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ABSTRACT

Focusing on heart disease and cancer, the study compared the preventive health education needs of farm and nonfarm rural adults. During July and August 1975, face-to-face interviews were conducted with 57 men and 161 women living in Armstrong and Butler Counties, Pennsylvania. The sample included 119 commercial farm households and 99 rural nonfarm households. No significant differences were found between farm and nonfarm adults on preventive health attitudes, beliefs, knowledge or behaviors (e.g., susceptibility, seriousness, knowledge of cancer warning signals, dietary habits). In the case of perceived susceptibility to selected diseases, knowledge of cancer warning signals, and blood pressure checking, males consistently perceived themselves as being less susceptible to the selected illnesses than did females. Further, men's lower recall of the cancer warning signals (70% able to recall less than two) suggested the need for building a greater knowledge among men of the physiological changes related most closely to cancers having the highest 5-year survival rates. The general orientation of the adults interviewed toward health maintenance was overwhelmingly positive. Approximately 80% engaged in regular activities to maintain their health. Three practices mentioned by those actively seeking to maintain their health (diet, exercise, rest) cost very little. This may suggest that educational programs should make an effort to involve individuals at least initially in activities having a low cost. (Author/NQ)

Preventive Health Education Needs Among Rural Farm and Rural Nonfarm Adults

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Abstract

This paper addresses the question of preventive health education needs among rural clientele. Attention is focused on two specific population categories; rural farm and rural nonfarm adults. The specific preventive health concern is with two major causes of mortality: heart disease and cancer. The research design used allows a comparison of preventive health education needs of farm and nonfarm rural adults and the description of high priority substantive areas for educational program development.

No significant differences were found to be present between farm and nonfarm adult respondents on preventive health attitudes, beliefs, knowledge or behaviors (e.g., susceptibility, seriousness, knowledge of cancer warning signals, dietary habits). In the case of perceived susceptibility to selected diseases, knowledge of cancer warning signals, and blood pressure checking statistically different response profiles were present for men and women.

Males consistently perceive themselves as being less susceptible to the selected illnesses than do females. Further, men's lower recall of the cancer warning signals (70 percent able to recall less than two) suggests the need for building a greater knowledge among men of the physiological changes related most closely to cancers having the highest five-year survival rates.

The general orientation of the adults interviewed toward health maintenance was overwhelmingly positive.

Approximately 80 percent engaged in regular activities aimed at maintaining their health. Three practices mentioned by those who actively seek to maintain their health (diet, exercise, rest) have in common the fact that they cost very little. This may suggest that educational programs should make an effort to involve individuals at least initially in activities having a low cost. At the same time, the fact that many persons are already sensitive to the relationship between their behavior and their health is a positive factor upon which educational efforts may be based.

Purpose

Preparation of sound informal educational programs rests on the availability of reliable, relevant and up-to-date data. Such data bases include marketing and consumer trends, technological advances based on new knowledge, estimates of educational needs among the clientele and societal conditions growing out of legislative and regulatory action regarding issues such as energy, poverty, health and environment (Oliver, 1972).

This paper addresses the question of educational needs among rural clientele in the subject area of preventive health education. Attention is focused on two specific population categories; rural farm and rural nonfarm adults. The specific preventive health concern is with two major causes of mortality in the United States, heart disease and cancer.

First, the paper describes the extent of concern with chronic illnesses in the United States and the reason for attention today on preventive approaches to them rather than depending solely on acute care. Second, a brief review is made of the methods used in this research. Third, the findings of this research are described and, finally, implications of these findings for the development of informal educational programs are discussed.

Background of the problem

Americans spend a great deal of money each year in efforts to keep healthy. The total bill for health care in the United States in 1975 has been estimated at 118.5 billions of dollars. This is an increase from 1965 when only 38.9 billions was spent. In relation to the gross national product, spending for health care has increased from 4.6 percent in 1950 to 5.9 percent in 1965 to an estimated 8.3 percent in 1975 (Kristein, et al.,1977). Somers (1976) has estimated our spending on health at $607 per person in the period from July 1, 1975 to June 30, 1976. On top of this one must keep in mind the federal government's health research budget which for 1972 was in excess of 1.8 billion (Cooper, 1973). Thus it is not an overstatement to say that health is a dominant concern in America.

