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Research Article

Exploring Tobacco Use and Smoking Cessation Best Practices From the Perspectives of Individuals With Lung Cancer and Health Care Professionals

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ABSTRACT

Background: Lung cancer patients who continue to smoke after diagnosis are at increased risk of treatment toxicity, residual/recurrent disease, future malignancies, and all-cause mortality. Guidelines including those from National Comprehensive Cancer Network and Cancer Care Ontario advocate for screening, counseling, and access to smoking cessation services for all cancer patients; however, barriers from both patient and health care professional (HCP) perspectives contribute to lack of implementation.

Objective: The objective of this study was to identify the different perspectives among patients and HCPs in how the promotion of person-centred approaches may be used when offering smoking cessation services to patients who are receiving care within a regional cancer centre.

Methods: Qualitative data were generated using various methods, including focus groups with HCPs and interviews with patients. In total, 16 HCPs participated in three focus groups: including nine radiation therapists, five registered nurses, one registered dietitian, and one physiotherapist. Of 55 patients accrued, 19 were interviewed. Both focus groups and interviews were audio recorded, and the recordings were transcribed verbatim. Transcripts were then analyzed using narrative thematic analysis to define and identify themes.

Results: The identified themes were categorized into three topic areas: knowledge (eg, impact of smoking on illness and why they should not smoke); individual decision to quit (eg, motivators),

and the social unacceptability of smoking (eg, the public perception of smoking over the last 40 years). HCP-identified themes included identification of smokers, triggers to start a conversation, approach, gaps and barriers to cessation, rationale for cessation, and judgment. Patient-identified themes included knowledge, individual decision to quit, and the social unacceptability of smoking.

Conclusion: Understanding patient and HCP perspectives on smoking cessation will help influence practice to ensure that patients are not judged, assumptions are not made, and individualized and person-centred care is provided. HCP awareness of these themes and the patient perspective may challenge assumptions and values.

RÉSUMÉ

Contexte : Les patients atteints d'un cancer du poumon et qui continuent de fumer après le diagnostic présentent un risque accru de toxicité du traitement, de maladie résiduelle/récurrente, de tumeurs malignes futures et de mortalité de toutes causes. Les lignes directrices comme celles établies par le National Comprehensive Cancer Network (NCCN) et Action Cancer Ontario (ACO) proposent le dépistage, les conseils et l'accès à des services pour cesser de fumer pour tous les patients atteints d'un cancer; cependant, les obstacles tant du point de vue des patients que de celui des professionnels de la santé contribuent aux difficultés de mise en œuvre.

Objectif : L'objectif de cette étude était d'identifier les différents points de vue des patients et des professionnels de la santé sur la fa-

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çon dont la promotion des approches centrées sur la personne pouvait être utilisée dans l'offre de services pour cesser de fumer aux patients qui reçoivent des soins dans un centre régional de cancérologie.

Méthodes : Des données qualitatives ont été générées en utilisant différentes méthodes, dont des groupes de discussions avec des professionnels de la santé et des entrevues avec des patients. Au total, 16 professionnels de la santé ont participé à trois groupes de discussion: neuf radiothérapeutes, 5 infirmières autorisées, une diététiste et 1 physiothérapeute. Dix-neuf patients sur 55 ont été rencontrés en entrevue. Les groupes de discussions et les entrevues ont été enregistrés sur vidéo et les enregistrements ont été transcrits. Les transcriptions ont ensuite été analysées à l'aide de l'analyse narrative thématique pour définir et identifier les thèmes.

Résultats : Les thèmes identifiés ont été regroupés sous trois domaines principaux: connaissance (par exemple, effet du tabagisme sur la maladie et pourquoi ils ne devraient pas fumer); décision

individuelle de cesser de fumer (par exemple, facteurs de motivation); et acceptabilité sociale du tabagisme (par exemple, l'évolution de la perception de l'usage du tabac au cours des 40 dernières années). Les thèmes identifiés par les professionnels de la santé comprenant l'identification des fumeurs, les façons de lancer une conversation, l'approche, les lacunes et les obstacles à l'abandon du tabac, la justification de l'abandon, et le jugement. Les thèmes identifiés par les patients comprenaient les connaissances, la décision individuelle de cesser de fumer et l'inacceptabilité sociale du tabagisme.

Conclusion : Comprendre le point de vue des patients et des professionnels de la santé sur l'abandon du tabac aidera à influencer la pratique pour faire en sorte que les patients ne soient pas jugés, que des hypothèses ne soient pas faites et que des soins individualisés et centrés sur la personne soient donnés. La sensibilisation des professionnels de la santé à ces thèmes et au point de vue des patients peut remettre en question les hypothèses et les valeurs.

