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Special Article - Tobacco and Smoking Cessation

What Explains Provider-Delivered Smoking Cessation Counseling to Rural Medicaid Patients?

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Abstract

Tobacco use among the Medicaid population is almost double that in the general population. Health care providers are key in promoting smoking cessation. This study explored the influence of providers' attitudes, normative beliefs, and perceived behavior control on provider-delivered brief cessation counseling to rural Medicaid-enrolled smokers. Interviews were conducted with health care providers who regularly see Medicaid patients. The interview questions addressed three constructs of the Theory of Planned Behavior: 1) attitudes (towards Medicaid-enrolled smokers and the behavior of cessation counseling); 2) normative beliefs (perceptions of Medicaid administrators' interests in adopting a cessation program); and 3) perceived behavioral control (perceived ability to deliver cessation counseling). All providers delivered some cessation counseling to their patients despite not receiving reimbursement for counseling. Overall, attitudes appeared to be a major determinant of providers' delivery of cessation counseling. Providers perceived that a large proportion of smokers had no desire to quit, and they recognized that advising smokers to quit may be ineffective among smokers not ready to quit. However, they did not indicate that they were following the Clinical Practice Guideline Treating Tobacco Use and Dependence recommendations to encourage smokers to move towards getting ready to quit smoking by providing motivational interventions. Normative beliefs and perceived behavioral control did not appear to influence provider behavior. Training for providers on how to conduct brief motivational interventions to unmotivated smokers may be beneficial to promote compliance with the Guideline.

Keywords: Tobacco use; Smoking Cessation; Medicaid; Health care provider; Theory of Planned Behavior

Introduction

Medicaid enrollees have higher smoking prevalence than the general population [1]. In Ohio Appalachia, a rural area characterized by increased unemployment, poverty, and poor health, the smoking prevalence is 48% among working-age Medicaid enrollees [1], which is far higher than the general population (25.5%) in Ohio. Medicaid patients represent a priority population for tobacco control efforts [2]. Health care providers can play an important role in helping patients to quit smoking [3]. Even brief advice given in a five-minutes session by health care providers can improve smoking quit rates [3,4]. The U.S. Public Health Service Clinical Practice Guideline Treating Tobacco Use and Dependence encourages all providers to employ the 5 A's: Ask about tobacco use, Advise users to quit, Assess willingness to quit, Assist in the quit attempt by writing a prescription for pharmacotherapy and referring to counseling, and Arrange for follow-up [4]. In the general population, while 'ask' and 'advise' are delivered fairly regularly by providers [2,5] the remaining three A's are not commonly included in discussions with smokers [5]. The same appears to hold true in the Medicaid population. In a national sample of Medicaid current and former smokers, 87% reported being asked about smoking, 65% received advice to quit, 51% were assessed for their willingness to quit, 24% received assistance, and 13% had a follow-up visit arranged [2].

Given the significant role that providers can play and their modest performance of the 5A's, it is critical to better understand factors associated with delivering brief cessation counseling to patients. One theory that has been used to understand various provider behaviors is the Theory of Planned Behavior (TPB), a model that predicts behavioral intentions, which, according to the model, ultimately leads to behavior [6]. The three constructs of the model include behavioral beliefs (i.e., attitudes towards the behavior), normative beliefs (i.e., how others perceive the behavior), and perceived behavioral control (i.e., confidence in performing the behavior). In previous studies that used the TPB to explain the behavior of providing brief counseling messages to quit smoking, behavioral beliefs and perceived behavioral control explained much of the variance in the outcomes intention to give advice to quit smoking in the next 3 months [7] and actually delivering cessation advice [8]. The TPB framework has not been specifically examined for its relevance to provider behavior with Medicaid patients. By using qualitative research methods, our study thoroughly explored the TPB constructs as a way to understand what influences physician behavior when interacting with Medicaid patients. Our goal was to characterize the influence of attitudes, normative beliefs, and perceived behavior control on the provision of tobacco cessation counseling to rural Medicaid smokers.

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Table 1: Quotes Related to Behavioral Beliefs of the Theory of Planned Behavior.