For those who prefer more daily kinds of evidence of our preoccupation with health, an informal survey of periodic literature sold at newsstands and supermarkets is appropriate. With the exception of magazines aimed solely at male audiences, every periodical contained one or more articles on health; many of them dealing with preventive health practices.

Even though health in general is viewed as important, all health problems do not have equal importance over time. Through scientific discoveries and technological advances many causes of illness and death have been substantially reduced. One of the most dramatic instances

of this in recent times is the use of vaccine for paralytic poliomyelitus prevention. The 1958 peak of 6,031 cases in the United States may be compared with only 40 cases reported a decade later, (Langmuir, 1959; Hopkins, 1969). Similarly, the occurrence or seriousness of many other illnesses of an acute nature have been reduced.

Increasing attention is being given to illnesses of a chronic character such as cancer and coronary heart disease. The extent of limitation as a result of chronic illness was estimated by the Public Health Service for 1972. At that time, ". . . 12.7 percent of the population reported some degree of limitation as a result of chronic conditions, a proportion very similar to that in previous years. Three-quarters of those with a limitation were limited in their major activity" (Public Health Service, 1973).

Further, using arteriosclerosis and hypertensive diseases as a means of estimating the economic costs of heart dieases, a 1972 task force report estimates the direct annual cost of these illnesses at $4.3 billion, (National Institutes of Health, 1972:138). Kristein and others estimate the direct and indirect costs of hypertension alone to be $16 billions annually (1977:459). Regardless of whose estimates are accepted as being most reliable, the picture is clear. The prevention of chronic illnesses is of importance in our society.

The particular interest in this research on comparing preventive health education needs of rural farm and rural nonfarm adults grew out of an earlier analysis of Pennsylvania data. Using a probability sample of all noninstitutionalized adults from a rural county, preventive health education needs data were collected in 1974. A comparison of village, open-country nonfarm and farm populations from this sample revealed that statistically and substantively significant differences existed among these three population categories regarding health education needs. Distance of open-country homes from the community center was not recorded, however, in the 1974 survey. Unresolved with these data, therefore, was the question of whether the difference between the farm and nonfarm categories was associated with occupational or locational factors. As a first step in answering this question a comparative study was designed in 1975 that would allow occupation to vary but hold relatively constant place of residence (or, in practical field terms, distance from the village center).

Whether or not such differences exist between these two educational audiences is a significant issue for the practicing health educator. If differences are present between farm and nonfarm adults, resources will have to be allocated to program planning and materials preparation for two audiences. In contrast, if the two audiences are nearly equal in preventive health education needs more resources may be devoted to programming and fewer to planning and preparation.

Source of Data for this Analysis

During the months of July and August, 1975, 218 persons (57 men and 161 women) living in Armstrong and Butler counties, Pennsylvania were interviewed. A probability sample of farm households was selected from the universe of all commercial farms in these two counties and one adult from each farm household was interviewed. An adult from a matching rural nonfarm residence located as close to the sampled farm household as possible was also interviewed. (1). The occupational mix of farm and non-farm families and the population density were sufficiently favorable to permit relatively small distances (<.25 miles) between the farm and non-farm residences. The 218 households thus sampled represented 13 percent of the commercial farm households (N=119) and .08 percent of the rural nonfarm households (N=99) in these counties. The age and sex characteristics of those interviewed were compared to the age and sex characteristics of the rural population as reported in the 1970 population census. The sample sex ratio was found to be heavily over-representative of females. Analyses were performed for males and females separately to determine where sex-related differences in needs occurred. Data are reported separately by sex of respondent for those variables having significantly different response patterns for males and females. The sample population was slighly older than the total rural population due to underrepresentation in the age category of less than 25 years of age. When interpreting these results, therefore, these facts should be kept in mind.

