CALIFORNIA STATE UNIVERSITY, NORTHRIDGE

A CANCER EDUCATION PROGRAM FOR MEN

A thesis submitted in partial satisfaction of the requirement for the degree of Master of Public Health

by

David A. Kaplan

January, 1975
The thesis of David A. Kaplan is approved:

California State University, Northridge
December, 1974
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Last of all, for their continued support while writing this thesis, I wish to thank my wife Carole, and my parents Roslyn and Lewis.
ABSTRACT

A Cancer Education Program for Men

by

David A. Kaplan
Master of Public Health

A cancer education program was developed to reach small groups of men in business and industry. A total of nine pilot programs were implemented in four engine companies of the Los Angeles City Fire Department. Although attendance was voluntary, a total of 105 men participated in the programs and evaluations, which consisted of a transparency presentation designed by the author followed by a film focusing on cancer in men. Topics covered included detection methods, cancer quackery and safeguards. The program design encouraged two-way communication between speaker and audience.

Three purposes for doing this project were formulated: to increase the level of knowledge about cancer facts in the target population, to find out how men feel about the need for cancer education programs, and to design a program that could be used by the
American Cancer Society for its employee education programs.

A questionnaire was used as the instrument to collect data regarding cancer knowledge in the target group before, immediately after, and one month after the cancer education program. Responses to the questionnaire dealing with knowledge criteria were evaluated by comparing the differences between percentages of correct responses before, immediately after, and one month after the education program.

Individual item analysis showed that the program was very effective in increasing knowledge.

Use of the feedback sheet enabled the author to revise program content, length, and materials after each program, making the final pilot program more interesting and informative.

A large proportion of the participants felt that the program was good and recommended that more like it be done to reach more men with this life-saving information.

Suggestions for future programs and study were made, and a number of guidelines for reproducibility are included within the text of this project.
CHAPTER I

Introduction

Despite recent advances in medicine and engineering, many people in industrial nations still do not share in the wealth of having good health maintenance.

Social, psychological, and physical barriers exist which prevent people from translating newly acquired knowledge into new behavior. (9)

Because of the negative implications that cancer as a disease carries, these barriers become significant. High death rates for certain cancers produce a fear among the public of all cancers. (4)

American Cancer Society statistics point out that fear of the disease is justified. One out of every six deaths in the United States is from cancer. (4:3) In 1974, it was estimated that 675,000 new cases will be diagnosed and 355,000 will die from cancer that year. (4:3)

Since cancer strikes most in people over 40 years of age (4:3), cancer education programs for adult employees in business and industry could reach most of those likely to get cancer.

Because more men are dying each year from cancer than women, it appears that men are becoming a high-risk
group in the adult population. The cancer education program designed in this pilot study was created to help reduce male cancer deaths by giving the American Cancer Society another health education weapon in its battle against cancer.

**Purpose of the Program**

A Cancer Education Program for Men was designed to be implemented by the American Cancer Society in its employee education programs. The main goal of the nine pilot programs was to increase the levels of knowledge of the target population regarding cancer facts. A second goal was to find out how men felt about the need and importance of cancer education programs.

**Program Reproducibility**

The author feels that the program developed in this study could successfully be used with many different groups, including policemen, men's organizations, athletic teams, and industry where small groups of men work, play, or reside.

Even though the program has been used with men, women could benefit from it. The nature of the material lends itself to adaptability to either group. Audience choice may depend upon sex of the speaker and the film presentation to be used.

The program notes included in the appendix are
intended to be guidelines to help future American Cancer Society volunteers use the program. Users of the program should feel free to employ their own skills in speaking to audiences.

Limitations of the Project

The author had time limitations while doing the education programs. As a result, only nine pilot programs were completed, reaching a target population of 105 males. The follow-up evaluation was initiated one month after each program, not three or six months as desired. More program content revision could have taken place had there been more time between programs.

Definition of Terms

These terms are used frequently throughout this project; therefore their meaning should be clarified.

Business and Industry. A place where people work on a regular basis. (15)

Cancer Education. Teaching the individual or group to detect cancer early enough to be properly treated, and in certain cases, prevent the disease. (4)

Epidemiology. The study of the interrelating factors involved in the disease process: the environment, agents and man. (20)
Procto-Sigmoidoscopy. Direct inspection of the lower bowel through a lighted tube (sigmoidoscope). (20)
CHAPTER II

REVIEW OF THE LITERATURE

In this chapter, a survey of the literature relating to cancer education and cancer education programs for men in business and industry is presented.