Attitudes towards unsolicited cessation counseling and the impact on the provider-patient relationship
'Personally I don't have, don't have any concerns about that [providing unprompted cessation counseling]'.
'No, not at all [concerned about providing advice unprompted]. When the person comes in for an annual exam, we also talk about weight management, smoking, that type of thing'.
Attitudes towards cessation pharmacotherapy
'I would say I haven't found [pharmacotherapy] is much effective'.
'I really do not found it [smoking cessation pharmacotherapy] really effective, neither one of them very effective'.
'Chantix is probably the most successful [among] the three [Chantix, bupropion, and nicotine replacement]'.
Attitudes towards smokers
'The compliance [to pharmacotherapy] would be a little less in the Medicaid population but it's always a concern. I look at patients that they don't have the enthusiasm or the determination to follow, you know, solid medical advice and they want to do things the way they do things'.
'I think that [using tobacco to treat anxiety or depression] it's largely a societal thing actually. Especially among folks of the lower social economic class. It's kind of an acceptable way to treat certain anxiety issues'.
'They are really not [interested in smoking cessation counseling], most of them. They just kind of give us the lip service sometimes and say 'oh yeah, I want to do that but I'll get back to you when I am ready to start' but, so I really do not get very far with them. '
'There is hope that it would be successful but in reality it's unfortunate. The reality is that it [smoking cessation] is not really been very successful.'
'Most of them really don't see the need (to quit smoking)'.
'My Medicaid patients as a rule don't seem to have the inertia to stop smoking'.

Methods

Setting

This study was conducted with providers who work with Medicaid patients in the Appalachian region of Ohio. According to data from the 2012 Ohio Medicaid Assessment Survey, a statewide household survey of health and insurance, the Appalachian region experiences high rates of uninsured adults of working age (19.4% versus 17.3% in Ohio) and families in poverty (26.4% live below the poverty line versus 23.9% in Ohio) [1]. Medicaid coverage among working age adults is more prevalent in this region as well (17.0% versus 13.8% in Ohio) and, as indicated above, over half of Medicaid-enrolled adults in the Appalachia region are current smokers [1].

Qualitative interview methods

Health care providers were recruited for this study at two major medical centers that serve a large population of Medicaid patients in various counties in the region. Our contacts in the research department and tobacco dependence treatment program at these two medical centers actively recruited providers who regularly see patients with Medicaid. The qualitative interviews were performed by trained staff using a semi-structured interview instrument. All interviewers were trained by the Principal Investigator in interviewing and probing skills. The interviews were audio-taped and discussions lasted approximately 20 minutes. All providers received $20. The interview questions addressed the constructs of the TPB. The topics included: 1) attitudes towards the behavior (perceptions of Medicaid-enrolled smokers' interest in receiving physician delivered cessation counseling, perceptions of how smokers enrolled in Medicaid would embrace a smoking cessation program); 2) subjective norms (perceptions of Medicaid managed care plan leaders' interest in adopting a comprehensive cessation program); 3) perceived behavioral control (knowledge of effective tobacco dependence treatments and attitudes towards those treatments and perceived ability to deliver cessation counseling).

Coding and analysis

All interviews were transcribed by a trained transcriptionist. The investigators developed an initial coding frame based on questions asked in the interview guide as well as model constructs. The text from each interview was reviewed and coded independently by two of the investigators. Following an independent review, the two investigators met and discussed all of the coding assignments. Investigators developed new codes as new themes emerged from the interview data. When there was disagreement on a particular code, the investigators discussed the point until agreement was reached. All of the data were entered into Excel and the topics and codes were sorted to facilitate the analysis. The textual data were analyzed to identify recurrent patterns and themes related to the research questions. Quotations associated with each code were reviewed and analyzed and select quotes were chosen to illustrate the themes identified.

Results

A total of 10 qualitative interviews (with 9 physicians and 1 nurse practitioner) were conducted. However, one audiotape was lost; therefore, the analysis was performed with data from the remaining 9 providers. Detailed notes taken during the interview indicated that the responses by this provider were consistent with those given by the other 9 providers. The time to complete the interview ranged from 20 to 30 minutes. The providers represented multiple disciplines: primary care, cardiology, endocrinology, oncology, gynecology, and surgery. The number of Medicaid patients the providers reported seeing each week ranged from 5 to 90. The providers estimated that 10-90% of their Medicaid patients are current smokers with the average being 54%.

Behavioral beliefs

The behavioral beliefs that were discussed during the interviews included attitudes about providing unsolicited counseling to smokers, attitudes about smokers themselves, and attitudes about smoking cessation pharmacotherapy. (Table 1) includes relevant quotes that were made by the providers during the interviews. With respect to beliefs about providing unprompted counseling to smokers and how it may interfere with the provider-patient relationship, most providers were not concerned that unsolicited counseling would harm their relationship with patients. However, providers gave some examples of patients who responded negatively to smoking cessation discussions. One physician stated, "I have had one guy who came in and before I even asked him if he smokes or wanted to quit, he like got hostile. Said don't even talk to me about quitting smoking". Attitudes toward smoking cessation pharmacotherapy were also discussed with the providers. All providers had prescribed cessation pharmacotherapy to smokers in the past. However, many of the providers indicated that they believed that pharmacotherapy, in general, is not very effective in promoting smoking cessation. Chantix® was frequently mentioned by

Table 2: Quotes Related to Normative Beliefs of the Theory of Planned Behavior.