During a face-to-face interview setting, each respondent was asked 167 questions; all of the data reported here were drawn from that data set. The data were summarized using the Statistical Package for Social Sciences system [SPSS](Nie, 1974).

Findings

Each person rated five selected diseases regarding their seriousness and susceptibility. Seriousness was defined in terms of the respondent's personal situation. If a person perceived that major changes would be required if they had a disease, this perception was defined as most serious. In contrast, when no changes in life style were

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(1) For detailed sampling data see S.M. Leadley and A.A. Taranto, 1975a and 1975b.

associated with a disease, this perception was defined as least serious. Cancer was perceived to be the most serious of all five illnesses with heart disease ranking second (Table 1). The contrast between the perceived seriousness of these two leading causes of mortality (rows 1 and 2) and colds (row 5) suggests that individuals' judgments of seriousness are reliable. Data are not reported separately for farm and nonfarm populations in Table 1 because no statistically significant differences were present between the two respondent categories (using $p<.1$ as a criterion value to assess statistical signficance).

TABLE ONE GOES ABOUT HERE

Further, the high percentage of respondents judging cancer and heart disease as serious enough to require changes in their present life (79 and 81 percent respectively) means that educational efforts may be directed at other dimensions of their prevention. People already believe these are serious; now, what should they do about them?

The individual's judgment of susceptibility was made on the basis of their own experience, knowledge, and personal observations.

Perceived susceptibility to selected diseases was related to sex of respondent but not to the farm/nonfarm characteristic (Tables 2 and 3). A comparison of the data in these two tables reveals, in general, that males do not perceive themselves as falling victim to the selected diseases as frequently as do females. For all five diseases the percent of men perceiving themselves as very unlikely to have the disease is substantially lower than the similar figure for women. diseases as frequently as do females. No similar relationship was found to be present between the occupational categories of farm and nonfarm and these data are not presented in tabular form.

It is significant to note that the perceived susceptibility rate for cancer for men is substantally lower than actual incidence (16 percent responding very likely or likely compared to 25 percent estimated occurrence) while women have slightly over-estimated their susceptibility (32 percent responding very likely or likely compared to 25 percent estimated occurrence) (American Cancer Society, 3). (2)

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(2) While sex-specific morbidity data were not readily available, two other kinds of sex-specific data are cited here to demonstrate the lack of congruence of perceptions and incidence. The estimated number of new cases for cancer for 1977 were 347,000 for males and 343,000 for females; a

TABLES 2 AND 3 GO ABOUT HERE

One's motivation to adopt recommended health practices is not based solely on perceptions of seriousness. Persons may ask, "But, what are my chances of getting sick with this disease?" For example, the data in Table 2 show that 34 percent of the male respondents perceive themselves as either likely or very likely to have heart disease. For males, the greater perceived threat of heart disease (34 percent) compared to cancer (16 percent) may suggest a greater receptivity to information related to the former disease than the latter. Nearly the reverse is true for females. In neither case does the perceived threat of the disease (considering both seriousness and susceptibility) appear to be sufficiently high to motivate large numbers of individuals to seek out preventive health information at public meetings or from their doctors.

Early Detection and Knowledge About Cancer

Research on rates of occurrence of cancer and subsequent mortality has shown that "more people die of cancer which could have been cured or prevented than of cancer for which a cure has yet to be found" (American Cancer Society, 4). Thus, it is important to know how useful persons feel early detection is in cancer treatment. Seventy-three percent of those responding strongly agreed that some types of cancer detected in the early stages can be cured (Table 4). Only three persons out of 215 expressing an opinion disagreed.

TABLE 4 GOES ABOUT HERE

In contrast to the importance of early detection, however, were individuals' knowledge of the warning signals of cancer as suggested by the American Cancer Society (Table 5). On the basis of immediate recall, 70 percent of the males interviewed could name less than two of the seven signs. In contrast, 70 percent of the females could name

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nearly equal rate. Further, age-adjusted death rates (per 100,000) for 1972-1974 were 159.7 for males and 107.7 for females; these data are at greater variance with the perceived susceptibility data than the average incidence rate (25 percent) (American Cancer Society, 10 and 14 respectively).

three or more of the same warning signals. As in earlier instances, there were no significant differences among either males or females on the basis of occupation (farm vs. nonfarm); these data are available from the authors on request. On one hand, educators may be encouraged by the high agreement over the value of early detection. On the other hand, current knowledge among this population seems sufficiently low to suggest a continuing need for programs to acquaint persons with the warning signals (especially males).

