

ATHEROSCLEROTIC HEART DISEASE AMONG THE DRUZES IN ISRAEL

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25,000 Druzes live actually in Israel, working their land in small villages, relatively secluded from Western Civilization by their strict religious traditions which forbid them, among other things, to smoke and drink alcoholic beverages.

2120 Druzes aged 40 years and above living in the villages of the Western Galilee were examined clinically and electrocardiographically for signs of atherosclerotic heart disease.

1088 men and 1022 women, who comprise 51.8% of the population at risk in 15 villages (Table I).

Only prevalence rates could at the present time be evaluated.

Coronary Insufficiency: was determined by the ECG, STT changes, according to group of 3 of the Avia modification of the Minnesota criteria (1956)¹. Its prevalence was 2% in the men and 4% in the women, increasing with age in both sexes (being statistically significant in all age groups (Table II)).

Myocardial Infarction: was determined accordingly by groups 4,5,6, of the Avia modifying. Its prevalence was 3.5% in the men and 1.8% in the women, being significantly higher among the men in all their age groups (Table III).

Angina pectoris was not included because of lack of reliable criteria in this highly suggestible and primitive population.

In comparing these data with other published surveys (Reid in Britain 1967², Epstein in Tecumseh 1965³ and Medalie in Israel, 1967⁴, it becomes obvious that the prevalence of total coronary insufficiency is the lowest among the Druzes. It is 3-5 times lower among the men than the corresponding age groups of the selective Government employees studied by Medalie (Table IV).

However, the prevalence among the women was surprisingly higher in all age groups than that of Tecumseh (40-69 years), (Table V). No plausible explanation is suggested in view of the opposite ratio in the prevalence of myocardial infarction among them.

Nevertheless, the prevalence of the combined coronary insufficiency and myocardial infarction is found to be similar (5.41% in men versus 5.81% in women). (Table VI).

It seems that the Druzes tend to manifest their atherosclerosis as myocardial infarcts among the men and coronary insufficiency among the women. This conclusion should be regarded with much reservation, as the data were derived only from ECG tracings and it is well known that false negative cases may surpass 5%⁵. Moreover, no follow up and incidence studies among the Druzes are available which may enable one to calculate the fatality rates of atherosclerotic heart disease among this particular ethnic group.

In this study it was deemed important to evaluate the influence of some of the well known risk factors on the atherosclerotic heart patients who were revealed among the Druzes.

Arterial Hypertension

The prevalence of hypertension among this Druzes population was found to be 15.4%, which is similar to other Israeli population surveys but somewhat lower than most reports from U.S.A. (Doyle N.Y. excepted with 13.0% but their age was younger 35-55 yr. only). (Tables VII, VIII).

The hypertension was more prevalent among the women (18.2%) than among the men (12.8%), i.e. a ratio of 1.5/1.0.

The systolic blood pressure levels tend to increase linearly with the advancing age, in both sexes (except after 70 years).

The diastolic blood pressure mean levels increased with age only in the women (Fig. 1).

TABLE I
THE DRUZES POPULATION IN WESTERN GALILEE, ISRAEL, 1967, BY AGE AND SEX

Age (Yr)	Sex	The Total Population	Examined	
			No	%
40 - 49	Males	750	400	53.30
	Females	740	477	63.10
	Total	1,490	877	58.80
50 - 59	Males	600	270	45.00
	Females	500	301	60.20
	Total	1,100	571	52.00
60 - 69	Males	360	224	62.20
	Females	320	166	51.80
	Total	680	390	57.30
70 - 79	Males	300	155	51.70
	Females	280	93	37.50
	Total	580	248	42.80
80 <	Males	155	49	31.60
	Females	140	11	8.00
	Total	295	60	20.30
Total	Males	2,165	1,098	50.72
	Females	1,980	1,048	52.90
	Total	4,145	2,146	51.80
			2,120	

