Patient-Initiated Prevention Discussions

Two Interventions to Stimulate Patients to Initiate Prevention Discussions

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BACKGROUND. When patients are active participants in discussions, comprehension and compliance are likely to improve. This study examines the use of two interventions to aid patients in initiating such discussions in the area of health maintenance.

METHODS. The study was a randomized controlled trial of adult patients. The first intervention used two cards that listed seven core health maintenance concerns. The second intervention used a brief session with a nurse to help patients identify their health risks and develop a plan for seeking any desired information about these risks. An exit questionnaire and a telephone interview 4 to 6 weeks later assessed the extent to which (1) information seeking by patients was stimulated; (2) patients recalled the information obtained; (3) patients used the information to effect lifestyle changes; and (4) patients felt they participated in the decision to discuss health maintenance.

RESULTS. Both interventions stimulated patients to request health maintenance information (both $P<.05$); the second intervention significantly increased patient recall ($P=.018$). Neither intervention, however, had a significant impact on lifestyle change or sense of participation in the decision to initiate discussion. Analysis of the second intervention did show that both increasing patients' recall of information ($P=.008$) and sense of involvement in the decision to discuss health maintenance ($P=.003$) significantly increases the likelihood of lifestyle change.

CONCLUSIONS. Two interventions have been developed that are relatively simple and inexpensive methods to stimulate patients to seek health maintenance, and quite probably other health-related information. The blunted impact of these two interventions, however, raises the question of whether such simple and relatively inexpensive interventions are strong enough to stimulate patients to use this information to initiate change when one seeks to address a wide range of risks.

KEY WORDS. Health care seeking behavior; preventive health services; health promotion; health risk appraisal; health education. (*J Fam Pract 1996: 43:468-474)*

When patients feel that they are active contributors to discussions with their physicians, they are more likely to comprehend the information they receive and act on it.[1-5] A particularly active role for patients is to initiate discussions of importance to them and seek the information they desire, but they often lack the necessary skills to accomplish this task. A study by Roter, however, shows that providing patients with a tool for initiating such discussions will stimulate them to acquire information of importance to them.[6]

If patients are to be encouraged to initiate such physician-patient discussions, what topics should they be encouraged to address? One possibility is to help patients attain their expressed desire for more information about health maintenance.[7,8] The importance of such discussions has become even more apparent with the recognition that approximately one half of all mortality in the United

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States, more than a million deaths yearly, has a preventable component.[9]

Our goal was thus to develop a tool that would encourage patients to obtain from their physicians the health maintenance information they desired, and in so doing, to develop a sense of ownership. It was then hypothesized that this would lead to a better recall of the information obtained and a commitment to use this information to improve their health habits. This approach mirrors the recommendations of the US Preventive Services Task Force.[10] In addition, we sought to make the tool inexpensive and time efficient so that it could be easily incorporated into the practice of any primary care physician. This latter requirement effectively ruled out the use of prolonged interventions by paid personnel to teach patients how to be active participants, a technique known to be an effective method.[6]

METHODS

We developed two tools. The first involved the use of a simple, inexpensive health concerns card. This card listed seven health behaviors that had been previously identified as being important topics for health maintenance counseling in adults.[10] The card was designed to stimulate patients to seek further information from the physician about any of the behaviors that concerned them. The second tool was more intensive and complex, and thus potentially more expensive. This consisted of having a nurse practitioner briefly talk to patients, for less than 5 minutes, as part of preparing them for the physician visit. The intent of this nurse intervention was to focus the patient's attention on two principal tasks. First, did the patient have any of the risk factors for the 10 leading causes of preventable death?[9,11] Second, did the patient wish to seek information about one or more of these risk factors from the physician, and how did he or she plan to accomplish this? It was also expected that once developed, the role of the nurse practitioner could be taken on by any health care worker, making it more cost effective. The active role fostered by both tools was designed to encourage patients to act on the information they received.

Both interventions were conducted at the outpatient clinic of the community-based Waukesha Family Practice Residency, which is affiliated with the Medical College of Wisconsin. Patients at the clinic are seen both by the residents and the family physician faculty. The patients are an urban/suburban mix. The majority of the patients are white, but there is a sizable minority of Hispanic patients, and many patients from Southeast Asia.

The patients meeting study criteria included those with chronic and acute problems, who were 18 years and older, who spoke English, and who were not in too much distress to comfortably participate in the study. Obstetrical care patients were excluded since the clinic already had a comprehensive health promotion program for this population.

To provide an understanding of the nature of health maintenance activities already occurring at the clinic and to assess for potential Hawthorne effect, a short exit questionnaire was administered to a random selection of patients meeting the above selection criteria before each intervention was implemented. It obtained basic demographic information and asked the subjects if during that visit they had discussed with the physician any of the health maintenance topics under consideration. The questionnaire also asked who initiated the discussion, and whether they saw their usual physician. A total of 104 questionnaires were obtained, with uniformity between the two baseline periods.