Cancer Epidemiology: Men

In 1974, in the United States, the number of new cases of cancer diagnosed will be approximately the same in men and in women. (4:5) In 1974 approximately 326,000 men and 329,000 women will be diagnosed for the first time as having cancer. Statistics show that the situation regarding number of deaths from cancer is considerably different. Projections indicate that 193,000 men and 162,000 women will die from cancer this year. (4:10) Of all deaths from cancer this year, fifty-four percent will be men.

Cancer of the lung is now epidemic among men in the United States. (3) Lung cancer deaths in men very likely are a major factor in why more men die each year from cancer than women. Approximately 75,000 Americans will die from lung cancer in 1974 and 60,000 of these people will be men. (4:18) Since 1952, the lung cancer death rate per 100,000 population has increased 96 percent in
men. (4) Of those men who have lung cancer, at present
cure rates not even six percent are alive five years
later. (3) Studies done in the San Fernando Valley show
lung cancer incidence rates of men and women almost the
same as those of the entire United States population. (13)

The three site areas, lung, prostate, and colon-
rectum, comprised 46.2 percent of cancer incidence in men
in the San Fernando Valley in 1972. (13) Cancer of the
lung is the number one cancer killer in men. Cancer of
the Colon-rectum is second, and cancer of the prostate
third. (4) The opportunity exists for prevention of lung
cancer by changing cigarette-smoking behavior. Good
methods of detection are available to aid in the early
diagnosis of cancers of the prostate and colon-rectum,
thus preventing many more deaths. The wide-scale reduc-
tion of the number of deaths from cancer in these anatom-
ical sites is possible. (4)

Other cancer sites show an alarming difference in
incidence and mortality between men and women. Even
though the same number of new cases will be reported this
year for oral cancers, twice as many men will die from
them. More women will be diagnosed as having Melanomas
(a skin cancer which has a high mortality rate), but
deaths will be fifty percent greater among men. The num-
ber of new cases and deaths from cancer of the larynx and
esophagus is several times greater in men. (4)
The epidemiology of cancer in men calls for the education of more men as a step towards the control of the disease. (16) About half of all cancers are of the type that are presently curable. (4) Early cancer is among the most curable of the major causes of death, but if untreated or treated late, it is fatal. (22) Only through education can large numbers of men be motivated to see physicians in time for early diagnosis and treatment. (16:8)

Cancer Education

If a person believes he has cancer, he will not see a doctor, unless he feels there is hope. Therefore the emphasis in public education has been placed on the curability of cancer. People are more likely to want to see their doctor to find out they don't have cancer rather than that they have it. Evidence taken from attitude studies has indicated that there is a healthier view of cancer after many years of public education. (10)

The American Cancer Society has developed and implemented cancer education programs for many different target populations. It has been assumed that these programs lead to a reduction in the mortality rate by increasing knowledge of warning signals and safeguards, thus leading to better prevention and early detection and treatment. (6)

Emphasis has been placed by the American Cancer
Society on three ways for people to protect themselves against cancer. Education programs focus on having people adopt preventive habits such as avoiding cigarette smoking, overexposure to sunlight and other known causes of cancer. In addition, it is recommended that people have medical checkups annually no matter how well they feel. Importance is placed on learning the warning signals of cancer and going to the doctor immediately if a warning signal is noticed.

Cancers of six anatomical sites; breast, colon-rectum, lung, oral cavity, skin, and uterus, offer the greatest opportunity for saving lives through prevention or by early diagnosis and treatment. Sixty percent of all cancer incidence is in these six sites, and fifty percent of deaths. The American Cancer Society has developed and implemented many programs aimed specifically at reducing deaths from cancers of these six sites. (4:14)

Adult cancer education programs sponsored by the American Cancer Society have attempted to reach as many people as possible through meetings, leaflets, films, mass media, and person to person activities. (4:14)

Cancer Education Programs for Business and Industry

Content. The American Cancer Society has sponsored industrial health education programs on a nationwide basis in an effort to reach people where they
work. (15) Basically the programs, which are conducted on-the-job, consist of a film followed by discussion led by a doctor or trained leader. (18)

Programs must be varied to meet company wishes and worker's needs. (19) The Illinois Division of the American Cancer Society developed three program plans and has presented them to hundreds of companies. Some programs used only literature, posters, and company publications for educational purposes. Most consisted of film showings followed by a speaker. A few programs consisted of smoking cessation clinics for employees. (2, 5, 8, 14, 17)

**Materials.** A variety of materials have been used for industrial health education programs, adding greatly to the effectiveness of the learning process. Chalkboards, charts, films, filmstrips, motion pictures, posters, and tape recorders have all been factors in making learning more concrete by appealing to more than one sense. (12)

The Canadian Cancer Society has produced a set of transparencies illustrating cancer facts, its treatment, and prevention. There are several advantages to using transparencies in conjunction with a lecture presentation. Most important is the fact that the lecturer is able to face his audience and does not lose eye contact intermittently as with a blackboard. (12)
Evaluation. The number of cancer education programs for business and industry which have been evaluated to find out their success in meeting program objectives are minimal.

