

NURSING RESEARCH

Abstract: As cigarette-smoking has been directly related to lung cancer, so have smoking-cessation programs been linked to risk-reduction in incidents of lung cancer. The role of a practitioner in these programs is crucial, and in long-term care situations, the role of the nurse in delivering these programs can be directly connected to decreases in patient-smoking, and to decreases in the risks for incidents of lung cancer.

The Role of Nurses in Smoking-Cessation Programs: Participating in the Reduction of Lung-Cancer Risk

INTRODUCTION

This essay is interested in determining what ways nurses participate in smoking-cessation programs that are implemented through primary-care interventions, and what relation these interventions have in reducing the risk of lung-cancer in patients and participants who want to stop smoking.

The articles being critiqued here provide different perspectives on the roles that nurses can take in smoking-cessation programs (e.g., Frenn & Malin 1998, Wadland 1999); and what the success rates are in cases where such intervention-programs have been assessed.

Crucially, all articles considered here have substantiated the role of nurses in smoking-cessation programs, and the relation of their participation to lung cancer is most obviously inferred through the determinants already established between lung cancer and smoking (e.g., Ervin et al. 1999, Lancaster et al. 2000).

What is not explicitly accounted for are the pragmatic concerns of funding for resources in contexts of time and training required for nurses to initiate and/or participate in these kinds of interventions (Ervin et al. 1999, Wilby 1999).

RELATIONS OF SMOKING AND LUNG CANCER

In Ervin et al. (1999), and Frenn and Malin (1998), smoking is a risk-factor categorized as “epidemiological.” In epidemiological terms, then, risk is defined, by Ervin et al. (1999) as “...the probability that an adverse event will occur (e.g., an illness or death).” (p. 26).

This term, “risk factor” is used to describe a determinant, that is, an attribute or exposure that “...increases the probability of occurrence of disease or other specified outcome.” (26)

An example is the increased probability of lung cancer in the presence of smoking. Furthermore, Ervin et al. (1999) define certain risk factors as modifiable, that is, factors that can be modified through intervention. Smoking is regarded as both a risk factor, and a modifiable risk factor, meaning that smoking-cessation programs do decrease the existing probability of death or illness.

As Wilby (1999) reports, it is estimated that one in three Americans now living will eventually develop cancer, and more than 30% of cancers are related to cigarette smoking (Wilby, p. 53)

The purpose of Ervin et al.’s (1999) article is to provide an example of a population focus for improving health outcomes of a community, where the emphasis was placed on nursing participation, and a specialized focus was developed for a particular community’s needs. By correlating the specific increased relations between smoking and young African-American women in low-income areas, the program was based in a community that was predominantly inhabited by this high-risk group (Ervin et al., p. 26-27).

The focus of the project was to contribute to improving the overall health status of the community, and to specifically contribute to the reduction of smoking amongst women in this community (p. 27).

Of the intervention-based activities, including providing information about smoking and relations to children’s health, children’s likelihood of smoking if their parents smoke, and risks in pregnancy, the project emphasized home-visits and the production of elaborate community-resource files for each home visited (Ervin et al., p. 27).

While this proved to be the most important factor in their project, it also proved to be the most highly funded feature of the project. Nurses who participated were paid for the time they spent making the extensive home-visits, and for cooperating with other health care agencies in the community as a way to

cultivate an extensive case file for each family who participated. Part of these visits involved information-based activity, where women were informed about what health-care facilities were accessible to their needs, where they were located, who to contact there, and so on.

As well, the extensive community-resource files were important features of tracking the women's participation in health-care, self-care, and behavioral changes that took place over the duration of the project (Ervin et al. p. 29).

Of the difficulties faced by the nurses in their participation, finding the time of day when the women would be home proved to be the largest obstacle. One solution that was proposed was to visit in the evening and on weekends; however, the personal safety of the nurse was weighed against providing services. Because home visiting in the evening was not a viable alternative in this community, the nurse used extensive telephone contacts to schedule and confirm appointments for home visits. Even with this approach, many women were not home when the visits were scheduled (Ervin et al. p. 30).

While the study concludes that their approach improved overall health awareness in the community, there is no evidence that there was any change or improvement in lifestyles of the women who participated. As such, the home-visits, telephone calls, and resource-files had no effect on smoking, or on reducing risk factors for lung cancer. While this had been one of the objectives of the study, its relevance seems to have been minimized by the authors as a way to promote the community-based approach towards health care in low-income areas. As well, the extensive funding this project received is also situated as an exceptional aspect of the study, and so fails to provide realistic initiatives that can be generalized to wider nursing populations.

