOLOGY

In exploring the proper and most effective approach to this study, a literature survey was deemed the necessary starting point. As noted above, this avenue of exploration was of limited value. Communication with those in the best position to have information about the N.M.A. also confirmed that the work by others was limited.⁷ As a consequence of these early investigative efforts, it was decided that a survey, utilizing a mailed questionnaire, would combine the proper balance between breadth and accuracy of information. The limitations of survey research utilizing the mailed questionnaire were fully understood. It was felt that a visit to Washington, D.C., to elicit the cooperation and, perhaps, aid of some of the leadership of the National Medical Associ-

ation would be appropriate and helpful for the completion of the study. A letter from W. Montague Cobb, M.D., Editor of the *Journal of the National Medical Association*, addressed to those members selected to receive the survey instrument was chosen as the most expeditious approach to eliciting a high response from the N.M.A. membership.

The population of the survey was rigidly defined as the membership of the National Medical Association listed in the *Directory of the Association*, dated May, 1968.⁸ As delineated in that document, the membership of the N.M.A. totalled 5,048 physicians. For the purpose of study, the population elements were assigned to one of four regions, with members residing outside of the United States assigned to one of these regions. The regions were defined such that there was some geographic continuity and a numerical balance in the stratification of the universe (Table 1).

As Goode and Hatt⁹ point out, proper research procedure requires that in order for a sample of a survey investigation to be considered representative of the defined universe, the population elements must have an equiprobability for selection into that sample. Such was the case for those who sent questionnaires for this study. The random

sample, stratified by region, consisted of 20 per cent of the universe and was generated from a uniform distribution with the aid of the University Computer Center at the University of Iowa.

The sampling distribution and the level of participation by those physicians chosen are shown in Table 2. Of the 1,010 questionnaires mailed, 34.8 per cent were returned by April 1, 1969. A Chi-Square test for goodness of fit was computed, and from the analysis of the statistic it was concluded that no bias existed as a function of regional variation of the returns.¹⁰ This test for bias was chosen because the region of residence was the only population parameter known for the membership of the N.M.A. On this basis, it was felt that reporting the data for each variable as a function of regional location was acceptable.

RESULTS OF THE STUDY

How the physician organizes the practice of his profession, the manner of remuneration for his services, the level of his earnings, the degree to which he specializes, and his hospital affiliations are the dimensions of concern of this study which are presented here. The data presented here provide limited information along those variables as they apply to members of the N.M.A.

TABLE 1.—THE RESEARCH UNIVERSE: DISTRIBUTION OF MEMBERSHIP OF NATIONAL MEDICAL ASSOCIATION BY ASSIGNED REGION AND STATE

Northeast: Region I		South: Region II		Far West: Region III		Midwest: Region IV	
State	No.	State	No.	State	No.	State	No.
Connecticut	51	Alabama	75	Alaska	1	Illinois	298
Maine	3	Arkansas	20	Arizona	12	Indiana	102
Massachusetts	39	Delaware	11	California	625	Iowa	17
New Hampshire	0	Dist. of Columbia	464	Colorado	8	Kansas	23
New Jersey	193	Florida	90	Hawaii	5	Michigan	296
New York	624	Georgia	96	Nevada	4	Minnesota	21
Pennsylvania	306	Kentucky	35	New Mexico	6	Missouri	168
Rhode Island	4	Louisiana	69	Oregon	6	Nebraska	4
Vermont	0	Maryland	194	Washington	22	North Dakota	1
		Mississippi	43	Wyoming	1	Ohio	278
<i>Total</i>	1220	North Carolina	145	Outside U.S.	60	Wisconsin	30
		Oklahoma	31				
		South Carolina	53	<i>Total</i>	750	<i>Total</i>	1238
		Tennessee	195				
		Texas	155				
		Virginia	150				
		West Virginia	14				
		<i>Total</i>	1840				

Source: National Medical Association, *Directory of the National Medical Association* (Washington, D.C.: National Medical Association, May, 1968).