Health Concerns Card Intervention

During the summer of 1993, as patients meeting the selection criteria checked into the clinic they were asked by the clinic receptionist if they wished to participate in a study about health promotion. Those willing to participate were then handed a previously randomized manila envelope and told to read the contents while in the waiting room. All envelopes contained a consent form and the patients were told that if they desired to participate, they should sign the consent form in the presence of the LPN who prepared them for their appointment. The consent form explained that they might receive a health concerns information card in their envelope and would be required to fill out a brief questionnaire as they were leaving the clinic.

One third of the patients received the card shown in Figure 1, while another third received the card in

Figure 2. There was little difference in the effect of these two cards so the results from the two were subsequently combined. The final third, or control group, received only the consent form in their envelopes.

During the physician visits, if patients used the cards to request health maintenance information, the physicians were instructed to insert the cards into the patients' chart loosely. This allowed the study authors to track the number of patients using the card.

As adult patients checked out of the clinic, they were asked if they had participated in the study. Those who had participated were asked to answer the same questionnaire that had been used in the baseline period.

In addition to the exit questionnaire, a telephone interview was conducted 4 to 6 weeks later to obtain additional information from study participants. These interviews elicited whether patients remembered receiving health promotion information. Those patients who received information were also asked whether they had been able to use it to adopt healthier lifestyles since the visit, and how much they felt they had participated in the decision to discuss health promotion. Finally, those patients who received a health concerns card were asked whether it facilitated initiating a discussion about health maintenance. Patients were also able to raise other issues relating to patient education and physician-patient interaction, giving us further insight into the factors affecting the experimental process.

Nurse Intervention

During the summer of 1994, patients meeting the previously described selection criteria were randomized by the day they presented to the clinic to receive either the nurse intervention or not. Patients arriving on intervention days were prepared for their physician appointments as usual by an LPN. A nurse practitioner then talked to as many of the eligible patients as possible using a scripted scenario (Figure 3) that included showing the patient a list of of 10 health risk behaviors (Figure 4). Two different levels of intervention were used, as shown in the script, but there was no significant difference in their effect. Thus the data from the two were collapsed together during later analysis. Patients were then encouraged to talk to the physician about any of the risk factors by checking off one or more of a series of prepared questions or by writing down their own questions, and then using this as a tool to initiate the discussion. The interviews were predominantly performed by a single nurse practitioner, with only the occasional assistance of another nurse practitioner, to attempt to further ensure a uniform approach. The full intervention generally took less than 5 minutes.

Eligible patients arriving on control days only received and signed the informed consent. This was done by the LPN who prepared them for their physician visits using the same format as the nurse practitioners.

As with the card intervention, participants in both the intervention and control groups were then asked to complete the baseline questionnaire. The questionnaire used for the intervention patients also asked if the intervention had helped make it easier to talk to the physician about preventive medicine issues.

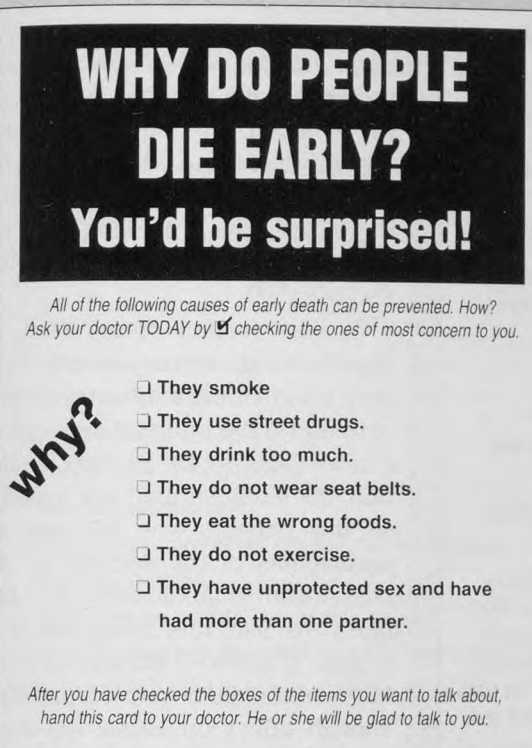
As with the first intervention (health concerns card), an exit questionnaire was given to patients and a telephone interview was conducted 4 to 6 weeks later to obtain more information. This time the interview was limited to those patients who indicated on the exit questionnaire that they had discussed one or more of the 10 causes of preventable death. The same questionnaire was used as in the card intervention except that it asked if patients had been stimulated to move toward change rather than simply asking about change as opposed to no change. This was an attempt to make our outcome measures more sensitive to any positive effect of the interventions on the continuum of change.