Wilby (1999) describes prevention and intervention based programs that can be generalized towards a larger nursing population, and offers a significant variety of approaches towards implementing smoking-cessation programs. Here, the emphasis is explicitly on reducing lung-cancer (Wilby 53). All of the interventions indicated by Wilby are also viable options for nurses working in the primary-care facility, thus eliminating the difficulties of community-based programs. For example, Wilby (1999) details the ways a change in diet can influence the effects of withdrawal and cravings experienced by smokers (p. 58).

To discourage tobacco use, furthermore, Wilby advocates that all clinicians should begin by creating a smoke-free environment and positive role modeling, the latter of which is a means of lowering the acceptability of smoking. As this is common-practice in primary-care facilities, Wilby insists that the appearance of physicians and nurses smoking is enough to legitimize smoking for those who are in long-term care (1999, p. 58). In fact, Wilby makes a strong argument for nurses to model non-smoking behaviors, as patients who are in the process of quitting are highly susceptible to the smell of smoke in hair, and on clothing. As well, patients in long-term care and who are mobile will have the option of “stepping outside” for a cigarette. Seeing primary-care practitioners and nurses in this situation merely reinforces the acceptability of smoking (Wilby, p. 59).

In the implementation of smoking-cessation programs, Wilby provides extensive approaches towards working with the patients, including the process of encouraging the smoker to consider stopping as an essential factor in successful smoking-cessation programs. Personal will and the motivation to stop are most important factors in stopping smoking (Wilby, p. 59).

Once the tobacco user has agreed to stop, Wilby indicates how efforts should be made to assist the individual in following through with the decision. One way is through providing educational materials, and working with the patient in setting a date for the quitting. In this aspect of smoking-cessation, the nurses’ participation with the patient’s own agenda is crucial as a support device (Wilby, p. 59).

As well, there are various educational materials that can be provided through the National Cancer Institute, the American Cancer Society the American Academy of Pediatrics, and other organizations. As well, consideration may be given to providing nicotine gum or patches those who smoke one pack or more per day, and for those patients who are able to participate in clinic-based programs, nurses can make referrals to intensive smoking cessation programs.

Patients in long-term care do require long-term assistance in stopping smoking, and because the dominant interactions here are between the nursing staff and the patients, it is the nurses who are in the position to make the difference (Wilby, p. 60). Contrary to Ervin et al’s (1999) extensive and expensive program, Wilby’s (1999) discussion provides pragmatic suggestions for implementing a smoking-cessation

program with patients in long-term care at a hospital. In all instances, whether long-term care or short-term care, patients are in a position to benefit from nurse-based interventions. As Wilby writes,

Nurses must also assume a more active role in advocating for health care policies that ensure access to necessary health education and screening services. Nurses must also serve as role models for health-promoting behaviors and implement strategies for smoking cessation...(p. 60)

While this seems extreme, it is a sentiment that recognizes the influence nursing has on patient behavior, and provides nurses with a health-care agenda that includes not only professional, but personal interests as well. This may be the significant difference in the ways nurses can implement smoking-cessation programs (p. 61).

SMOKING-CESSATION AND RELAPSE

While there are no ambiguities about the reduction of lung-cancer in relation to smoking-cessation programs, there are high incidents of relapse in smoking-cessation (Wadland et al. 1999). According to their study, Wadland et al. found that not only were nurses in primary care practice a crucial influence in implementing these smoking-cessation programs, it was in the effects of follow-up assistance that differences between those who relapsed and those who successfully quit emerged (Wadland et al., p. 716.)

As their study reports, "...[n]urses in primary care practices ... can be trained to deliver effective relapse-prevention counseling during office visits and by telephone. Our study showed an increase in the reported rates of smoking cessation by using these counseling methods." (Wadland et al. 1999, p. 715)

According to Wadland et al.'s research, physician-based advice on smoking-cessation was first documented as effective by Russell (and colleagues) in 1973 (Wadland et al., p. 716). What has since emerged in the research on smoking-cessation is that brief advice from a physician alone results in quit-rates of less than ten percent (p. 716). Wadland et al.'s (1999) study provides an evaluation that responds to the relation between primary-care intervention and smoking cessation by comparing two approaches: one approach involved the intervention assistance of nurses and telephone counselors, and the second approach engaged telephone counselors alone (p. 717). Furthermore, Wadland et al. set out to evaluate the feasibility

of training nursing staff in the use of "...computer-prompted relapse prevention counseling," (p. 717) as a way to reduce the burden being assumed by the nursing staff in the intervention programs.

As such, Wadland et al. (1999) produce a study that offers practical options for nurse-implemented smoking-cessation programs, and one that does not depend upon an excess of external funding or resources.

In addition to paying the nurses for the extra training in intervention-based counseling, Wadland et al. introduced a software program designed to provide prompts for dealing with relapse prevention. This program, "I'd Rather Cope Than Smoke" (p. 718) prompts counselors to ask smokers about relapse situations and assists in developing personalized coping strategies. The program lists more than 70 relapse situations and 90 coping responses.