One program, conducted as an informal, small group presentation of facts and figures, was evaluated on knowledge and behavior criteria. Evaluation instruments consisted of a pre-test, post-test, and post-post test. Identical questionnaires were the testing instruments. The effect of the program on increasing cancer knowledge was pronounced. (9)

Programs for men. Hanisch, in doing her cancer education programs for business and industry, speculated on the almost non-existent attendance of men. Some men were asked why they did not participate, while a few claimed to be too busy, others admitted they saw such programs as being developed mainly for women who were assumed to be more interested in health matters than men. (9:47)

A survey conducted in 1955 by the American Cancer Society to find out what people knew about the seven warning signals of cancer indicated that men knew less about cancer than did women, and that many men thought cancer was primarily a women's disease.

A review of the literature indicated that evaluation of cancer education programs for men has been
almost non-existent. (9) The need to reach more men with life-saving information in an interesting and informative way has led to the development of a cancer education program to be used with small groups of men employees.

The program is based on some recommendations made by Hanisch (9), which include: emphasis on the small group method, consideration of the total environment of the workers, and use of printed materials. In addition, transparencies as an educational device were used and evaluated for the first time in a small-group, all male target population. (1)
CHAPTER III

MATERIALS AND METHODS

This chapter presents the purpose of the program, the program objectives, the study population, planning and promotion of the program, program design, and methods of evaluation.

Purpose of the Program

The main purpose of the program was to develop a cancer education program that could be used by the American Cancer Society to reach small groups of male employees. Further, the goal was to increase knowledge regarding the importance of the annual health checkup, proctosigmoidoscopy, avoidance of smoking and overexposure to the sun, and the seven warning signals of cancer.

Program Objectives

Three primary objectives can be stated for this project:

1. The program will significantly increase the level of knowledge about cancer facts and the knowledge will be retained over a specified period of time.
2. The author will find out how men feel about the importance of attending cancer education programs.
3. Evaluation of each pilot program's content and
subsequent changes in content will produce a final, successful educational program which can be used by the American Cancer Society in its employee education programs.

Pilot Study Population

A total of 105 men from four engine companies of the Los Angeles City Fire Department participated in the programs.

Every man had completed at least a high school education, and a few had attended college. Their ages ranged from twenty-six to over sixty. However, most of the men were in the thirty-five to fifty age range.

Even though the author stressed that attendance in the programs was voluntary, everyone at the engine companies attended. Because of the para-military structure of the fire department (7), authority of some of the fire station captains prevailed in getting all the men together at the specific time of the program.

Approximately six of the men attending the program were attached to rescue units based at the fire stations. These men probably had more general knowledge about health than many of the other firemen.

Planning and Promotion of the Program

In selecting a target population such as firemen, the author wanted to be sure the program was interesting
Following the advice of Hanisch (9), the author went "to the top" to gain permission for the program. The Chief of the Fire Department was contacted about the plans to conduct programs at his stations. A speedy reply from the Chief requested the author to contact individual station captains to get their approval for education programs at their stations.

Before contacting the captains at the stations where the programs were to be done, a tentative program was outlined. This aided in promoting the programs.

Since the author had top management's approval, each station captain was eager to sponsor cancer education programs. All thought the program would be interesting.

When the station captains asked how long the programs would take and when they would take place, they were pleased to find that the time available to do the programs was very flexible. Most of the captains offered helpful suggestions and wanted to help in any way they could.

The author decided to do nine pilot programs in all. This would enable an adequate number of men to be tested so that gains or losses in knowledge as a result of the presentation could be measured. After each program, content evaluation and revision was planned so that the final revised program, as outlined in the appendix,
could be submitted to the American Cancer Society for its acceptance and use.

Program Design

The cancer education program was designed specifically to appeal to men. The author developed and used eight transparencies (which were shown on an overhead projector) to supplement the lecture presentation. These transparencies presented subject matter focusing on cancer facts, the importance of early detection, treatment methods, warning signals, and safeguards. Seven were designed by the author, and one was adapted for use from a transparency lesson prepared for high school biology classes. (21)

Using the transparencies enabled the author to keep eye contact with his audience during the presentation. The small groups of men benefited from the use of transparencies because much discussion and question-asking took place. The program notes and outline, exhibited in the appendix, show the content of the transparency presentations and how the author used them.