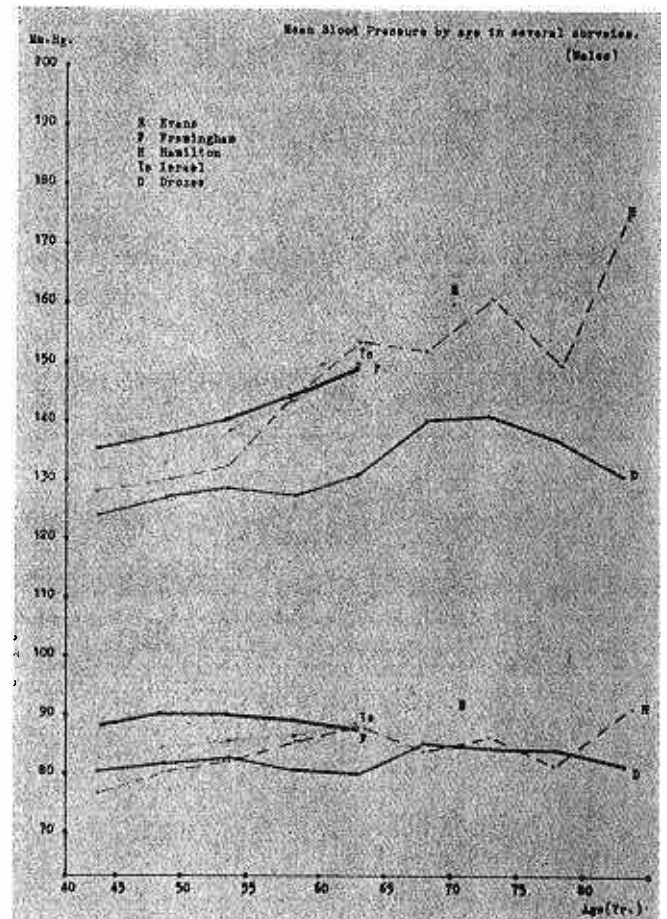


Fig. 1.

TABLE II
PREVALENCE OF CORONARY INSUFFICIENCY (PERCENT), BY AGE AND SEX
AMONG THE DRUZES POPULATION, ISRAEL 1967

Age (Yr)	Males			Females			All Population		Rate
	Popu- lation Examined	No. of Cases	Rate	Popu- lation Examined	No. of Cases	Rate	Popu- lation Examined	No. of Cases	
40 - 44	215	1	0.46	297	6	2.22	512	7	1.17
45 - 49	185	4	2.16	180	5	2.77	365	9	2.46
50 - 54	129	—	—	131	5	3.81	260	5	1.92
55 - 59	141	6	4.25	160	11	6.87	301	17	5.64
60 - 64	99	4	4.44	74	4	5.40	173	8	4.62
65 - 69	117	—	—	86	6	6.97	203	6	3.05
70 - 74	81	1	1.23	49	—	—	130	1	0.76
75 - 79	72	3	4.16	44	3	6.81	116	6	5.16
80 <	49	2	4.08	11	1	9.09	60	3	5.00
All ages	1,088	21	1.92	1,032	41	3.97	2,120	62	2.92

TABLE III
PREVALENCE OF MYOCARDIAL INFARCTION (PERCENT), BY AGE AND SEX
AMONG THE DRUZES POPULATION, ISRAEL, 1967

Age (Yr)	Males			Females			All Population		Rate
	Popu- lation Examined	No. of Cases	Rate	Popu- lation Examined	No. of Cases	Rate	Popu- lation Examined	No. of Cases	
40 - 44	215	2	0.92	297	1	0.34	512	3	0.58
45 - 49	185	2	1.08	180	2	1.11	365	4	1.09
50 - 54	129	2	1.55	131	1	1.52	260	3	1.15
55 - 59	141	3	2.13	160	3	1.87	301	6	1.99
60 - 64	99	3	3.03	74	3	4.05	173	6	3.47
65 - 69	117	6	5.12	86	5	5.80	203	11	5.41
70 - 74	81	9	11.11	49	2	4.09	130	11	8.46
75 - 79	72	4	5.55	44	—	—	116	4	3.49
80 <	49	7	14.28	11	2	18.18	60	9	15.00
All ages	1,088	38	3.49	1,032	19	1.84	2,120	57	2.68

