
Health Evaluation of the Dentist And His Wife: I. Historical Information

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Our reemphasis on the importance of the oral examination in the nation's program of multiphasic screening for the detection and prevention of chronic disease is being applied to the Annual ADA multiple screening program. A group of dentists and their wives have inaugurated a multiphasic screening program with Professors Cheraskin and Ringsdorf as consultants, who report here the "findings of a health questionnaire."

INTRODUCTION

The health evaluation program came into being in 1964 as a result of the belief that the dentist should be as acutely and definitely aware of his general and oral health as is the physician of his general health. . . . The dentist, who is entirely dependent upon himself for his income, cannot afford to be in poor health which might necessitate not only absence from the office but make it impossible for him to continue his optimum work load.

This statement¹ not only served as a justification for and prelude to the multiphasic screening program now being conducted annually at the national meeting of the American Dental Association but also for the development of a periodic multiple testing project of a group of dentists and their wives under the auspices of the Southern Academy of Clinical Nutrition.

This first in a series of reports has a twofold purpose. First, to analyze the results of a questionnaire completed by the members of the Southern Academy of Clinical Nutrition. Second, to compare these findings with the questionnaire results obtained at the multiphasic screening program conducted during the annual meeting of the American Dental Association.

METHOD OF INVESTIGATION

One hundred and fifty-two dentists and their wives participated in the survey. The age and sex distribution is summarized (Table 1). It is clear that the majority (54.6 per cent) are male and the age predominance (39.4 per cent) is in the fifth decade.

Each subject completed the Cornell Medical Index Health Questionnaire.² This is a self-administered questionnaire consisting of 195 questions to be answered negatively or affirmatively. The results may be viewed in three ways. First, specific questions relate to specific disease entities. For example, question #21 asks, "Do you suffer from asthma?". Second, the 195 questions are arranged by systems. Thus, section A

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TABLE 1.—AGE AND SEX DISTRIBUTION

<i>age groups</i>	<i>male group</i>	<i>female group</i>	<i>total group</i>
20-24	0 (0.0%)	2 (2.9%)	2 (1.3%)
25-29	3 (3.6%)	7 (10.1%)	10 (6.6%)
30-34	18 (21.7%)	19 (27.5%)	37 (24.3%)
35-39	19 (22.9%)	15 (21.7%)	34 (22.4%)
40-44	28 (33.7%)	16 (23.2%)	44 (28.9%)
45-49	9 (10.8%)	7 (10.1%)	16 (10.5%)
50-54	3 (3.6%)	3 (4.3%)	6 (3.9%)
55-59	2 (2.4%)	0 (0.0%)	2 (1.3%)
60-64	1 (1.2%)	0 (0.0%)	1 (0.7%)
total	83 (100.0%*)	69 (100.0%*)	152 (100.0%*)
minimum	28	23	23
maximum	64	54	64

*approximate

includes 9 questions relating to the eyes and ears; section C lists 13 cardiovascular questions. Third, the total number of positive replies may be regarded as a measure of what might be termed the "syndrome of sickness."

RESULTS

Table 2 summarizes the percentage frequency distribution of positive finding regarding specific problems. It will be noted that, for the entire group of 152 men and women, 39 per cent reported hemorrhoids. Further, Table 2 reveals that this is the most common problem in both sexes. However, the frequency is 10 per cent higher in the female group. Table 2 also discloses that the second most frequent finding for the entire group is overweight [21 per cent]. However, viewing the sexes independently, overweight is the second most common item [29 per cent] in the male. The second most frequently reported finding in the female is kidney and bladder disease [25 per cent]. It is fair to conclude that, within the limits of this relatively young and health-motivated group, a number of problems prevail as judged by the data obtained from a self-administered questionnaire.

It should be recalled that the questions are arranged by systems. Analysis of the data by this technique will be considered in a subsequent report.

Finally, some measure of the so-called syndrome of sickness may be derived by simply analyzing the frequency of positive replies. Table 3 permits such an analysis. Three points deserve consideration. First, the reported findings range from a low of one to a high of 53. Second, the percentage frequency decreases with an increase in the number of affirmative responses. Finally, females report more positive findings than males.

DISCUSSION

It would appear that, in this relatively young and health-motivated group of dental practitioners and wives, there is evidence of considerable recognized and, to a degree, remedial disease ranging from a high of 39 per cent with admitted hemorrhoids to a low of zero for venereal disease. It is generally agreed² that more than 25 overall positive replies suggests "significant" disease. On this basis, almost one in five [19 per cent] fall into this category.

