Focused Interventions for Smoking Cessation

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Abstract

Clinical Problem: The current basic intervention of advising and referring patients to quit smoking is inadequate to achieve full smoking cessation.

Objective: To determine if there are more focused interventions that could be performed by nurses to further help patients achieve smoking cessation. PubMed, CINAHL, and Google Scholar were accessed to obtain randomized controlled trials and current practices about interventions in regards to smoking cessation. The key terms used were nursing interventions, smoking cessation, randomized controlled trial, quit smoking, smokers, tobacco use, and smoking programs.

Results: The studies showed that smokers who received a more focused and intensive intervention were more likely to have sustained abstinence from smoking. The cessation rates did not show a statistically significant increase with the more intensive intervention. However, the studies showed that a more comprehensive and multidisciplinary approach might be needed in dealing with smoking cessation.

Conclusion: According to the Centers for Disease Control and Prevention (CDC, 2014), the clinical setting is an important network for the motivation of smokers to quit and the delivery of evidence-based cessation treatments. The literature shows that a more focused and intensive intervention positively affects the motivation to quit and complete smoking cessation.

Focused Intervention for Smoking Cessation

Smoking is the most preventable cause of disability, disease, and death in the United States. Five hundred thousand Americans die from tobacco use annually and more than sixteen million Americans suffer from health problems caused by smoking (CDC, 2014). Smoking leads to diseases such as lung cancer, chronic obstructive pulmonary disease, and heart disease (Osborn, Wraa, Watson, & Holleran, 2014). Despite these risks, there are still about forty two million adults in the United States who smoke cigarettes (CDC, 2014). Patient education is a big part of nursing and while education regarding smoking may increase awareness for our patients, there seems to be a lot more that could be done. Besides the basic intervention of advising and referring patients to quit smoking, are there more focused interventions that could be performed by nurses to further help patients achieve smoking cessation? Could a more tailored approach increase cessation rates among patients who use tobacco products? In patients who smoke, how do focused nursing interventions, such as phone follow up, when compared to basic intervention, such as cessation pamphlet or referral, affect the rate of smoking cessation within a period of six to twelve months?

Literature Search

PubMed, CINAHL, and Google Scholar were accessed to obtain randomized controlled trials and current practices about interventions in regards to smoking cessation. The key terms used were nursing interventions, smoking cessation, randomized control trial, quit smoking, smokers, tobacco use, and smoking programs.

Literature Review

One Centers for Disease Control and Prevention guideline for best practices and three randomized controlled trials were used to evaluate the effects of focused interventions for

smoking cessation. Cossette et al. (2012) used a randomized controlled trial to evaluate how feasible and acceptable a nurse-led intervention would be to participants, as well as to evaluate a post discharge intervention by a smoking cessation nurse specialist (SCNS). The study sample consisted of cardiac patients after discharge. The sample consisted of 115 patients hospitalized in the adult cardiovascular center. All were daily smokers. Forty patients were randomized with 20 patients being assigned to the control group and another 20 patients assigned to the experimental group. The control group received the usual referral to community care. The experimental group received weekly telephone sessions during first month and then once a month interventions up to the third month. The acceptability and feasibility of the intervention were confirmed. Both groups showed an almost similar cessation rates. The cessation rate for the control group was 30% and the cessation rate for the experimental group was 25%. The results of this trial showed that the cessation rates for both groups were similar at the end of the six-month period. The conclusion of this trial, however, showed that a more comprehensive, intensive, and multidisciplinary approach may be required in regards to smoking cessation because of the characteristics of smokers that have smoked for a long time with significant dependence on nicotine. The weakness of this study is that the randomized sample was very small. Since this was a preliminary study, only 40 participants were randomized. Another weakness is that only 57% of the participants were able to report after the six-month trial. For the analysis, the unreported participants were categorized as still smoking. One of the strengths of the trial was the random assignment of the control and experimental group. Reasons were also given as to why participants were not able to complete the trial. Another strength was that differences in characteristics and disease types between the control and experimental group were also explained. The recommendation grade for this study is low due to the very small sample,

short amount of time, and the low percentage of participants that were able to report back.