TABLE IV
PREVALENCE OF Ci AND Mi IN SEVERAL STUDIES

The author	Place	Prevalence (Percent)							
		40 - 49		50 - 59		60 - 69		70 and over	
		Ci	Mi	Ci	Mi	Ci	Mi	Ci	Mi
Reid (1967)	G.B.	4.20	1.10	9.20	2.70	—	—	—	—
Epstein (1965)	Tecumseh	1.30	2.10	3.30	8.10	7.90	10.10	8.70	9.40
Medalie (1967)	Israel	7.00	0.80	10.30	3.10	10.70	6.30	—	—
Our Study (1967)	Druzes	1.25	1.00	2.22	1.85	1.85	4.16	2.92	9.90

TABLE V
PREVALENCE OF Ci AND Mi IN TWO SURVEYS

Age Groups (Yr)	Coronary insufficiency				Myocardial infarction			
	Males		Females		Males		Females	
	Druzes	Tecumseh	Druzes	Tecumseh	Druzes	Tecumseh	Druzes	Tecumseh
40 - 49	1.25	1.30	2.30	0.60	1.00	2.10	0.62	1.10
50 - 59	2.22	3.30	5.40	3.10	1.85	8.10	1.71	3.10
60 - 69	1.85	7.90	6.25	5.60	4.16	10.10	5.00	10.70
70 <	2.97	8.70	3.50	7.40	9.90	9.40	3.50	7.40

TABLE VI
PREVALENCE OF A.S.H.D. (CORONARY INSUFFICIENCY AND INFARCTION), PERCENT BY AGE AND SEX AMONG THE DRUZES POPULATION, ISRAEL 1967

Age	Males		CHD	Females		CHD	The all Population		CHD
	Myocardial Ischemia	Myocardial Infarct		Ischemia	Infarction		Ischemia	Infarction	
40 - 44	0.46	0.92	1.38	2.22	0.34	2.56	1.17	0.58	1.75
45 - 49	2.16	1.08	3.24	2.77	1.11	3.88	2.46	1.09	3.55
50 - 54	—	1.55	1.55	3.81	1.52	5.33	1.92	1.15	3.07
55 - 59	4.25	2.13	6.38	6.87	1.87	8.74	5.64	1.99	7.63
60 - 64	4.44	3.03	7.47	5.40	4.05	9.45	4.62	3.47	8.09
65 - 69	—	5.12	5.12	6.97	5.80	12.77	3.05	5.41	8.46
70 - 74	1.23	11.11	12.34	—	4.09	4.09	0.76	8.46	9.22
75 - 79	4.16	5.55	9.71	6.81	—	6.81	5.16	3.49	8.65
80 <	4.08	14.28	18.36	9.09	18.18	27.27	5.00	15.00	20.00
All ages	1.92	3.49	5.41	3.97	1.84	5.81	2.92	2.68	5.60

TABLE VII
PREVALENCE OF HYPERTENSION (PERCENT) BY AGE AND SEX AMONG THE DRUZES POPULATION, ISRAEL 1967

Age	Males		Rate	Females		Rate	All Population		Rate
	Population Examined	No. of Cases		Population Examined	No. of Cases		Population Examined	No. of Cases	
40 - 44	215	13	6.05	297	24	8.08	512	37	7.40
45 - 49	185	15	8.20	180	24	13.33	365	39	10.68
50 - 54	129	8	6.20	131	21	16.03	260	29	11.15
55 - 59	141	17	11.34	160	37	23.12	301	54	17.94
60 - 64	99	16	16.16	74	23	31.08	173	39	22.41
65 - 69	117	29	24.44	86	22	25.42	203	51	24.63
70 - 74	81	19	23.48	49	16	32.65	130	35	26.92
75 - 79	72	15	20.86	44	17	38.63	116	32	28.44
80 <	49	7	14.28	11	4	36.36	60	11	18.33
All ages	1,088	139	12.77	1,032	188	18.21	2,120	327	15.42