Several motion pictures were viewed prior to conducting the programs in order to find one that would be appropriate for men. A very colorful, action-oriented film, having interest level and vocabulary suitable for the target group, was selected and shown immediately after the transparency presentation. The film reinforced
already presented subject matter and introduced new material. The yearly health checkup was highlighted as the big key to proper timing in early diagnosis. The importance of having the proctoscopic examination after age 40 was clarified by showing how deaths from colo-rectal cancer could be reduced if this test was included in the annual health checkup.

The program concluded after approximately one hour. Pamphlets reviewing the materials presented were distributed, and the American Cancer Society was publicized as the place to refer any questions or problems should they arise in the future. Usually, an informal discussion with the men took place immediately following the program. Some individuals felt that questions of a personal nature could best be discussed alone with the author.

Nine programs were presented, three programs at each of three fire stations. Three programs were done at each station because each station consisted of three platoons of firemen. In order to reach all the men, it was necessary to present programs on three different dates. The author functioned as speaker and discussion leader. However, the program notes exhibited in the appendix clearly show the feasibility of any qualified lay speaker being able to reproduce the program in a similar setting. The author was prepared to lead these education programs
because of extensive coursework at the University and several months of supervised field training with the American Cancer Society.

Methods of Evaluation

Hanisch (9) tested the reliability of the questionnaire used in this project to evaluate knowledge and attitude criteria.

The questionnaire was adapted to measure the learning of some of the different content presented in this program. Many questions used by Hanisch were deleted, three new questions were added (2, 8, and 11). Question 11 was added to find out men's attitudes about the importance of cancer education programs. Questions 2 and 8 were added to evaluate material presented in the education program.

The questionnaire was used to measure knowledge before the program, immediately after the program, and one month later. It was given to those who had attended the programs one month later to determine if knowledge gained from the program had been retained.

Changes in knowledge were measured by comparing ratios of the total number taking the test before, immediately after, and one month after the program. Measurement resulted in ratios of those who answered true or false on Questions 1 through 7, listed all three
treatment methods on Question 8, and checked all seven cancer warning signals on Question 9.

The significance of the difference between percentages was used as the test to compare percentages of correct responses before, immediately after, and one month after the program to be sure differences were not incurred by chance alone.

The feedback sheet evaluated program content, length, pace, and materials. Use of this measurement tool, adapted from the feedback sheet used by General Telephone (1), facilitated changes and improvements in each program. Parts of the original feedback sheet were deleted or re-arranged to meet evaluation needs for this program. From suggestions written on the feedback sheets immediately following the program, the author was able to present a final, successful, and smoothly-running pilot program. The final program was in many ways different from the first presentation. More transparencies were designed and used, lecture content was expanded, and more appropriate pamphlets were distributed following the education program. The feedback sheet proved to be very useful in program design.
CHAPTER IV

ANALYSIS AND RESULTS

Analysis of Findings Relating to Knowledge

Table I shows results of the cancer education program relating to knowledge before, immediately after, and one month after the program. Responses to Questions 1 through 9 are compared. Responses to five of the nine questions show statistically significant increases after the program. Results also showed that all new knowledge was retained after a period of one month.

Analysis of individual items showed that the greatest increase in knowledge occurred on Question 8 (The three methods of cancer treatment are:). There was an increase of correct responses after the program of 56 percent. Question 2 (T or F; More women die from cancer than men.) had the second greatest increase in knowledge with a 38 percent increase. Very importantly, Question 5 (T or F; The Procto can save more lives from cancer than any other step in the yearly check-up) showed an increase of 36 percent. Question 1 (T or F; Cancer is disorderly, uncontrolled growth of cells.) and Question 9 (The seven warning signals of cancer are:) showed increases of 14 percent and 19 percent respectively.
### TABLE I