The data enumerating the percentage of time devoted to general practice by those members of the N.M.A. who responded to the survey instrument are shown in Table 3. This variable explores in an oblique fashion the extent of specialization of N.M.A. members as they actually deliver health care to their patients. It should be noted here that the term "general practice" remained undefined on the survey instrument. The lack of definition was justified by research findings by Fahs and Peterson, "who reported that physicians' self-classifications are reliable" when the physicians are asked to identify their degree of participation in general practice.

Examination of the 335 responses to this questionnaire item shows that a majority of the physicians devote less than half of their time to general practice. The N.M.A. members practicing medicine in the Southern region, however, display a greater propensity for general practice. When analyzed with the Chi-Square statistic, the tendency for general practice in the Southern region is not a significant one. These data are interesting, nevertheless, when coupled with an examination of the extent to which the N.M.A. members responding to the questionnaire are certified by an American

Specialty Board.

These data found in Table 4 show that the majority of the respondents are not board certified, and that there is no significant difference between the regional variation and certification status. There are two trends evident, however. First, there is no region containing a majority of board certified respondents. Second, the Southern region contains proportionately the fewest N.M.A. members responding that they are certified by an American Specialty Board. This latter finding is congruent with that finding dealing with the percentage of time devoted to general practice reported in Table 3.

Another finding relative to specialization among members of the N.M.A. is also interesting. Of 309,483 physicians in the United States in December, 1967, slightly less than one-third (31.3 per cent) were "Specialty Board Certified Physicians."¹² The proportion of N.M.A. members certified by an American Specialty Board (41.5 per cent) is, when compared to the larger figure, quite substantial.

The data for the responses to the questionnaire item concerned with organization of the respondent's medical practice are shown in Table 5. The

TABLE 2.—POPULATION, SAMPLE, AND SURVEY RESPONSES, BY REGION

	<i>Northeast: Region I</i>	<i>South: Region II</i>	<i>Far West: Region III</i>	<i>Midwest: Region IV</i>	<i>Total</i>
Population	1220	1840	750	1238	5048
Per cent of Population	24.2	36.5	14.8	24.5	100.0
Sample	244	368	150	248	1010
Per cent of Sample	24.2	36.4	14.6	24.6	99.8
Sample Returned	87	111	60	90	348
Per cent of Sample Returned	25.0	31.9	17.2	25.9	100.0

Note: Variations from 100.0 per cent are due to rounding. Calculated $X^2=3.776$. Degrees of Freedom=3. $X^2_{.05}=7.815$. Number of non-respondents to question=0.

TABLE 3.—PER CENT OF TIME DEVOTED TO GENERAL PRACTICE BY REGION

	<i>Northeast: Region I</i>		<i>South: Region II</i>		<i>Far West: Region III</i>		<i>Midwest: Region IV</i>		<i>Total</i>	
	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>
None	47	55.3	39	35.8	24	40.7	41	50.0	151	45.1
Less than 25%	7	8.2	17	15.6	9	15.3	10	12.2	43	12.8
25%-50%	4	4.7	8	7.3	4	6.8	5	6.1	21	6.3
50%-75%	4	4.7	3	2.8	5	8.5	2	2.4	14	4.2
75% or more	23	27.1	42	38.5	17	28.8	24	29.3	106	31.6
<i>Total</i>	85	100.0	109	100.0	59	100.1	82	100.0	335	100.0

Note: Variations from 100.0 per cent are due to rounding. Calculated $X^2=13.937$. Degrees of Freedom=12. $X^2_{.05}=21.026$. Number of non-respondents to question=13.

definition of group practice, unlike that for general practice, was provided on the survey instrument in order to allow a common frame of reference for the respondent, hopefully thereby increasing the reliability of the survey results. The definition provided was a modification of that used by the U.S. Public Health Service.¹³ The resultant definition was: "Group practice is the formal association of three or more physicians providing services in one facility in more than one field of specialty (usually sharing income)." It was felt that the other forms of medical practice organization would be clear to the physicians and did not require definition.