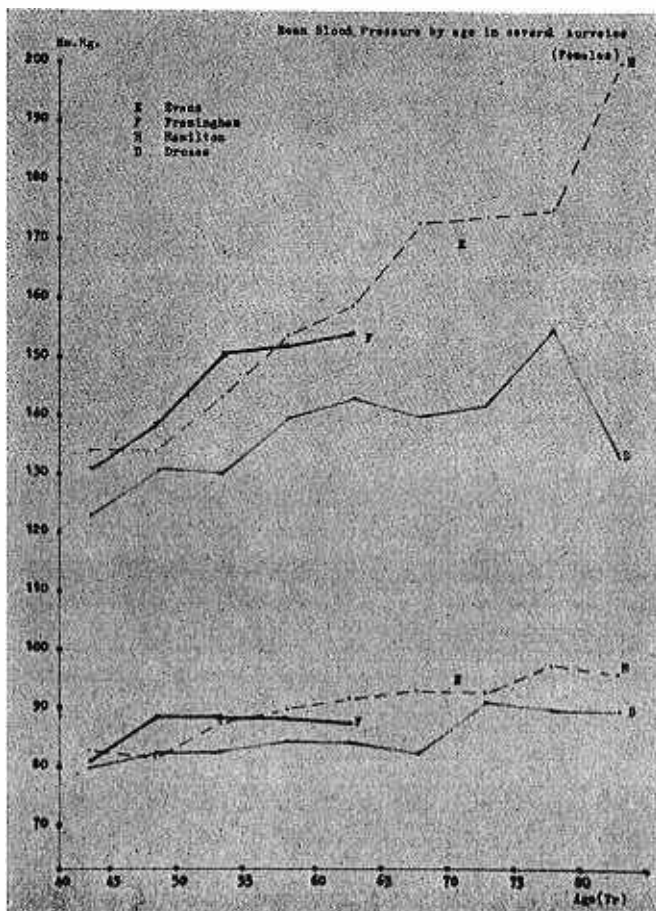


Fig. 2.

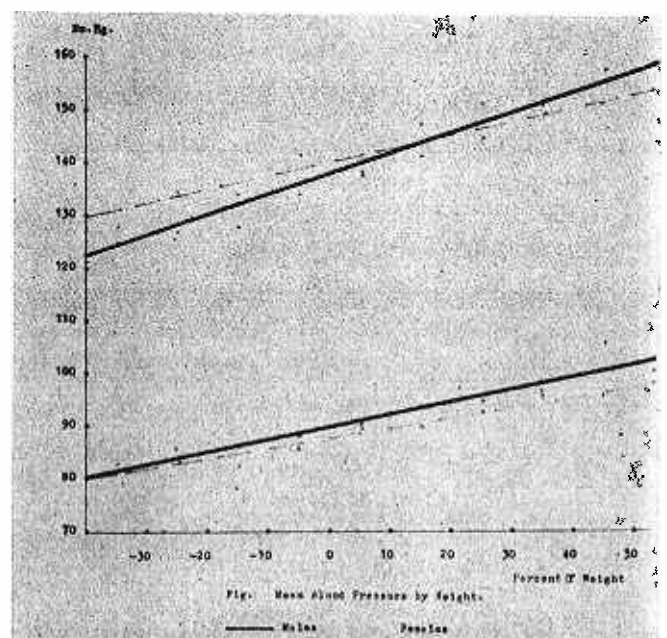


Fig. 3.