TABLE 5 GOES ABOUT HERE

Of specific interest may be signals associated with high rates of occurrence and cure. The estimated number of new cases of cancer per year for the breast and uterus sites are 40 percent of all cases. And, five-year cancer survival rates for these sites are 84 and 82 percent respectively (American Cancer Society, 9). The data in Table 6 show that the warning signals associated with these sites are known most commonly (rows 1 and 2) by female respondents.

Again, while there were signficant differences between respondents on the basis of sex, there were no significant differences on the basis of occupation (farm vs. nonfarm).

TABLE 6 GOES ABOUT HERE

Given that cancer is the leading cause of death among women 30-54 (American Cancer Society,6), this study also asked women about a Pap test.(3) Three out of five of the women in this population (N=158) reported having a Pap test in the past year. This rate is very similar to the rate found in a national sample of women aged 17 and over, 61 percent of whom had a Pap test in the year prior to being interviewed(Vital Statistics, 1975).

Lack of participation in preventive health practices may be due to numerous factors. Results of other similar surveys in rural areas by these authors (See Rural Health Staff Papers 3-8) suggest that financial, transportation and service accessibility factors play a less important role in non-participation than do knowledge and motivation. Knowledge of the practice and the need for it as well as a motivational factor are the two most frequently

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(3) Pap test here refers to the Papanicolaou test for cervical cancer.

cited barriers to participation. Regardless of the fact that cancer is perceived to be serious and early detection is seen as effective, a large portion (42 percent) of women in this study population did not place the Pap test as a health maintenance behavior high enough among their personal priorities to go and have a Pap smear made during the past twelve months. Since it has been demonstrated that for selected situations approximately 10 percent of health behavior is related to health knowledge (Dowell, 1969), educational programs may have to emphasize motivation as much or more than knowledge.

Heart Disease and High Blood Pressure

Heart disease is the leading cause of death in the United States and Pennsylvania.(4) It is not surprising to find, therefore, among these rural residents interviewed for this study, a high level of concern about this disease. In terms of susceptibility, thirty-four percent of the males felt they were likely or very likely to eventually get heart disease (Table 2). Its seriousness as an illness is reflected in that 81 percent saw it as serious or very serious (Table 1).

The frequency of occurrence of heart disease is associated with what are called risk factors such as high blood pressure, overweight and lack of regular physical exercise. Those persons reporting normal blood pressure were asked about having their blood pressure checked (Table 7). While everyone reported having their blood pressure checked at some time in the past, a lower percentage, 80 percent for men and 88 percent for women, reported doing so in the past 18 months.

This variable, like the others, was examined for a difference among farm and nonfarm respondents and no signficant difference was found.

TABLE 7 GOES ABOUT HERE

Ninety-eight percent of the male respondents reported having their blood pressure checked while obtaining either acute or preventive health care from medical professionals (Table 8). While women were significantly

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(4) While the heart disease mortality rate in Pennsylvania in 1974 was 425 per 100,000 mid-year population, the cancer (malignant neoplasms) mortality rate for the same year was 198. By comparison, the mortality rates for cerebrovascular disease and accidents were 101 and 40 respectively (Natality and Mortality Statistics, 1974:6). For further comparison see Jurkat (1974).

more likely to have had their blood pressure checked at a screening site than men, distributions of this variable were similar for farm and nonfarm respondents.