An examination of the data in Table 5, then, reveals that a majority of N.M.A. members are practicing solo medicine (56.4 per cent). The second most frequently reported form is the full-time hospital staff appointment. That 22 residents responded to this question, however, may provide some inflationary bias to that category of data for this item. It is also quite interesting to note, in this context, that despite that Association's favorable posture relative to group practice, only 3.8 per

cent of the respondents were engaged in this organizational form of medical care delivery. The Chi-Square test reveals that there is a significant relationship between the organizational form of practice and the respondent's location.

The data relative to the respondents' source of income are revealed in Table 6. According to the data, a clear majority of the N.M.A. members derive their income from the fee-for-service form of remuneration. This is congruent with the finding that the majority of N.M.A. members are solo practitioners. The fee-for-service basis of payment is normally associated with solo medicine. The second most frequently reported form of income derivation is the salary, with almost one-third responding in that category. This is probably a reflection of those respondents who are full-time hospital staff members, professors, or administrators. It should be noted here that the Chi-Square statistic for these data is spuriously inflated due to several theoretical values in the contingency cells being less than five.¹⁰ Furthermore, some of the response categories contained no data, but nevertheless could not be collapsed.

TABLE 4.—SPECIALTY CERTIFICATION STATUS OF RESPONDENTS, BY REGION

	Northeast: Region I		South: Region II		Far West: Region III		Midwest: Region IV		Total	
	N	%	N	%	N	%	N	%	N	%
Not Certified	37	54.5	50	71.4	26	56.5	36	50.7	149	58.5
Certified	31	45.6	20	28.6	20	43.5	35	49.3	106	41.5
Total	68	100.0	70	100.0	46	100.0	71	100.0	255	100.0

Note: Variations from 100.0 per cent are due to rounding. Calculated $X^2=7.135$. Degrees of Freedom=3. $X^2_{.05}=7.815$. Number of non-respondents to question=93.

TABLE 5.—ORGANIZATIONAL FORM OF MEDICAL PRACTICE, BY REGION

	Northeast: Region I		South: Region II		Far West: Region III		Midwest: Region IV		Total	
	N	%	N	%	N	%	N	%	N	%
Solo	44	51.8	67	61.5	32	55.2	47	55.3	190	56.4
Partnership	5	5.9	8	7.3	4	6.9	12	14.1	29	8.6
Group Practice	1	1.2	2	1.8	7	12.1	3	3.5	13	3.8
Full-Time Hospital Staff	21	24.7	23	21.1	4	6.9	13	15.3	61	18.1
Academic Appointment	6	7.1	4	3.7	2	3.4	6	7.1	18	5.4
Administrative	1	1.2	4	3.7	5	8.6	1	1.2	11	3.2
Other	7	8.2	1	.9	4	6.9	3	3.5	15	4.5
Total	85	100.1	109	100.0	58	100.0	85	100.0	337	100.0

Note: Variations from 100.0 per cent are due to rounding. Calculated $X^2=40.928$. Degrees of Freedom=18. $X^2_{.05}=28.869$. Number of non-respondents to question=11.

TABLE 6.—RESPONDENTS' DESCRIPTION OF SOURCE OF INCOME, BY REGION

	Northeast: Region I		South: Region II		Far West: Region III		Midwest: Region IV		Total	
	N	%	N	%	N	%	N	%	N	%
Fee-for-Service	46	54.1	78	70.3	34	57.6	62	72.1	220	64.5
Shared Income	0	0.0	1	.9	2	3.4	0	0.0	3	.9
Salary	35	41.2	31	27.9	21	35.6	24	27.9	111	32.5
Contract or Percentage	2	2.4	0	0.0	2	3.4	0	0.0	4	1.1
Other	2	2.4	1	.9	0	0.0	0	0.0	3	.9
<i>Total</i>	85	100.1	111	100.0	59	100.0	86	100.0	341	99.9

Note: Variations from 100.0 per cent are due to rounding. Calculated $X^2=21.497$. Degrees of Freedom=12. $X^2_{.05}=21.026$. Number of non-respondents to question=7.