TABLE VIII
THE PREVALENCE OF HYPERTENSION IN SEVERAL SURVEYS

The Author	The population	Prevalence of Hypertension (%)
Doyle (1959)	Albany	13.00
Epstein (1965)	Tecumseh	20.00
Stamler (1960)	Chicago	19.40
Tiblin (1967)	Götburg	25.00
Wilber (1967)	Georgia	17.50
Medalie (1967)	Israel	15.00
Our Study (1967)	Druzes	15.42

TABLE X
PREVALENCE OF MYOCARDIAL INFARCTION (PERCENT) BY BLOOD PRESSURE STATE AND SEX

	Sex	Population Examined	No. of Cases	Rate
Normotensive	Males	949	29	3.05
	Females	844	12	1.42
	Total	1,793	41	2.23
Hypertensive Border line Cases "O"	Males	5	—	—
	Females	3	—	—
	Total	8	—	—
1st degree	Males	72	5	6.94
	Females	96	1	1.04
	Total	168	6	3.57
2nd degree	Males	30	2	6.66
	Females	56	2	3.57
	Total	86	4	4.65
3rd degree	Males	32	2	6.25
	Females	33	4	12.12
	Total	65	6	9.23
All the Hypertensive	Males	139	9	6.47
	Females	188	7	3.72
	Total	327	16	4.92
Hypertensive Ratio Normotensive	Males			2.1
	Females			2.6
	Total			2.2

Coronary insufficiency was 3.7 times more prevalent among the hypertensives in comparison to the normotensives.

Among the men this trend was even more conspicuous—6.2 timesfold, whereas in the women it was only 2.6 timesfold. (Table IX).

The higher the levels of the hypertension the higher was the prevalence of coronary insufficiency.

Myocardial infarction was found to be twice as prevalent among the hypertensives as compared to the normotensives. However, this difference was not statistically significant. (Table X).

This atherogenic role played by arterial hypertension was concordant with the conclusions of Epstein in 1967 who showed that 2/3 of middle aged coronary patients in the U.S.A. suffer from hypertension¹¹ Stamler in 1960⁸ and 1967¹² showed that even mild elevations of systolic blood pressure (from 130 to 160 mm Hg.) increase the incidence of atherosclerotic heart disease by 3 timesfold and in diastolic blood pressure elevation (from 80 to 95 mm Hg.) by 8 folds (from 10.4% to 82.1%) prevalence.

Kogan and the Framingham group in 1959¹³ found 4.51 folds increase with the rise of blood systolic pressure from 120 to 180 mm Hg.

TABLE IX
PREVALENCE OF CORONARY INSUFFICIENCY (PERCENT) BY BLOOD PRESSURE STATE AND SEX

	Sex	Population Examined	No. of Cases	Rate
Normotensive	Males	949	11	1.15
	Females	844	26	3.09
	Total	1,793	37	2.06
Hypertensive "O"	Males	5	2	
	Females	3	1	
	Total	8	3	
1st degree (160-170/95-105 mm Hy)	Males	72	3	4.16
	Females	96	6	6.24
	Total	168	9	5.35
2nd degree (171-195/106-115 mm Hy)	Males	30	1	3.33
	Females	56	4	7.15
	Total	86	5	5.82
3rd degree (196/116 mm Hy<)	Males	32	4	12.50
	Females	33	4	12.18
	Total	65	8	12.30
All the Hypertensive	Males	139	10	7.19
	Females	188	15	7.98
	Total	327	25	7.62
Hypertensive Ratio Normotensive	Males			6.2
	Females			2.6
	Total			3.7

TABLE XI
THE DISTRIBUTION OF THE WEIGHT GROUPS AMONG THE HYPERTENSIVES

	Over weight		Normal		Low-weight		Total	
	Cases	%	Cases	%	Cases	%	Cases	%
Males	62	44.6	70	50.4	7	5.0	139	100
Females	95	50.5	79	42.0	14	7.5	188	100
Total	157	48.0	149	45.8	21	6.5	327	100

Doyle in Albany, N.Y, in 1959⁶ found that atherosclerotic heart disease is 2.2 timesfold more prevalent in hypertensives.