Exactly what strategy would be most effective in detecting high blood pressure is not clear from these data. It is clear that rural men who do have their blood pressure checked do not do so at screening programs. Since 79 percent of all persons interviewed had visited a physician in the past year for either acute or preventive health reasons and more than 90 percent of the respondents had their blood pressure reading taken during an acute or preventive care visit, it does not seem reasonable to try to increase the blood pressure checking rate by encouraging a more uniform application of this practice at this location. Perhaps it is not feasible to try to reach the small minority who choose not to have their blood pressure checked on an annual or biennial basis.

TABLE 8 GOES ABOUT HERE

Nearly all persons interviewed (91 percent) felt that high blood pressure can be reduced and were aware of one or more ways in which this could be accomplished. One may speculate, nevertheless, that the actual treatment regimen -- especially when it includes daily medication -- may involve considerable problems. Instituting a practice to the level of a habit clearly depends on more than knowing that the medication, once taken, has the desired effect.(5)

Heart Disease and Overweight

While this study did not include physiological measures of overweight or obesity, it did inquire into practices and feelings about diet and weight control. About two out of five of these men and women reported never or only occasionally consciously being careful about how much or what foods they eat (Table 9).

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(5) While it is not within the scope of this research report to deal with adherence behavior it is an area receiving increasing attention in the past few years. Of special interest is the work sponsored by the National High Blood Pressure Education Research Program at the Stanford Research Institute (National Heart, Lung and Blood Institute, 1976:4). This work, under the direction of Dr. Paul Insel, will identify characteristics of hypertensives that predict adherence behavior and assess the relative effectiveness of alternative intervention strategies in reducing nonadherence.

TABLE 9 GOES ABOUT HERE

In addition, respondents evaluated the degree of difficulty they had in regulating their diet (Table 10). Thirteen percent of the respondents felt that dietary regulation was somewhat or extremely difficult. No significant differences existed among respondents on the basis of either sex or farm/nonfarm status. It should be noted that these values may be artificially depressed below their true values due to cultural forces active in a face-to-face interview situation.

TABLE 10 GOES ABOUT HERE

The results of a screening program for detecting health problems among adults living in rural areas of Pennsylvania show that obesity is the most important problem among persons screened (Pa. Dept. Agric.,6). The facts obtained by the present study suggest two conclusions. First, if the incidence of obesity among these men and women is at all similar to the population in the health problems screening program, there surely is an excessive degree of risk of heart disease being borne by the respondents. Second, while a sizeable majority of respondents may already be following recommended dietary practices to attain or maintain desirable weight levels, a significant minority of persons appear to feel their diet is not of concern to them.

One possible conclusion that may be drawn from these findings is that the relationship between heart disease and obesity is not as well known or understood as that between high blood pressure and heart disease.

Other Regular Health Maintenance Practices

The persons interviewed were also asked if there were things they did regularly which they felt helped them improve or maintain their health. Two out of ten respondents replied "No" to this question. Of those replying "Yes" (167 persons), exercise and dieting were each mentioned by over one-half of the respondents (Table 11). On one hand, the general orientation of the sample is very positive about regular activities designed to maintain their health. On the other hand, a sizable portion of the sample either does not practice preventive health maintenance or does not recognize things they do regularly as conducive to health maintenance.

TABLE 11 GOES ABOUT HERE

Programs to increase persons' awareness of the need for regular health maintenance practices could emphasize the practices found to be most commonly already incorporated into rural residents life styles; namely, (1) proper exercise, (2) diets that reduce the occurrance of overweight, and (3) adequate rest.

Implications (6)

The question that stimulated the design for the present research was whether or not adults residing in similar locations but differing in their occupations (farm vs. nonfarm) would have different preventive health education needs. For those characteristics reported here there were no statistically significant differences ($p<.1$) between farm and nonfarm respondents' replies. The validity of this single observation needs to be examined in other settings before it can be accepted as a reliable guide for program development. In the meantime, however, the authors conclude that health educators need not devote special energies in the development of separate preventive health education programs for these two rural audiences.

The observed differences between males and females may, however, merit attention. While both sexes recognize the seriousness of the high mortality chronic diseases, males consistently perceive themselves as being less susceptible to the selected illnesses than females. When compared to actual rates of incidence with cancer, men appear to underestimate their susceptibility while women seem to overestimate this value.