Control of Bias

The clinic staff and the physicians participating in the interventions were aware of their occurrence, but were told only that the teaching of health maintenance was being evaluated. Physicians were unaware of which patients were in the study and were asked to not increase their usual level of health promotion activity, and to answer any patient inquiries about health maintenance in their usual manner. The only exception was that one of the authors participated as a physician in both studies, but was blinded as to which patients were participants.

FIGURE 1

Health concerns card with admonition to ask for health information about preventing early death.



Analysis

Data for both interventions were entered into a FoxPro database and analyzed using STATA, a statistical package. Categorical data were analyzed using chi-square tests for independence.

RESULTS

A total of 129 patients participated in the card intervention (87 actual interventions, 42 controls) while there were 163 patients in the nurse intervention (104 actual interventions, 59 controls). There was generally surprising uniformity in the demographics across all the groups, the two intervention groups and the two baseline groups, making comparisons easier. The demographics were also consistent with the clinic as a whole for patients seen in the clinic over the age of 18. The median age of the patients was approximately 35 years, and they were predominantly female (approximately 70%).

Health Concerns Card Intervention

The presence of either card did have a significant effect on patient requests for information, compared with the control group (27% vs 10%, P=.03).The increase in information requests associated with the cards, however, did not motivate the patients to utilize the information they received to change unhealthy behaviors within the short follow-up period, nor did it increase the recalling of the information requested. It also did not translate into a sense of increased participation in the decision to discuss health promotion.

An analysis of the telephone interviews, though, yielded some intriguing qualitative results. Many patients felt they were already receiving adequate health maintenance information, both from the physician and from other sources such as television, periodicals, and friends. Another large group felt that they did not need a card to aid them in asking

FIGURE 2

Health concerns card without the specific admonition to ask for health information about preventing early death.

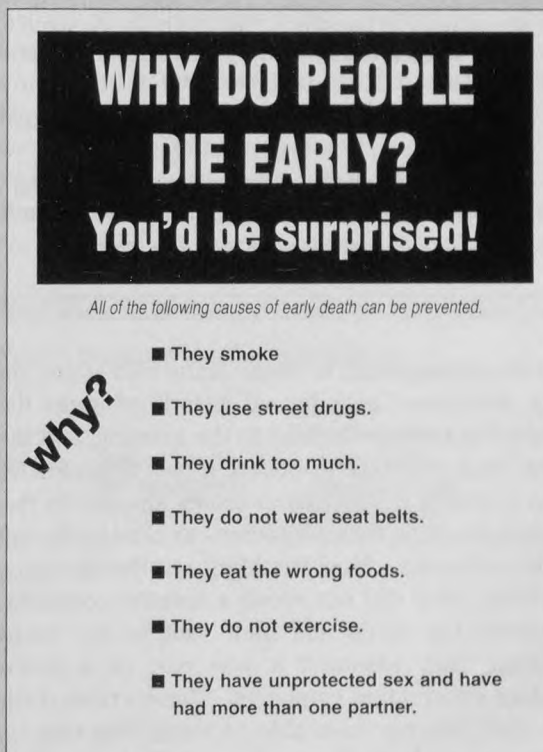


FIGURE 3

Scenario followed by nurse practitioner to help patients identify their preventable health risks for early death and develop a plan to ask the physician for further information on how to reduce their risks.

SCENARIO FOLLOWED BY NURSE PRACTITIONER

Hello. My name is Barbara Murphy and I am a Nurse Practitioner here at the clinic. While you are waiting for your doctor, I was wondering if you would be willing to participate in a health promotion study I am doing. It will only take a few minutes of your time.

(If patient agrees, have him/her read and sign consent)

We are looking at 10 preventable causes of early death in the United States—things that we can change, but which could cause us to die before our time.

(Show patient list, Figure 4)

I'd like to go through these risks to see which ones affect you.

Level 1: Of the risks that you have identified, which ones concern you the most?

Level 2: Of the risks that you have identified, which one concerns you the most?

In order for you to learn more about your risk(s) I want to encourage you to ask your doctor questions. This is the only way your doctor knows what is on your mind. I have prepared a list of some common questions a lot of our patients have on _____ (e.g. smoking). Please take a look at these questions and circle those that you would like to ask your doctor. Please feel free to write down and ask any additional questions that you have. At some time during your visit with your doctor today, please take a moment to ask your questions on _____ (e.g. smoking).

When you leave the clinic there is a short exit questionnaire for you to fill out.

A student from the medical college will be calling you in about 4 weeks or so with a short and final follow-up questionnaire.