Chapman in Los Angeles (1964)¹⁴ arrived at a similar ratio of 2.7 Alexandrow¹⁵ was reporting from Poland increased prevalence of 5.6 in women and 3.6 in men with hypertension.

The primitive populations outside the Western Societies with a shortened survival do not behave in such a pattern and hypertension has no apparent risk factor in the development of atherosclerotic heart disease¹².

It is noteworthy, that among the Druzes the prevalence of myocardial infarction, although increasing in hypertension, does not increase with the degree of the hypertension. Table X indicated it in relation to the grades I, II, III of hypertension where the prevalence is 6.94, 6.66 and 6.25% among the men. Among the women the prevalence of myocardial infarction increases with the severity of the hypertension grades—1.04 (I), 3.57% (II) and 12.12% in grade III.

This unexpected finding among the men, which is contrary to the general trend which was found in all Druzes with coronary insufficiency (Table IX), is difficult to explain. It can be presumed that the men with myocardial infarction and severe hypertension may have a greater fatality than the women by working too much outside their homes.

A word of caution should be said about the above mentioned prevalence rates. They probably manifest "max-

TABLE XII
THE PREVALENCE OF HYPERTENSION BY
WEIGHT AND SEX

Weight Group	Sex	Examined	No. of Cases	Rate
Low Weight (-9%) and less	Males	174	7	4.03
	Females	128	14	11.00
	Total	302	21	6.95
Normal Weight (-10% - + 19%)	Males	694	70	10.10
	Females	526	79	15.00
	Total	1,220	149	12.20
Over Weight (+ 20% and over)	Males	220	62	28.20
	Females	378	95	25.10
	Total	598	157	26.30

TABLE XV
THE PREVALENCE OF HYPERTENSION BY
CIGARETTE SMOKING AMONG THE DRUZES
MALES POPULATION

	Examined	No. of Cases	Rate	Ratio
Non Smokers	724	114	15.70	2.85
Present Smokers	254	19	7.45	1.36
Past Smokers	110	6	5.45	1.00
P < 0.001				

TABLE XIII
THE PREVALENCE OF CORONARY INSUFFICIENCY MYOCARDIAL INFARCTION
AND A.S.H.D. BY WEIGHT GROUPS AND SEX

Weight Group	Sex	Examined	Coronary Insufficiency		Myocardial Infarct		A.S.H.D.	
			No. of Cases	Rate	No. of Cases	Rate	No. of Cases	Rate
Low weight	Males	174	3	1.73	6	3.44	9	5.17
	Females	128	2	1.55	2	1.56	4	3.12
	Total	302	5	1.65	8	2.31	13	4.30
Normal weight	Males	694	8	1.29	26	3.74	34	4.89
	Females	526	24	4.56	12	2.47	36	6.73
	Total	1,220	32	2.62	38	3.11	70	5.73
Over weight	Males	220	10	4.54	6	2.72	16	7.27
	Females	378	15	4.00	5	1.32	20	5.29
	Total	598	25	4.19	11	1.83	36	6.32

TABLE XIV
THE PREVALENCE OF CORONARY INSUFFICIENCY MYOCARDIAL
INFARCTION AND A.S.H.D. BY CIGARETTE SMOKING AMONG
THE DRUZES MALE POPULATION

	Examined	Coronary Insufficiency		Myocardial Infarction		C.H.D.	
		No. of Cases	Rate	No. of Cases	Rate	No. of Cases	Rate
Non Smokers	724	16	2.29	22	3.04	38	5.11
Past Smokers	110	1	0.91	8	7.27	9	8.18
Smokers 1-10 Cigarettes	30	1	3.33	2	6.66	3	10.00
Smokers 11-20 Cig.	106	2	1.88	3	2.83	5	4.71
Smokers 21 Cigarettes	118	1	1.84	3	2.54	4	3.39
All Smokers	254	4	1.57	8	3.15	12	4.72

imum" figures. Most Druzes examined in this survey in their villages represented the more diseased section of the Druze population at risk. The healthier section was not present in the survey probably because of lack of interest or by the fact that they were on work outside and sometimes far away from their homes. It may seem theoretically sound to estimate the real prevalence by calculating it from the total figures of the population which will give a minimal value, which obviously would reduce by half the already very low prevalent rates of the Druzes, relative to the cited series.