TABLE 7.—RESPONDENTS' LEVEL OF GROSS INCOME, BY REGION

	Northeast: Region I		South: Region II		Far West: Region III		Midwest: Region IV		Total	
	N	%	N	%	N	%	N	%	N	%
Under \$10,000	8	9.8	14	13.0	4	6.9	8	9.3	34	10.2
\$10,000-\$19,999	16	19.5	15	13.9	4	6.9	13	15.1	48	14.4
\$20,000-\$29,999	19	23.2	31	28.7	14	24.1	18	20.9	82	24.6
\$30,000-\$39,999	19	23.2	19	17.6	13	22.4	16	18.6	67	20.0
\$40,000-\$49,999	14	17.1	14	13.0	7	12.1	11	12.8	46	13.8
\$50,000-\$59,999	1	1.2	5	4.6	4	6.9	3	3.5	13	3.9
\$60,000-\$69,999	3	3.7	4	3.7	4	6.9	4	4.7	15	4.5
\$70,000 or more	2	2.4	6	5.6	8	13.8	13	15.1	29	8.7
<i>Total</i>	82	100.1	108	100.1	58	100.0	86	100.0	334	100.1

Note: Variations from 100.0 per cent are due to rounding. Calculated $X^2=23.278$. Degrees of Freedom=21. $X^2_{.05}=32.671$. Number of non-respondents to question=14.

TABLE 8.—RESPONDENTS' TYPE OF HOSPITAL AFFILIATION, BY REGION

	Northeast: Region I		South: Region II		Far West: Region III		Midwest: Region IV		Total	
	N	%	N	%	N	%	N	%	N	%
None	5	6.0	11	9.9	4	6.7	7	8.0	57	7.9
Active Staff	46	54.8	69	62.2	36	60.0	57	56.6	208	60.8
Honorary or Consulting Staff	3	3.6	5	4.5	3	5.0	4	4.6	15	4.3
Full-Time Staff	22	26.2	14	12.6	11	18.3	8	9.2	55	16.1
House Staff	5	6.0	9	8.1	4	6.7	9	10.3	27	7.9
Other	3	3.6	3	2.7	2	3.3	2	2.3	10	2.9
<i>Total</i>	84	100.2	111	100.0	60	100.0	87	100.0	342	99.9

Note: Variations from 100.0 per cent are due to rounding. Calculated $X^2=12.539$. Degrees of Freedom=15. $X^2_{.05}=24.996$. Number of non-respondents to question=6.

Gross income was defined on the survey instrument as "income without deductions for professional and/or office expenses and taxes." Again, the definition was provided so that those responding could do so from a common frame of reference. The data dealing with the income level of N.M.A. members is shown in Table 7. The median income of the N.M.A. member responding

to the questionnaire is approximately \$30,000 per annum, based on the physician's income for the past two years. While the highest incomes are being reported by those respondents from the Midwest region, there is no relationship between the level of income and the region in which the physician is presently located.

The hospital affiliation privileges for physi-

cians are important dimensions of his professional development. Affiliation with a hospital is mandatory for medical training. Furthermore, for the physician in practice, affiliation with a hospital is a professional as well as an economic necessity. The N.M.A.'s concern with the ability of the Negro physician to secure affiliation has always been a major one; it has been particularly urgent since the 1920's, however. In light of the high level of concern in this area, information was elicited relative to the N.M.A. member's hospital affiliations. The data are found in Table 8.

While it can be seen that 60.8 per cent of those responding do hold hospital affiliations as active staff members, there are certain interpretive considerations which are important. First, there are no indications in the data to suggest the scope and limitations of those staff privileges. Second, there is no indication as to the quality of the hospital itself. Third, there is no way of ascertaining if those 39.8 per cent without active privileges lack those privileges by their own choice. These interpretive elements aside, however, the researchers felt that just as important, perhaps, was the physician's perception of his hospital privileges and affiliations, regardless of his "real" affiliations and privileges.