Perception of Medicaid
'With the current environment of health care and the financial crunch, I don't think they would be interested in it [adopting a comprehensive smoking cessation counseling program that starts in providers' offices]'.
'They know that if a patient quits smoking, it's going to reduce their costs in the long run, but they're more concerned with what their costs are by next year. If it's going to cost them $150 per patient to implement this program they may not be all that interested'.
'I think they [Medicaid] definitely should reimburse for programs for smoking cessation'.
'It's just when it comes to reimbursing, I've seem more cuts than adding'.

providers as a medication that is more effective than others.

Providers had a range of opinions of Medicaid-enrolled smokers. Largely, they tended to believe that smokers are not motivated to quit. They also expressed skepticism that Medicaid-enrolled smokers would be adherent to pharmacotherapy. Providers gave a range of factors that impact adherence, including a smoker's desire to quit, side effects of the medicine, and whether insurance would cover pharmacotherapy. When asked how successful smokers would be if they attempted to quit, these providers did not think many would be successful, largely due to barriers such as a smoker's willingness to quit, addiction, costs of pharmacotherapy, and lack of social support.

Normative beliefs

(Table 2) includes relevant normative belief statements made by providers during the interviews. Providers tended to believe that Medicaid administrators should be interested in encouraging smokers to quit through a formal program because smoking cessation would lead to fewer health care costs associated with treating tobacco-related diseases. However, they doubted that Medicaid would actually adopt a comprehensive smoking cessation program because of barriers such as cost and the perceived ineffectiveness of such programs. One physician stated that, "If it's going to cost them, you know, $150 per patient to implement this program, they may not be all that interested". When it comes to potential reimbursement for brief counseling, different opinions were stated. Most of the providers thought that Medicaid should reimburse providers who deliver smoking cessation counseling, but that Medicaid would not adopt such a model due to cost. One physician noted, "When it comes to reimbursing, I've seen more cuts than adding." Most providers noted they are already providing some cessation counseling with no expectation of reimbursement.

Perceived behavioral control

(Table 3) includes relevant perceived behavioral control quotes that were made by the providers during the interviews. Providers expressed confidence in their ability to deliver smoking cessation counseling. The few who indicated being less confident mentioned that they would be confident if they had appropriate training and the resources. Providers described not being too direct when advising smokers to quit, and most stated that they describe the adverse health effects of tobacco use, which they feel may motivate some smokers to quit. In addition, several providers mentioned that they are more likely to deliver counseling when the patients have health conditions related to tobacco use, such as respiratory disease. Many of the providers indicated that they backed off from the topic when patients are not very interested in quitting. The barriers providers perceived in delivering brief smoking cessation counseling included: 1) many smokers have no desire or willingness to quit; 2) tobacco is highly addictive; 3) lack of support for quitting because family members and friends smoke; 4) smoking cessation resources are limited for smokers and for providers; and 5) time restrictions make delivery of smoking cessation counseling lower on the priority list. (Table 3) gives relevant quotes that were made by the providers during the interviews.

Discussion

In the present study, we examined the factors that affect a provider's smoking cessation counseling behavior using the TPB model as a framework. From the discussions, behavioral beliefs appeared to be a major determinant of delivery of brief smoking cessation counseling. Normative beliefs and perceived behavioral control did not appear to affect provider behavior in delivery of smoking cessation counseling. Similar to previous findings, we found that while providers were well-informed of the importance of counseling patients, they were pessimistic about the effectiveness of counseling unmotivated smokers [8-9]. They correctly recognized that counseling smokers to quit may be ineffective among smokers who were not ready to quit, but they incorrectly believed that most smokers had no desire to quit. Trying to convince unmotivated smokers to quit smoking is a challenging task [3,10]. The Clinical Practice Guideline recommends that providers encourage all smokers, including unmotivated smokers, to quit tobacco use. For those who are unwilling to quit, the Guideline recommends that providers promote motivation to quit in the future by using brief motivational interventions. These interventions should incorporate the "5 R's" which include Relevance (linking smoking to a patient's personal situation), Risk (asking smokers to identify the potential adverse consequences of smoking and highlight the ones most relevant), Rewards (asking smokers to identify the most personally relevant benefits of quitting), Roadblocks (help smokers discover potential barriers to quitting smoking and solutions), and Repetition (repeat these interventions every time an unmotivated smoking patient visits the clinic). Carpenter et al. [11] reported that motivational interventions are effective in promoting cessation among patients who are unwilling to quit. Except for the 'relevance' recommendation, providers did not describe a pattern of routinely employing these techniques to enhance a smoker's motivation to quit smoking. This suggests that providers could benefit from additional training in motivational interventions. Such training may encourage providers to deliver tailored messages to unmotivated smokers that may eventually promote abstinence.