In effect, the use of this technological assistance not only reduces the nurses' personal time in learning the most successful responses to relapse-prevention situations, it supplements the usual information base with tested protocols for addressing these issues. More than handing out pamphlets of information, this program participates with information that is specifically designed to deal with relapse, which is one most likely consequences of smoking-cessation program participants (Wadland et al., p. 718).

The empirical results from this six-month study reveal variable rates of success in smoking-cessation. Those who participated for the longest period of time enjoyed a higher success rate than those who participated for only a short period of time.

However, as an initial and innovative approach to the problems of relapse, this study proved to be the most efficient in addressing both the needs of the nurses and the smoker-participants in terms of assistance and support.

While the physicians and nurses both commented that financial incentives, and comprehensive scheduling were needed to sustain the program, all reported continuing a variation of nurse counseling for relapse prevention using written documentation after the withdrawal of the computer support services (Wadland et al., p. 720). As well, smokers were asked about program satisfaction at the 3-month follow-up, and one hundred percent of the participants responded that their experience with the program was positive.

Finally, Frenn & Malin (1998) report on the relations between what are called “transtheoretical” models of intervention in smoking-cessation programs. They report that “...research based on these models consistently identify the importance of benefits of and barriers to behavior, self-efficacy behavioral intention, and stage of change.” (p. 2). In other words, when people see the benefits as outweighing the barriers, self-efficacy behaviors develop into more intentional behaviors, and these, as motivation, play a significant role in assisting the smoker to alter his or her smoking-relation behaviors.

Self-efficacy is defined as the belief in one's capacity to accomplish the desired action, and is essential to altering health behaviors. (Frenn & Malin 1998) “Self-efficacy is behavior specific...” (Frenn & Malin 1998, p. 5) meaning that beliefs about one's ability to stop smoking are absolutely reflective in the behavioral changes that one will make to make this belief a truism.

Basing their analysis in theoretical resources, Frenn & Malin (1999) report that self-efficacy, or self-care behavior, as well as subjective perceptions of self-efficacy is predictors that influence behavioral change. Frenn & Malin state:

Across studies, behavioral intention is a significant predictor of actual behavior. Nurses can ask their clients about what they plan to do within a specific time frame. Research[28] suggests that nurses can set goals with clients to begin their intended health behaviors within a 2-month period.
(p. 4)

In this article, Frenn and Malin offer specific and concrete practices for implementing an effective smoking-cessation program, one that includes a needs-assessment task, as well as setting out contractual arrangements with participants in goal-setting and quit-dates (p. 7).

While it is required that nurses change their own behaviors in-relation to intervention-based programs, Frenn & Malin provide the most feasible intervention programs, as there are no technologies or extra funding involved; rather, the participation is based on the ways nurses can incorporate transtheoretical knowledge into their daily practice (p. 7). It is, according to these authors, nurses' knowledge that makes for effective intervention programs, and smoking-cessation programs that are based on interaction-based knowledge, as opposed to technology-assisted knowledge, such as in Wadland et al's (1999) study. The difference is in the ways personal beliefs are cultivated in-relation to others, and nurses, as a patient's

resource, are in a position to participate in developing alternative behaviors in smoking-cessation through a grounded understanding of the stages of change, and adapting their responses with these stages of behavioral change.

CONCLUSION

Many studies of nurse-mediated smoking-cessation programs conduct their research in specialized contexts, or with specialized technologies, and with the extra-funding and resources to conduct these research-based interventions. In all the studies considered here, the most common denominator is the relationship between the nurse and her own knowledge of what is involved in smoking-cessation.

Furthermore, it is with personal experience with an understanding of what behaviors are involved in stopping smoking that nurses are best able to integrate the programs of smoking-cessation into their daily practice. Since time and funding are the most difficult resources for nurses to gain access to, advocating a theory-based protocol and practice, such as Frenn & Malin (1998) do, provides a language-base from which nursing staff are able to coordinate smoking-cessation programs. Programs based in language and knowledge about behavior in smoking-cessation enables the nurses to coordinate a program that does not involve special training, complex schedule-changes, extra funding and resources, counseling-based phone calls, or home visits. Furthermore, holistic approaches such as those advocated by Frenn & Malin (1998) are not geared towards behavior-modification, but are instead based on personal belief systems and cultivating the essential motivation required to begin a smoking-cessation program – this involves both the nurses, and the smoker-participants, on a lateral plane of participation. By eliminating the specialization of smoking-cessation trials, and humanizing the process to one of beliefs and needs, Frenn & Malin provide the most coherent, and most feasible approach towards reducing lung-cancer risk through smoking-cessation programs.

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