In the earlier discussion on cancer the low recall rate among men of the cancer warning signals was pointed out. Also observed was (a) their perception of low susceptibility and (b) their overwhelming ascription to a nonfatalistic orientation toward early detection and cure. These data suggest the need for and potential effectiveness

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(6) The theoretical model upon which the implications are based is described by Hazen-Osgood (1975). It depends heavily upon the work of S.V. Kasl and S. Cobb ("Health Behavior, Illness Behavior, and Sick Role Behavior," Archives of Environmental Health 12:246-266) and I.M. Rosenstock ("Historical Origins of the Health Belief Model," Health Education Monographs 2:328-335 and "The Health Belief Model and Preventive Health Behavior," Health Education Monographs 2:354-386).

of an educational program aimed at a realistic assessment of one's chances of having the illness and learning selected observable physiological changes related most closely with cancers having the highest five-year survival rates.

For females, the problems of early detection are related to observation. While the breast self-examination is to be performed by the woman, the detection of uterine cancer requires professional services. When as many as 40 percent of the women do not avail themselves of these services on an annual basis, a clear avenue for educational programming seems apparent.

Hypertension detection as a means of reducing heart disease seems to be receiving sufficient attention to achieve high rates of blood pressure checking among the sampled population. Further, knowledge of control therapy seems to be widespread. In contrast, the understanding of the relationship between heart disease risk and obesity does not appear to be high enough to affect dietary habits of a substantial minority of the rural population in this sample. The difficulty level in dietary control reported is low and suggests that the major factor in reduction of obesity probably may not be difficulty in dietary control but rather might be the initial perception of the need for weight control as a means of health maintenance.

The general orientation of the adults interviewed toward health maintenance was overwhelmingly positive. Fully 80 percent claimed engaging in regular activities aimed at maintaining their health. Three of the practices mentioned by those who actively seek to maintain their health (dietary, exercise, rest) have in common the fact that they cost very little. This may suggest that educational programs should make an effort to involve individuals, at least initially, in activities having a low cost. At the same time, the fact that many persons are already sensitive to the relationship between their behavior and their health is a positive factor upon which educational efforts may be based.

Tables for Preventive Health Survey

Table 1. Rating of Perceived Effect of Selected Diseases

Armstrong and Butler Counties, Pennsylvania, 1975

(N=218)

Disease*	Degree of Changes Required					
	Major	Some	Uncertain	Few	None	Total
	-- percentage --					
Cancer	50	29	13	5	3	100
Heart Disease	41	40	7	10	2	100
Glaucoma	37	37	12	11	3	100
Diabetes	21	40	4	27	8	100
Colds	1	11	1	30	57	100

*Not answering were 10,6,6,8 and 2 persons, respectively, for each disease.

Table 2. Rating of Susceptibility to Selected Diseases, Men Armstrong and Butler Counties, Pennsylvania, 1975 (N=57)

Disease*	Susceptibility Rating					
	Very Likely	Likely	Depends	Unlikely	Very Unlikely	Total
	-- percentage --					
Common Cold	14	25	16	27	18	100
Cancer	6	10	22	38	24	100
Heart Disease	17	17	13	30	23	100
Diabetes	8	13	6	28	45	100
Glaucoma	2	6	15	40	37	100

*Not answering were 1,7,4,4 and 5 persons, respectively, by disease.

Table 3. Rating of Susceptibility to Selected Diseases, Women Armstrong and Butler Counties, Pennsylvania, 1975 (N=161)

Disease*	Susceptibility Rating					
	Very Likely	Likely	Depends	Unlikely	Very Unlikely	Total
	-- percentage --					
Common Cold	14	27	17	34	8	100
Cancer	5	27	21	41	6	100
Heart Disease	7	19	22	38	14	100
Diabetes	7	17	12	40	24	100
Glaucoma	2	13	17	48	20	100

*Not answering were 2, 29, 16, 11 and 23 persons, respectively, by disease.