Skov-Ettrup, L. S., Dalum, P., Bech, M., & Tolstrup, J.S. (2016) designed a randomized controlled trial to examine the efficacy of proactive phone counseling, reactive phone counseling, and internet/text based intervention in smoking cessation. The study sample consisted of 1,810 smokers who were all participants in two previous national health surveys. The participants are all daily smokers, aged 16 years or above, owned a mobile device, and had an email address. The first group was the proactive phone counseling group (n=452) in which the participants were contacted by Quitline within the first week and then subsequently received five session that were all initiated by a counselor. The second group was the reactive phone counseling group (n=453) in which the participants were informed that free phone counseling is available for them with Quitline and were encouraged to call when they were ready to quit. The third group was the internet/text group (n=453) in which the participants were encouraged to go online and sign up with the provided link to the online program. The participants were sent tailored text messages and tailored e-mails in consideration to their chosen quit dates. The fourth group, the self-help booklet group served as the control group (n=452). The self-help group received a 36 page booklet which included advice on coping tactics and on how to identify difficult situations at different stages in the quitting process. After 12 months, a higher rate of abstinence was found in the proactive telephone counseling group at 7.3% compared with the control group at 3.6%. No clear evidence was found regarding the effectiveness of reactive telephone intervention or internet/text message intervention when compared with the control group. The strengths of the trial included participants being assigned randomly to different groups, blinded participant group assignment, and participants recruitment from the general population. The length of the study was also valid at 12 months. One weakness of this trial is

that all interventions were freely available to anyone. For example, the self-help control group has access to the third group's interventions, such as internet/text message intervention, so there was an implied risk of contamination between groups. In regards to the risk, less than 6% of the participants reported using any of the other programs not allocated to their designated interventions. The recommendation grade for this trial is high because of the large sample size, the adequate length of the trial, and the methodology used to find evidence in the abstinence rates.

Zwar et al (2015) performed a randomized controlled trial to evaluate the effectiveness of a customized smoking cessation intervention that was mainly provided by a practice nurse (PN). The study population in this trial consisted of 2,390 participants from 101 general practice clinics. All the participants are 18 years of age or above and smoked cigarettes daily or weekly. The first group acted as the control (n=678) and only received the usual care, which consisted of assessment and the offer to provide assistance according to practice, such as advice or referral to Quitline, or both. No other steps were taken to facilitate either the advice or the referral. The second group was the Quitline referral group (n=836) in which the participants received the usual care of advice and referral, with the addition of the providers facilitating the referral by completing a faxed form to Quitline. This group was then offered a series of free evidence-based telephone advice or counseling sessions from Quitline. The third group was the quit with PN group (n=876). The participants in this group were given assistance by the practice nurses to develop a quit plan and were offered telephone support from the nurses as well as face-to-face consultations depending on the participant's preference. The sustained abstinence rate was 2.9% for the control group, 4.4% for the Quitline referral group, and 5.4% for the quit with PN group. The results showed that participants who were given complete or even partial PN support had

higher rates in reporting sustained abstinence. The strengths of this study lie in the randomization of the trial, blind allocation of the participants, large sample size, and the length of the trial (12 months). A possible weakness is that the number of participants who took advantage of the intervention across all groups was low. For example, only 43% of the participants in the PN group came in to see the nurse. This trial is strongly recommended because of the large population of patients, wide demographics, adequate length of trial, and the methodology used to find evidence regarding sustained abstinence rates.

The CDC (2014) recommends that the Quitline be made available to all tobacco users who are willing to access the service. Evidence showed that phone interventions are more effective than self-help alone. The CDC (2014) also recommends institutionalizing smoking cessation interventions in health care systems and also integrating these interventions into routine clinical care. Evidence showed that more intensive and comprehensive interventions are more effective than the current usual care. The CDC's recommendations are highly recommended since they are evidence-based cessation interventions.

Synthesis

Cossette et al. (2012) showed that because of the characteristics of long-term smokers with significant nicotine dependence, a more comprehensive, intensive, and multidisciplinary approach may be required for smoking cessation. Skov-Ettrup et al (2016) also showed that a more intensive approach of proactively initiating smoking cessation support for smokers resulted in higher cessation rate of 7.3% compared to 3.6% with usual care. Furthermore, Zwar et al (2015) showed that smokers who received complete or even partial support from the practice nurse were more likely to achieve sustained abstinence from smoking (5.4% compared to 2.9% with usual care). Even though the evidence shows higher cessation rates, the low percentage of

participants able to report back regarding smoking status may have had an impact on the statistics. The low use of the different interventions across the board also suggests that the willingness and the stage of cessation of individual participants may have had an effect on the demographics of the samples. Additional research may be needed to determine the true effectiveness and value of the more focused interventions.

Clinical Recommendation

The CDC (2014) recommends Quitline as an effective, evidenced-based treatment approach that can be customized to different populations and increase cessation rates. Giving advice and a referral to Quitline are both standards for usual care. Research confirms that a more proactive and intensive approach, such as providers initiating the first Quitline contact is more effective for achieving smoking cessation. Research also shows that a multidisciplinary approach such as a tailored support and counseling from a practice nurse in combination with medical advice and Quitline referral significantly increases the rates of sustained smoking cessation. It is also important to note that the CDC (2014) recognizes the clinical setting as an important network for the motivation of smokers to quit and for the delivery of evidenced-based cessation interventions. A more focused intervention that starts in the clinical setting is another way to significantly increase smoking cessation rates and sustained abstinence.

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