In comparing the type of hospital affiliation with the form of practice (i.e., comparing the data in Table 8 with those in Table 5), strong internal consistency of the survey instrument is found. While no formal test of reliability was applied to the data, this finding of consistency adds confidence in the efficacy of the survey and the survey instrument, and hence the data collected in this study. The categories of full-time hospital staff and academic appointment in Table 5 total to 23.5 per cent; the combination of the full-time hospital staff and house staff categories in Table 8 sum to 24.0 per cent. That there is such congruence in the data across similar categories is heartening to any researcher, and the authors are no exception.

SUMMARY

1. This brief paper presents in detail some of the responses to a questionnaire which was part of a much larger study of the membership of the National Medical Association. The information was obtained from a 20 per cent stratified random sample of N.M.A. members. The data reported

here is unbiased as to region, on the basis of Chi-Square analysis.

2. While the data reported in this paper are limited, a profile of the membership of the N.M.A. can be provided on the basis of the larger study.

3. The membership is largely male, who are married and middle-aged.

4. They earned their bachelor's degree from predominantly Negro colleges or universities, with major academic interests in the sciences.

5. The member tended to obtain his medical education from either Howard University Medical School in Washington, D.C., or from Meharry Medical College, Nashville, Tennessee. The N.M.A. member is basically satisfied with his medical education, although he clearly notes room for improvements.

6. The internships served by the N.M.A. member are generally of the rotating type, and usually of a year's duration; and while the internships are served in hospitals across the country, there were basically six hospitals which have played a major role in the training of these physicians.

7. A majority of the physicians responding to the questionnaire had taken some residency training—again in hospitals throughout the Nation, and again with a certain few carrying the major burden of residency training. However, analysis indicates that there is considerable attrition when certification status is compared to those who indicated some residency training. Despite the ostensible attrition, the data show that the N.M.A. members tend to become board certified more frequently than does the physician considered as part of the larger population of physicians in this country.

8. The characteristics of the N.M.A. member's medical practice do not differ substantially from the general population of physicians in the United States. The N.M.A. member tends to practice solo medicine, earning about \$30,000 per year through fee-for-service remuneration. However, the fee-for-service solo practitioner is not the only type of doctor in the N.M.A. Many are salaried full-time hospital staff members, academicians, and administrators.

9. The members of the N.M.A. tend to have active staff privileges in hospitals, although the scope of these privileges is not known. In addition, the members tend to have staff privileges

at more than one hospital, and again the scope of those privileges is unknown.

10. Finally, while a majority of the respondents tend to be members of the American Medical Association, there is substantial sentiment that the N.M.A. is a viable and important organization for both the black physician and the "liberal" physician, whatever his color.

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(Contents, concluded)

PRESIDENT'S COLUMN	
Hard Times: Good Prospects	64
EDITORIAL	
Howard's Second Century	65
TALENT RECRUITMENT	
M.I.T. Special Program for Minority Groups	68
Howard University Medical School Recruitment Day	69
Brooklyn Recruitment Activities	69
BRIEFS	
Alexis Vice President for Health Affairs at Howard University	70
Louis T. Wright Surgical Wing of Harlem Hospital Dedicated	71
Gullattee Trustee of Wesleyan University	77
Standard Acting Director of Public Health for Washington, D.C.	78
Howard Kenney VA Regional Medical Director	79
W. Adrian Freeman Benefactions	79
Robinson Member of District of Columbia City Council	80
Japan Medical Association Hosts Seminar for Members of National Medical Association in Tokyo and Kyoto, Japan	81
<i>John B. Johnson, M.D.</i>	
Myocardial Sarcoidosis with Multiple Cardiac Arrhythmias	85
<i>Richard A. S. Williams, M.D.</i>	
A Pittsburgh Dilemma — The Black Physician	86
<i>Earl Belle Smith, M.D.</i>	
PROFESSIONAL NEWS	
Medical Education	87
Organizations	88
Personal	88
New Diplomates and College Fellows	89
NMA AUTHORS	89
NMA ACTIVITIES	
Statement of National Medical Association Representatives before the United States Senate Subcommittee on Appropriations	90
Awards for Scientific Exhibits	91
Smith Resigns as NMA Administrative Secretary	92
BOOK REVIEWS	94
CORRESPONDENCE	94