Frequency (%) of Correct Responses Before and After the Cancer Education Program

<table>
<thead>
<tr>
<th>Question Number</th>
<th>Pretest Frequency</th>
<th>Posttest Frequency</th>
<th>Post-Posttest Frequency</th>
<th>% Change Posttest</th>
<th>% Change Post-Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>89/105 85</td>
<td>104/105 99*</td>
<td>46/48 96</td>
<td>+14</td>
<td>+11</td>
</tr>
<tr>
<td>2.</td>
<td>63/105 60</td>
<td>103/105 98*</td>
<td>48/48 100*</td>
<td>+38</td>
<td>+40</td>
</tr>
<tr>
<td>3.</td>
<td>99/105 94</td>
<td>104/105 99</td>
<td>48/48 100*</td>
<td>+5</td>
<td>+6</td>
</tr>
<tr>
<td>4.</td>
<td>101/105 96</td>
<td>103/105 98</td>
<td>48/48 100</td>
<td>+2</td>
<td>+4</td>
</tr>
<tr>
<td>5.</td>
<td>66/105 63</td>
<td>104/105 99*</td>
<td>47/48 98*</td>
<td>+36</td>
<td>+35</td>
</tr>
<tr>
<td>6.</td>
<td>101/105 96</td>
<td>101/105 96</td>
<td>48/48 100</td>
<td>---</td>
<td>+4</td>
</tr>
<tr>
<td>7.</td>
<td>96/105 91</td>
<td>102/105 97</td>
<td>45/48 94</td>
<td>+6</td>
<td>+3</td>
</tr>
<tr>
<td>8.</td>
<td>38/105 36</td>
<td>97/105 92*</td>
<td>38/48 79*</td>
<td>+56</td>
<td>+43</td>
</tr>
<tr>
<td>9.</td>
<td>69/105 66</td>
<td>89/105 85*</td>
<td>41/48 85*</td>
<td>+19</td>
<td>+19</td>
</tr>
</tbody>
</table>

* Statistically significant at .05 level of confidence with critical $t$ value of 2.58 at 1 degree of freedom.
Three of the other questions measuring changes in knowledge showed increases in correct responses, however, these increases were not statistically significant and could have been due to chance alone. Question 6 (T or F; Not smoking is one of the best ways to prevent lung cancer.) showed no change at all. The percentages of correct responses before the program for Questions 3, 4, 6, and 7 indicated a high level of knowledge regarding the importance of the annual checkup, avoiding over-exposure to the sun, the danger of cigarette smoking, and the curability of cancer among the target population. Of those responding before the education program, 91 percent felt that cancer could be cured if detected early enough.

Question 10 (Have you ever had cancer?) was included in the questionnaire for a very important reason. Its inclusion expressed the optimism health professionals feel about the curability of cancer. Six of the 105 fire-men who attended the programs said that they at one time in their lives had cancer—and certainly the other men were aware of the fact that all were well enough to be working in a very physically demanding job.

Findings Related to the Men's Attitudes

Question 11 (I feel that cancer education programs are important: a) Mainly for women, b) Mainly for old people, c) Only to people who have cancer, d) To both men and women, e) I feel that cancer education programs are
really not needed) was designed by the author in order to find out how the target population felt about cancer education programs. The response pattern (Strongly Agree to Strongly Disagree) was adapted from Likert's scale (11) which is designed to be a measuring scale of attitudes. Although the number responding to each choice was insufficient to make the proportions significant, descriptive observations were possible (Table II). Before the program, 39 percent of the men disagreed with the statement "I feel that cancer education programs are important mainly for women". Immediately after the program, 55 percent disagreed, and one month later, 65 percent disagreed, a 26 percent change.

Responding to the statement "I feel that cancer education programs are important to both men and women", 97 percent agreed before the program, 94 percent immediately after and one month after. Very importantly, 73 percent of the men before the program disagreed with the statement "I feel that cancer education programs are really not needed", whereas 90 percent disagreed one month later.

Evaluation of the Program Content

Analysis of the responses on the feedback sheets (Table III) shows the success of the program. Examination of the feedback sheets distributed after the nine programs shows that over 90 percent of the men thought the program
<table>
<thead>
<tr>
<th>Question</th>
<th>Before</th>
<th>After</th>
<th>1 Month After</th>
<th>Posttest % Change</th>
<th>Post-Posttest % Change</th>
</tr>
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<tr>
<td>11a)</td>
<td>39%</td>
<td>55%</td>
<td>65%</td>
<td>+16%</td>
<td>+26%</td>
</tr>
<tr>
<td>11b)</td>
<td>49%</td>
<td>60%</td>
<td>69%</td>
<td>+11%</td>
<td>+20%</td>
</tr>
<tr>
<td>11c)</td>
<td>59%</td>
<td>64%</td>
<td>84%</td>
<td>+5%</td>
<td>+25%</td>
</tr>
<tr>
<td>11d)</td>
<td>3%</td>
<td>6%</td>
<td>6%</td>
<td>+3%</td>
<td>+3%</td>
</tr>
<tr>
<td>11e)</td>
<td>73%</td>
<td>74%</td>
<td>90%</td>
<td>+1%</td>
<td>+17%</td>
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### TABLE III
Cumulative Results, Nine Programs: Participants Evaluation by Percent of Total Responding

#### Participants rating of:

<table>
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<tr>
<th>Program</th>
<th>Excellent</th>
<th>Very Good</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>Total %</th>
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<td>58%</td>
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<td>6%</td>
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</tr>
<tr>
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<td>About Right</td>
<td>Too Short</td>
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<td>29%</td>
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<tr>
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<td>About Right</td>
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<td>Too Slow</td>
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<td>70%</td>
<td>1%</td>
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#### Participants rating of the quality of materials used in education program.