OVERWEIGHT

28% of the examined Druzes were considered overweight, i.e. defined by more than 20% above their expected weight, 20.2% among the men and 36.6% among the women.

A linear increase in the levels of blood pressure was related to the rise in body weight, both in systolic and diastolic levels (Fig. 3).

This trend between blood pressure and obesity was reported in the Western Literature (Larimore 1923¹⁶, Marks¹⁷, Huber 1927¹⁸ as well as in Tecumseh³, Framingham¹⁹ and Israel⁴).

Whyte²⁰ in Australia (1959) showed similar trend, but this was not reported in East Africa by Shaper in the primitive tribes in Kenya²¹. Padmavatie in India (1959)²² found this relationship to exist mostly among the groups with the higher socioeconomic status. He reported a rise of 6.7 mm Hg. systolic and 4.5 mmHg. diastolic blood pressure levels with each rise of 10 kg. above the normal weight. Among the Druzes this trend was found to be 3.4 mmHg. systolic and 2.2 mmHg. diastolic with each 10% increment above normal weight.

It is clear from this literature that overweight is playing a risk factor in the development of hypertension.

Chiang and his associates in China²³ reported in 1969 that 1/3 to 1/5 of hypertensive adults suffer from obesity, which corresponds the 1/3 of the similar group in Tecumseh.³

The Druzes manifest the same trend. (Table XI) with a ratio of 1:1.7:3.7 in the under, normal and overweight group with 48% of the hypertensives overweight (Table XII).

Coronary insufficiency was more prevalent among the overweight group of the Druzes 3 timesfold, as compared to the normal weight males.

However, in the Druze women the prevalence was not significantly different in the overweight group in comparison to the normotensive group (Table XIII).

Myocardial infarction was found to be prevalent in a similar rate among the different groups, with surprisingly the lowest prevalence among the overweight Druzes (not statistically different) both males and females (Table XIII). This is contrary to the expectation where in the overweight groups another atherogenic risk factor—the hypertension—is supposed to display its deleterious effect on the atherogenic process. Anyway, similar unexpected data were reported from the Framingham study by Dawber (1957)²⁴.

Yater *et al* (1948)²⁵ and Garn²⁶ and associates in 1951 reported similar results, as well as Keys in 1963²⁷.

It is possible to explain this finding by the increased mortality of the myocardial infarction among the obese, as Keys reported by comparing the fatality of atherogenic heart disease among the obese (4.23/1000 in the U.S.A. in 1949) versus that among the less obese (1.87/1000 in England in 1949)²⁸.

It is certain that many other risk factors play their role in this complicated atherogenic process (Lipoproteins, Cholesterol, Genetics, etc. etc.) which may explain the relative low fatality from myocardial infarction in Italy (1.37/1000) in spite of notorious obesity of the Italians²⁸.

By calculating the total atherosclerotic heart disease (myocardial infarction and coronary insufficiency) prevalence rates in relation to obesity no statistically significant differences could be found. (Table XIII)

The prevalence ratio in the underweight, normal and overweight groups were 1:1.33:1.46.

This finding stands in contradiction to the corresponding findings of the positive risk factor in atherosclerotic heart disease of the Framingham¹⁹ and Albany²⁹ surveys.