Thank you for participating in our study.

questions important to them. Many also stated that they developed an informal agenda of items they wished to talk about prior to the meeting, and they were thus reluctant to broach a new topic for fear that it would distract from issues already on their agenda because their physicians worked under rigid time contraints. Most troubling was that numerous patients often did not recall a specific connection between the cards and their visit to the doctor. Instead, they assumed it was part of a general patient information campaign. This correlated with the fact that we were able to verify that only one patient had physically handed a card to a physician to request information.

Nurse Intervention

Again, the intervention increased patient requests for health maintenance information, compared with controls (54% vs 8%, $P<.001$). In contrast to the effect of the card, though, the follow-up interview showed that the intervention, when compared with the control group, also increased the recalling of the requested information (54% vs 31%, $P=.0018$).

It was further found that, as hypothesized, when patients recall such information, they are more likely to utilize the information to effect change (44% vs 14%, $P=.008$). In addition, the study verified our hypothesis that patients who feel they are participants in the decision to discuss health maintenance are more likely to use this information to change ($P=.003$). Unfortunately, the intervention did not have a profound enough effect on either the recall variable or the sense of participation variable to lead to significant change within the short follow-up period covered by the telephone interview.

Analysis of the telephone interviews yielded qualitative insights that echoed those observed in the first intervention.

Not surprisingly, both the card and nurse interventions found that patients younger than 35 years old were significantly more interested in discussing dangerous sexual practices than were older patients; however, neither intervention showed any other significant age-related effects in the topics discussed nor for any of the other variables examined. In addition, whether or not a patient saw his usual physician had no consistent effects.

DISCUSSION

Both interventions appear to be relatively simple ways to stimulate patients to request health maintenance information. The more intensive nursing inter-

FIGURE 4

Tool used by the nurse practitioner to help patients identify and ask about their preventable health risks for early death.

WHY DO PEOPLE DIE EARLY?
YOU'D BE SURPRISED!

All of the following causes of early death can be prevented. ***HOW?***
Ask your doctor today by checking the ones of most concern to you.

Why?

- ❑ They smoke
- ❑ They use street drugs.
- ❑ They drink too much.
- ❑ They do not wear seat belts.
- ❑ They eat the wrong foods.
- ❑ They do not exercise.
- ❑ They have unprotected sex and have had more than one partner.
- ❑ They keep an unsafe gun in their home.
- ❑ They develop infection that could be prevented.
- ❑ They are exposed to toxins at home or work.

vention, though, was more effective than the simpler health concerns card in stimulating patients to recall the information that was requested (Table). In other words, the stronger the dose, the larger the impact. The cost of increasing the dose, however, must be balanced against the benefit reaped. In this case, the nurse intervention can be easily performed in only a few minutes by the person who routinely readies the patient for the physician, making it relatively cost-effective.

As shown in Table 1, neither intervention had a significant effect on patient utilization of the information to change a behavior or to promote a sense of participation in the decision to discuss health maintenance. Nevertheless, since the nurse intervention did show a tendency to prompt patients to move toward change, it is possible that a larger study population, or a longer follow-up period, might have resulted in a statistically significant effect on stimulating patients to move along the continuum of change. One must wonder, though, whether interventions that are sufficiently simple and inexpensive to be regularly incorporated into primary care can be strong enough to have a significant impact when one seeks to address a wide range of risks.

The nurse intervention did reaffirm that to help patients to accomplish change, the physician must both improve the patients' recall of the information requested, for example, with patient handouts, and facilitate the patients' sense of participation, for example, by asking them if they are ready to change. In addition, the telephone interviews indicated that it is important to reassure patients that the physician has time to both address their principal agenda and provide any additional requested information.

Other patient responses during the telephone interviews indicated that many patients already felt that they were exposed to substantial health mainte-

TABLE

Ability of the Study Interventions to Have a Significant Effect on Behavior, Compared with the Control Group

Study Group	Patient Requested Health Maintenance Information	Patient Recalled Requested Information	Patient Used the Information to Change	Patient Participated in Decision to Discuss Health Maintenance
Control	No	No	No	No
First intervention: Health concerns card	Yes*	No	No	No
Second intervention: Brief discussion with nurse	Yes†	Yes‡	No	No

*P=.03; †P<.001; ‡P=.008

nance information outside their physicians' offices. This raises the question of the accuracy of such health-related information. In addition, it challenges the health care system to help patients find ways to convert this information into improved health habits.

SUMMARY

The two interventions described in this paper give us two efficient and cost-effective tools for stimulating patients to obtain information from their physicians about the important topic of health maintenance. They also give us some clues as to what is needed to encourage patients to remember such information and use it to develop healthier habits, but they also make us wonder if simple interventions can achieve these two goals.

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