<table>
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<th>Material</th>
<th>Excellent</th>
<th>Very Good</th>
<th>Good</th>
<th>Fair</th>
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<td>Handouts</td>
<td>13%</td>
<td>48%</td>
<td>35%</td>
<td>4%</td>
<td>0%</td>
<td>100 %</td>
</tr>
<tr>
<td>Film</td>
<td>19%</td>
<td>42%</td>
<td>25%</td>
<td>12%</td>
<td>2%</td>
<td>100 %</td>
</tr>
<tr>
<td>Transparencies</td>
<td>12%</td>
<td>49%</td>
<td>30%</td>
<td>10%</td>
<td>1%</td>
<td>100 %</td>
</tr>
<tr>
<td>Discussion</td>
<td>10%</td>
<td>50%</td>
<td>33%</td>
<td>7%</td>
<td>0%</td>
<td>100 %</td>
</tr>
</tbody>
</table>
content, length, and pace was at least good. A majority of those indicating the program was too short or that the content was only fair were participants in the first two programs. Most of the revisions in program design took place during the time the first four programs were presented. As a result, the programs conducted later had little if any negative responses.

The pamphlets and program outline distributed during the programs were rated good by 91 percent of those responding to the feedback sheets. There were no more "fair" responses after program number 1. Participants suggested adding some pamphlets on "Cancer Facts for Women" and these were distributed after program number 2.

Eighty-six percent of the men liked the film shown. Those who did not like it indicated on the feedback sheets why. The main reason seemed to be an overuse of a popular television series theme.

Eighty-nine percent of the participants liked the transparencies. The 11 percent that indicated they did not like them attended the first three programs. After program number three, the number of transparencies was increased from three to eight, eliminating negative responses.

Mainly as a result of the transparency presentation, 91 percent felt that the discussions during and after the program were good. The quality of the
discussions improved when the number of transparencies used was increased.

Discussion

The effect of the cancer education program on increasing knowledge was significant.

A majority of the men felt that cancer education programs were important and needed for both men and women.

The target group was well informed on very general cancer facts before the program but lacked knowledge in some of the specific areas.

Approximately 90 percent of the men evaluated the program content, length, and materials as good, very good, or excellent.
CHAPTER V

SUMMARY AND CONCLUSIONS

In this chapter, a discussion of the success at meeting program objectives is presented. In addition, recommendations are suggested for future programs for men.

The primary objective in doing the program was to develop for the American Cancer Society an educational program which could be used for men. In addition, the author wanted to find out how men felt about the need for cancer education programs. It was felt that a successful program would show that an increase in knowledge among the participants would occur and that this increase would be retained over a period of time.

The level of success of this cancer education program can be evaluated by the achievement of meeting these objectives. Although only the knowledge criteria objectives lend themselves to measurement, the success of the other objectives can be ascertained from descriptive information obtained from Question 11 on the questionnaire, and from the feedback sheet.

Use of the Program in the Future

The American Cancer Society has indicated their
interest in using the program materials. Volunteers have been trained by the author to use the program for other target populations such as men's clubs, police departments, and athletic teams. Many industries where large proportions of their employees are men may be interested in using the program.

The simplicity of the program will enable qualified lay speakers to utilize the plan for a variety of men's audiences. The notes included in the appendix are easily understandable by the speaker with limited experience in cancer education.

Increase in Knowledge about Cancer

As indicated in Table I, a significant increase in knowledge took place as a result of the education program. More participants now realize that cancer is a serious threat to both men and women. Several men, after attending one of the programs, verbally indicated that they would ask their doctors to give them a procto exam during their next annual health checkup. More of the men know what the three accepted methods of cancer treatment are and recall the seven warning signals of cancer. Hopefully these increases in knowledge among the target population may some day prevent some of these men from dying of cancer.
Men's Feelings about Cancer Education Programs

It was found that when a cancer education program was developed expressly for men and presented to them, most of the men found the programs interesting and worthwhile. The comment of one fireman attending the program sums up how most of the men felt: "You should reach as many people as possible."

Recommendations for Future Programs

Full use of feedback sheets should be made. These serve as an evaluation tool to measure program effectiveness. By enabling the target population to comment freely on the program, the health educator is best "tuning in" to his or her target group's needs and interest levels.

Although a few of the comments made were somewhat unimportant, many enabled the author to find out how useful certain materials were or were not. This type of evaluation tool is especially helpful to the health educator lacking in experience.