SMOKING

Most reports of the literature tend to stress the deleterious effects of the smoking on the development and fatality of the atherosclerotic heart disease (Doll 1964³⁰, Hammond—1954, 1958 and 1964³¹⁻³⁴, Doyle in Albany 1959⁶ and Kogan in Framingham in 1959¹³ Brett—1968³⁵ and Bueschiley 1968²⁶). They indicate that the fatality is 3 folds higher in the smokers as compared to the non smokers. The prevalence of myocardial infarction was found by them to be 2-3 folds higher among the smokers in comparison to the non smokers. Russek in 1965³⁷ showed a 2 fold higher prevalence among the smokers in North America.

It was expected therefore to find a similar trend among the smoking Druzes, who are known to be more exposed to western mode of life than the non smoking Druzes (who are usually more religious).

The data of this survey show conclusively that no such a difference was demonstrated among the Druzes men. The Druze women do not smoke as this is not tolerated traditionally.

It was found that coronary insufficiency was more prevalent among the non-smokers, but this difference was not statistically significant. Myocardial Infarction was found

to be more prevalent among the past smokers (2 folds more) but equally prevalent (3%) among the smoking and the non smoking Druzes males. (Tables XIV). Atherogenic heart disease (Coronary insufficiency and myocardial infarction together) was found to be equally prevalent among the smokers and non-smokers (5%) (Table XIV). It is true that most smokers are younger than the non smokers more traditional Druzes, but the numbers are too small for statistical conclusion and it might be argued that the factor of smoking is identical to young age where atherosclerotic heart disease is rare of course.

This trend was also valid for the presence of hypertension, which was more prevalent among the non-smokers (15.7%) than among the smoking Druzes (7.45%)—Table XV.

This lack of risk factor of smoking in the Hypertensive and atherogenic process is not unique in the literature and is mentioned by Kannel—1961 Bronte Stewart (1961)³⁹, Dawber 1967⁴⁰ and Fishberg⁴¹, Karvonen⁴² and Jenkins.⁴³

The recent International combined study on Smoking, indicated that smoking was a risk factor only in the American group but not in the other groups (Keys, 1970)⁴⁴, Seltzer (1972)⁴⁵ casts grave doubts about the risk value of smoking in atherosclerosis.

Thus, it seems obvious that no conclusions should be drawn from this prevalence survey among the Druzes and only the prospective incidence data may contribute somehow to elucidate these results in this particularly interesting ethnic group.

SUMMARY

A prevalence survey among the Druzes in Israel showed very low rates of Coronary Insufficiency and Myocardial Infarction, which are among the lowest reported in the literature (2.92-1.48% for coronary insufficiency and 2.68-1.35% for Myocardial infarction, corresponding the maximum and minimum values).

The prevalence of Coronary Insufficiency among the women was higher (3X) than the men, but the prevalence of Myocardial Infarction is reversed, being almost twice as high among the men.

This trend is present somewhat in the Tecumseh study. The prevalence of Coronary Insufficiency is higher among the Druzes women, but the prevalence of Myocardial Infarction is much lower among the men and women as well as Coronary Insufficiency among the men in comparison to Tecumseh.

Hypertension was found to be at approximately the same prevalence reported in the literature (15.42%) but the calculated minimal prevalence is very low 7.63%, with a ratio of 1.5:1 between women and men. Coronary Insufficiency was 3.5 times fold more prevalent in hypertensives than among normotensives, being especially conspicuous among the men (7 timesfold) and among the women (2.5 timesfold).

No statistically significant prevalence rates were found for Myocardial Infarction in hypertension (2 fold). The degree of Hypertension correlates significantly with the prevalence of Myocardial infarction among the women, but for some reasons (mortality) not at all among the hypertensive men.

Overweight is related to coronary insufficiency which was 3 timesfold more prevalent in the men, but not in the women. However, the prevalence of Myocardial Infarction was not found to be related to overweight in both sexes—perhaps due to increased mortality in this highly combined risk factors as overweight and hypertension. Contrary to expectation, smoking was not found to influence the prevalent rates of atherosclerotic heart disease. Prospective study may solve some of these intriguing epidemiological problems among the Druzes.

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