TABLE 2.—PERCENTAGE FREQUENCY OF POSITIVE FINDINGS

disorder	male group	female group	total group
hemorrhoids	35	45	39
overweight	29	12	21
hay fever	20	17	19
major operation	14	23	18
hernia	16	*	16
kidney and bladder disease	6	25	14
scarlet fever	12	13	13
anemia	2	22	11
varicose veins	5	17	11
rheumatic fever	6	14	10
stomach ulcers	8	9	9
major injury	13	4	9
tumor-cancer	6	9	7
hypertension	7	4	6
malaria	10	1	6
heart disease	2	9	5
underweight	5	4	5
nervous breakdown	2	9	5
liver and gall bladder disease	5	3	4
mental hospitalization	5	3	4
asthma	5	1	3
diabetes	4	0	2
tuberculosis	1	0	1
epilepsy	0	1	1
goiter	0	3	1
veneral disease	0	0	0

*hernia question only asked of the male

As part of the 1964 and 1965 Health Evaluation Programs conducted during the annual conventions of the American Dental Association, a brief questionnaire was included. Table 4 allows a comparison of the age patterns for the participants in the two American Dental Association studies and the project of the Southern Academy of Clinical Nutrition. It is clear that the A. D. A. projects include more practitioners in the older age categories.

TABLE 3.—PERCENTAGE FREQUENCY DISTRIBUTION OF POSITIVE CMI RESPONSES

CMI groups	male group	female group	total group
0	0	0	0
1- 5	29	10	20
6-10	25	16	21
11-15	15	31	22
16-20	13	13	13
21-25	5	4	5
26-30	8	7	8
31-35	0	6	3
36-40	1	3	2
41-45	0	4	2
46-50	2	3	3
51-53	1	1	1
total	100%*	100%*	100%

*approximate

TABLE 4.—AGE DISTRIBUTION

age groups	A.D.A. 1964 study	A.D.A. 1965 study	Southern Academy of Clinical Nutrition
20-29	42 [3.4%]	74 [5.5%]	3 [3.6%]
30-39	316 [25.8%]	353 [26.1%]	37 [44.6%]
40-49	362 [29.5%]	412 [30.4%]	37 [44.6%]
50-59	255 [20.8%]	253 [18.7%]	5 [6.0%]
60-69	190 [15.5%]	209 [15.4%]	1 [1.2%]
70-79	46 [3.7%]	49 [3.6%]	0 [0.0%]
80+	4 [0.3%]	1 [0.1%]	0 [0.0%]
not determined	12 [1.0%]	3 [0.2%]	0 [0.0%]
total	1227 [100.0%]	1354 [100.0%]	83 [100.0%]

TABLE 5.—BASIC SCREENING
RECORD RESULTS

questions	percentage frequency of positive replies		
	A.D.A. 1964	A.D.A. 1965	Southern Academy of Clinical Nutrition
anemia	1.3	1.9	2.0
hypertension	7.3	7.7	7.0
stroke	0.2	0.6	*
coronary	3.5	3.5	*
heart disease	4.3	3.6	2.0
cataracts	0.6	0.7	*
glaucoma	0.6	0.8	*
diabetes	2.4	1.9	4.0
tuberculosis	1.4	1.1	1.0
other conditions	26.5	*	*
tumor	*	4.2	6.0
medications	17.5	*	*
normal hearing	74.2	*	*
glasses	74.7	74.3	*
physician con- sultation in past two years	72.9	69.4	*

*not reported

Table 5 allows a comparison, within the limits possible, of the questionnaire results. The frequency of anemia, hypertension, and tuberculosis are strikingly similar. The other disorders do not vary more than about 2 per cent.

SUMMARY

1. The questionnaire results of 152 individuals [83 dentists and 69 wives] are analyzed and the results compared with the questionnaire findings obtained during the 1964 and 1965 Health Evaluation Programs conducted during the annual meetings of the American Dental Association.

2. Where comparisons allow, the A. D. A. findings and those of the Southern Academy of Clinical Nutrition agree.

3. The yield from the Cornell Medical Index Health Questionnaire [utilized by the Southern Academy of Clinical Nutrition] is greater than that obtained in the study at the American Dental Association. This is likely due to the fact that the former form is more exhaustive.

4. A report to follow³ will analyze the blood glucose scores in the Southern Academy of Clinical Nutrition and compare the results with those obtained during the 1964 and 1965 Health Evaluation Programs.

REFERENCES

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