Table 4. Opinion Rating about Statement: "Some types of cancer detected in the early stages can be cured."
Armstrong and Butler Counties, Pennsylvania, 1975
(N=218)

Opinion	Percentage
Strongly Agree	73
Agree a Little	19
Depends	5
Disagree a Little	1
Strongly Disagree	*
Do Not Know	1
Total	100

* -- less than 1 percent.

Table 5. Number of Cancer Warning Signals Recalled

Armstrong and Butler Counties, Pennsylvania, 1975

(57 men and 161 women, 218 total)

Number of Cancer Signals Recalled	Respondent's Sex		
	Men	Women	Total
	-- percentage --		
None	51	9	20
1	19	9	11
2	9	12	11
3	7	23	19
4	12	22	20
5	2	16	12
6	0	6	5
7	0	3	2
Total	100	100	100

Table 6. Respondents' Knowledge of Seven Warning Signals by Individual Signals Armstrong and Butler Counties, Pennsylvania, 1975 (N=57 men, 161 women)

Signal	Percent Recalling Warning Signal		
	Men	Women	Total
Thickening or lump in breast or elsewhere	32	72	62
Unusual bleeding or discharge	11	66	52
Nagging cough or hoarseness	25	46	40
Obvious change in wart or mole	12	42	34
Change in bowel or bladder habits	16	39	33
A sore that does not heal	18	35	31
Indigestion or difficulty in swallowing	4	22	17

Table 7. Year of Most Recent Blood Pressure Check for Persons Reporting Normal Blood Pressure

Armstrong and Butler Counties, Pennsylvania, 1975

(N=173)

Year*	Percentage		
	Men	Women	Total
1975	52	70	65
1974	28	18	20
1973	10	5	6
1972 and before	10	7	8
Total	100	100	100

*1975 includes only January through June.

Table 8. Location at which Blood Pressure was Checked for Those Persons Reporting Normal Blood Pressure Armstrong and Butler Counties, Pennsylvania, 1975 (N=177)

Location	Percentage		
	Men	Women	Total
Individual checkup or physical examination	74	64	67
While being treated for an illness or injury	24	16	18
Screening Program	0	13	10
Other	2	7	6
Total	100	100	100

Table 9. Eating Habits and Dieting

Armstrong and Butler Counties, Pennsylvania, 1975

	Never	Occasionally	Uncertain	Usually	Always	Total
	-- Percentage --					
Careful Eater (1)						
Men (N=56)	21	18	*	40	21	100
Women (N=160)	11	28	*	45	16	100
Total (N=216)	14	25	*	44	17	100
Regulate Diet (2)						
Men (N=57)	21	19	0	34	26	100
Women (N=159)	14	19	*	47	20	100
Total (N=216)	16	19	*	43	22	100

(1) "I am careful about how much I eat."

(2) "I am careful about what kinds of food I eat."

* -- less than one percent.

Table 10. Difficulty for Regulating Diet, Getting Physical Exercise and Taking Medicine*
Armstrong and Butler Counties, Pennsylvania, 1975
(N=216)

	Not Difficult at All	A Little Difficult	Somewhat or Extremely Difficult	Total
	-- Percentage --			
Diet (1)	66	21	13	100
Exercise (2)	73	19	8	100
Medicine (3)	86	6	8	100

*"How difficult would it be for you to do each of these:
(1) regulate the kinds of food you eat?"
(2) get regular physical exercise?"
(3) take medicine on a regular basis?

Not answering were 3,2 and 2 persons respectively for each activity.

Table 11. Regular Health Maintenance Practices

Armstrong and Butler Counties, Pennsylvania, 1975 (1)

Type of Practice	Percent Practicing		
	Men (N=43)	Women (N=124)	Total (N=167)
Dietary	63	75	72
Exercise	56	54	55
Rest	23	17	19
Medication (2)	21	27	25
Professional service	0	*	*

(1) Of the 218 persons interviewed, 47 persons indicated that there was not anything they did regularly which they felt improved or maintained their health.

(2) Usually over-the-counter vitamin supplements.

* -- less than 1 percent.

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