The following suggestions may help future health educators develop cancer education programs for employees.

Be prepared. Knowledge of subject matter and methods of presentation are ultimate in importance, for without quality, the education program leader cannot really lead a good discussion with program participants.
In a small group setting, discussion is very important because its presence clarifies and increases the interest level of the information imparted to the audience.

In the appendix materials are provided which may help others prepare future programs. Extra equipment should be taken to the site of a program in case of breakdowns. Having extra bulbs for projectors increases the confidence and peace of mind of the program leader.

**Have a good sense of humor.** The author found that doing cancer education programs for small, close-knit groups of men required a good sense of humor. Practical jokes were not uncommon among the firemen, and, since these did not interfere radically with the presentation, should be taken lightly.

Doing education programs for special groups of men employees or service groups also requires a good deal of patience and adaptability. On a few occasions during the pilot cancer education program presentations for firemen the fire alarm at the station sounded. In a few seconds, the author was waving goodbye to the program participants as they sped out of the fire station in their red engines and trucks. Fortunately, the men returned in a short period of time, washed up, and were ready to continue with the cancer education program.

**The importance of honesty.** Being able to answer a
question from an audience by simply saying "I don't know but I will find out for you" is critical in gaining trust and respect when doing any education program. Questions concerning unproven methods of cancer treatment were the most difficult for the speaker to answer, but a consistent attempt to give only facts proved to be the best course to follow in maintaining communication with all of those attending. Making invalid assumptions or being highly opinionated has been found to alienate audiences.

**Closing Comments**

More men will die of cancer this year than women, even though cancer incidence is about the same in both sexes. Lung cancer has reached epidemic proportions among men. Cancer of the colon and rectum and prostate, which are highly curable when caught early, are killing many thousands of men who are still in their productive years of life. More men need to know the life-saving facts about cancer. It is for this reason that the cancer education program described in this thesis was developed.

The program was designed to motivate men to adopt health practices, such as annual health checkups and the procto exam, which facilitate early detection of cancer.

These programs were carried out in an informal atmosphere through the use of a transparency
presentation followed by a film which focused on cancer in men. Discussion was encouraged. Use of the transparencies was particularly effective since the author was able to maintain eye contact with his audience throughout the lecture portion of the program. Topics covered included detection and treatment methods, cancer quackery, and cancer safeguards.

Future speakers using this cancer education program should be qualified men who are actively engaged in volunteering some of their time to make their community healthier. The author feels that having a man present this program to an all male target group is best because easier rapport between the speaker and audience would encourage more dialogue and interest.

Hopefully, men who realize the importance of cancer prevention will be interested in encouraging others to adopt these life saving practices. The American Cancer Society is now providing training opportunities to give interested men the needed skill and materials to implement this cancer education program for men in the community.
SELECTED BIBLIOGRAPHY


4. '74 Cancer Facts and Figures. A publication of the American Cancer Society, publication #5008-L.E.


15. On the Job Cancer Education Pays 3 Ways. A publication of the American Cancer Society, publication #2016-LE.


APPENDIX A

List of Contents:

Materials needed for the cancer education program
Outline of program distributed to participants
Speaker's Notes for the Transparency Presentation
Summary of the film used in the education program
MATERIALS NEEDED FOR THE CANCER EDUCATION PROGRAM

1. Speaker's notes for the transparency presentation
2. The set of transparencies
3. The motion picture "On With Your Life"
4. A program outline for each participant
5. A feedback sheet for each participant
6. Questionnaires for pre-tests and post-tests
7. A transparency projector with an extra lamp
8. A 16 MM motion picture projector with an extra lamp and film take-up reel
9. A projector screen
10. Extension cords for both projectors
11. Pamphlets for each participant
CANCER EDUCATION PROGRAM

I. Introduction

Speaker's background
Function of the American Cancer Society
Purpose of the program

II. Transparency Presentation

Facts about cancer
What is cancer?
How cancer develops and spreads
Proven and unproven methods of treatment
The importance of early detection
The seven warning signals of cancer
Important safeguards against cancer
The annual health checkup: diagnostic tests

III. Film Presentation

IV. Conclusion

Evaluation of the program
Distribution of literature
Further discussion
Transparency 1: Facts about cancer

More men will die this year from cancer than women.

355,000 Americans will die this year from cancer.

One in every four Americans now living will have cancer sometime during their life.

Deaths from cancer are second as a cause of death in the United States.

Transparency 2: What is cancer?

Cancer is disorderly, uncontrolled cell growth.

One tiny cancerous cell reproduces and soon millions exist.