The findings in our study suggest that normative beliefs did not strongly influence providers. Other studies have also reported that normative beliefs were not associated with the intention to counsel patients [7,8]. Our providers reported engaging in at least some cessation counseling regardless of the fact that Medicaid does not reimburse for brief counseling in Ohio. Even though almost all providers believed that Medicaid should adopt a comprehensive cessation program, most of them doubted that Medicaid would actually do that because of the cost. Similarly, perceived behavioral control did not appear to be a crucial factor in delivery of brief

Table 3: Quotes Related to Perceived Behavioral Control of the Theory of Planned Behavior.

Confidence in counseling
'I'm skilled. I don't feel sort of barrier as to what to say [about smoking cessation counseling]'.
'I do it [smoking cessation counseling] a lot. It's something that I can deal without making the patients feel uncomfortable and I can give them good information'.
Experience with counseling
'We do that pretty much with every visit for someone we know is a smoker'.
'Pretty much. You know, I may miss one you know. And I look at the chart and if I'm seeing 25 patients in a very short period of time, I may miss someone that smokes, but they usually come back for a second appointment. And I hope I catch it the second time and I won't miss a smoker'.
Counseling barriers
'Some people enjoy smoking and they have no desire to quit. The second biggest barrier is just the addictive property of nicotine. Lack of resources primarily, lack of coverage for current medical options the nicotine medication treatment'.
'The rest of their family smokes and they're just around it so it's just difficult for them to get started or stay with it'.
'It's mostly time constraint. Behind every patient's you know[s] typically 3 or 4 other issues to get around and trying to get people in and out in a typical 10-15 minute office visit is challenging'.
'Maybe the recognition. Tobacco seems to be lower on the priority list for both myself and the patient'.

cessation counseling. All providers reported they had experience counseling patients to quit and stated that they were fairly confident in doing it. At the same time, some noted the need for better training and resources, which might suggest room for improvement. Specifically, given providers' pessimistic beliefs on encouraging unmotivated smokers to quit, providers might benefit from additional training on counseling this subgroup of smokers.

Provider-delivered brief cessation counseling is becoming more important in the medical field. The U.S. health care system has been shifting to a Patient-Centered Medical Home (PCMH) model, which is a model of comprehensive primary care for patients that involves improving accessibility of physicians, coordinating care with evidence-based approaches, using advanced information technology, and rewarding providers with enhanced reimbursement for improved patient access and outcomes [12]. Unlike traditional models of patient care, the PCMH model assumes that providers are responsible for all of the patient's health care needs, including preventive care [13,14]. Given the strong relation between tobacco use and various preventable chronic illnesses [15-17] smoking cessation is a high priority in PCMHs. It is important to note that the PCMH model does assume a team approach to the delivery of health care; thus, physicians will not be solely responsible for delivering this care. This model is consistent with the Clinical Practice Guideline's recommendations for a health systems approach to delivering tobacco dependence treatment [4]. For example, brief counseling can be provided by physicians with other team members delivering more intensive counseling.

To our knowledge, this is the first qualitative study with providers that explores patient-provider relationships related to smoking cessation counseling using the TBP framework. Qualitative research methods allow the researcher to explore topics in greater depth, and explain findings from quantitative studies. Our findings offer a unique perspective to issues related to provider-delivered smoking cessation counseling. Most importantly, we discovered that providers are not routinely using motivational techniques to help smokers feel ready to quit. This is an area on which to focus on future interventions targeting providers.

These providers represented a variety of specialties within medicine, which was an advantage to the study. One limitation of this study is that all of the providers are from the Ohio Appalachian region, which may not be representative of all Medicaid providers. A second limitation was that the sample size was relatively small. However, as we approached the end of our interviews, the study team determined that no new findings were emerging and we had reached saturation on our study topic. Per standards of qualitative research [18], we determined that our sample size was sufficient when we reached saturation. A third limitation was that only perceptions of Medicaid were asked to measure providers' normative beliefs. Coworkers and supervisors may also significantly impact providers' normative beliefs. This might be part of the reason that normative beliefs did not appear to influence providers' behavior. In summary, attitudes appeared to be the primary determinant of provider behavior in delivering smoking cessation counseling. Overall, providers tended to be pessimistic in offering smoking cessation counseling to unmotivated smokers, which could result in missed opportunities to increase quit attempts and cessation rates. Providers should be better trained on the benefits of brief motivational interventions and the strategies of how to effectively counsel smokers who are unwilling to quit.

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