Transparency 3: How cancer develops and spreads

Cancer begins as a localized disease.

Cancerous cells remain in one area for a period of time.

Localized cancer indicates that the cancerous cells are still in their original site.

Invasive or regional cancer indicates the spread of the disease.
Transparency 4: Proven and unproven methods of treatment

Only a medical doctor should diagnose and treat cancer.

The harm of diets, devices, and drugs in unproven methods of treatment.

The 3 treatment methods of cancer are surgery, radiation, and chemotherapy.

Transparency 5: The importance of early detection

There are big differences in cure rates between detection of the cancer in the localized involvement stage compared with detection in the regional stage.

100,000 deaths could be prevented this year with prompt treatment.

Transparency 6: Cancer's 7 warning signals

If any warning signal persists for more than 2 weeks the person should see his doctor.

Most often the signals do not mean a person has cancer.

Transparency 7: Important safeguards against cancer

Don't smoke.

Over 95 percent of lung cancers are due to cigarette smoking.

Using a sun screen or wearing a hat can prevent most skin cancers.

The annual health checkup is important in cancer detection.
Transparency 8:  The annual health checkup: diagnostic tests

The patient should ask his doctor for specific tests if not performed by his doctor.
"On With Your Life"

Summary

The motion picture suggested for use in the cancer education program for men is very colorful and action filled. The interest level and vocabulary is simple enough to be appropriate for lay audiences. Shown immediately after the transparency presentation, the film reinforces already presented subject matter and introduces new material.

Timing is stressed as the key to a cure in the incidence of cancer, and the yearly health checkup is discussed as a vital factor in timing of a diagnosis. A Physician explains that only by having a checkup regularly can changes in a patient be noticed over a period of time. Inclusion of the proctosigmoidoscopy in the annual health exam is stressed as an important tool in the early diagnosis and treatment of cancer.

Total viewing time of the motion picture is 12 minutes. Questions and answers followed the film.
APPENDIX B

QUESTIONNAIRE

Please do not sign your name.
Please circle either T (True) or F (False).
Do not guess. If you are not sure of the correct response, go on to the next question.

T F 1. Cancer is disorderly, uncontrolled growth of cells.
T F 2. More women die from cancer than men.
T F 3. The best protection against cancer is an annual check-up.
T F 4. Excessive exposure to the sun has little to do with developing skin cancer.
T F 5. The procto (visual examination of the bowel through a tube) can save more lives from cancer than any other step in the yearly check-up.
T F 6. Not smoking is one of the best ways to prevent lung cancer.
T F 7. Cancer cannot be cured even if detected early.

8. The three methods of cancer treatment are:
   (1) _________ (2) _________ (3) _______
9. The seven warning signals of cancer are:
(Check 7 Items)

- Stiffness in joints
- Change in bowel or bladder habits
- A sore that does not heal
- Palpitations after physical exertion
- Unusual bleeding or discharge
- Thickening of skin or lump anywhere
- Dizziness when standing up
- Indigestion or difficulty in swallowing
- Obvious change in wart or mole
- Nausea after eating
- Nagging cough or hoarseness

10. Have you ever had cancer? yes no

11. Please indicate your feelings about each of the following statements by checking the appropriate response.

I feel that cancer education programs are important:

<table>
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<th>Undecided</th>
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APPENDIX C

FEEDBACK SHEET

Please give me your honest opinion and comments. They will help me evaluate the program. Rate each area with a check and do comment freely.

1. How do you rate the program content?

   ______ Excellent
   _____ Very Good
   _____ Good
   _____ Fair
   _____ Poor

   Comments:

2. How do you rate the length of the program?

   ______ Just right
   _____ About right
   _____ Too short
   _____ Too long

   Comments:

3. How do you rate the pace of the program?

   ______ Just right
   _____ About right
   _____ Too fast
   _____ Too slow

   Comments:

4. How do you rate the quality of the following?

   Excellent  Very Good  Good  Fair  Poor

   Handouts
   Film
   Transparencies
   Discussion

Please suggest what I can do to make future programs better.

44
APPENDIX D

PAMPHLETS USED IN EDUCATION PROGRAM

"Cancer Facts for Men"

Cancer is becoming a greater threat for men. The pamphlet lists common types of cancer in men, certain safeguards against these cancers, and cancer's seven warning signals.

"Cancer Facts for Women"

The pamphlet tells women how they can protect themselves against cancer; by learning cancer's seven warning signals, practicing monthly breast self-examination, and other cancer safeguards.

"The Cancer Nobody Talks About"

The pamphlet explains how cancer of the colon and rectum is highly curable when found and treated in time. It tells what a proctoscopic examination is, why people should have one, and how often.