Keywords: Oncology; cancer education; lung cancer; smoking cessation; interprofessional team

Introduction

Lung cancer is a leading cause of cancer deaths for men and women [1]. In Canada, annually, there are 25,000 new diagnoses and 20,000 deaths, accounting for 27% of all cancer deaths [2]. Lung cancer patients who quit smoking have less toxicity and better outcomes [3]. There is a decreased risk of recurrence and of further smoking-associated malignancies [4–8]; however, implementation of smoking cessation in patients with lung cancer in many cancer centres has been challenging [5–7,9–18]. Consequently, up to 25% of smokers continue to smoke during and after cancer treatment [19,20]. The aim of our study was to use a qualitative approach to explore the perspectives regarding tobacco use and smoking cessation of patients with lung cancer and the HCPs who provide their care.

It has been described that some HCPs have concerns that asking patients with lung cancer about tobacco use and intentions to quit smoking could potentially increase stigma, shame, and blame [9] and may not feel adequately trained or educated to initiate the counseling process. The negative outcomes related to smoking during and after malignancy have prompted cancer centres and organizations to implement programs and policies relating to smoking cessation aiming to increase the proportion of cancer patients who successfully quit and/or reduce their smoking [13,21–24]. In both the National Comprehensive Cancer Network 2016 guidelines on smoking cessation and the Cancer Care Ontario (CCO) guidelines [21,22], there is recommendation for screening and evaluation of smoking history, counseling, and access to cessation services for all cancer patients along with appropriate follow-up as part of the overall treatment prescription. Although the CCO guideline advocates for smoking cessation counseling, it specifically describes the lack of direct identifiable evidence in the review of the literature supporting the benefit of smoking cessation counseling by HCPs [22]. Furthermore, the literature describing explicit triggers,

barriers, and effective strategies in smoking cessation counseling from HCP and patient perspectives alike are lacking.

A study that explored cancer patient–provider communication regarding smoking cessation in a population of patients with both lung cancer and head and neck cancer [25] provided practice recommendations for communication. However, participants were confined to early stage disease, stage I or II, and thus a gap in the literature exists for advanced or metastatic disease. Knowledge of the patient perspective for individuals with lung cancer, at all stages of cancer, regarding tobacco use and smoking cessation, is largely unknown, and knowledge of the HCPs perspective regarding asking patients with lung cancer about tobacco and smoking cessation is also lacking. Another qualitative study investigating smoking cessation in patients with head and neck cancer found that those highly perceived to have difficulty quitting were more likely to be enrolled in smoking cessation programs than those in whom the difficulty was not estimated to be as great [11]. Variability also exists in whether a new diagnosis of cancer may increase or decrease the motivation to stop smoking. A new cancer diagnosis motivates some but also discourages others [5]. Lower rates of smoking cessation have also been described in patients with less severe forms of cancer who needed less invasive treatments [16]. Physician advice can improve smoking cessation rates by up to 30%, with drug therapy and counseling, improving smoking cessation by 40%–60% at the end of treatment and 25%–30% at 1 year [18].

One perceived barrier is the stigma associated with persons who have lung cancer as being a self-inflicted disease that often results in death. Although motivation to quit smoking is often high after a cancer diagnosis [6,25–27], and national and regional guidelines are generally concordant in their recommendations for smoking cessation, a large proportion of cancer patients neither screened nor referred to appropriate smoking cessation programs [14]. The Odette Cancer Centre (OCC) is one of the largest specialized comprehensive cancer

centres in North America. Beginning in 2009, a smoking cessation program was implemented with a designated counselor to screen and counsel all patients within the Cancer Program at OCC. In 2011, this role was transformed to create an Interprofessional (IP) Smoking Cessation Team, which included a registered nurse, radiation therapist, occupational therapist, and oncologist for the purpose of implementing and integrating smoking cessation best practices into daily clinical care. The IP approach reinforced smoking cessation interventions at all points of care, improved access and support, and strengthened organizational capacity to sustain this best practice over time. The team worked collaboratively with IP colleagues to integrate this novel model based on the 5As (Ask, Advise, Assess, Assist, and Arrange) across clinical settings and treatment modalities [28]. The program adopted a decentralized model to optimize the use of existing internal and external resources to build capacity and ensure sustainability. Although the program was grounded in evidence and supported by clinical infrastructure, there continued to be resistance in expanding these programs with anecdotal concerns from the implementation team with respect to both patient and HCP perspectives on smoking cessation.

Methods

A qualitative approach was used to elicit participant perspectives. The approach included the use of focus groups and key stakeholder interviews, depending on the study population (patient or HCP).

HCP Population

Health care professionals caring for patients with lung cancer were recruited from the Odette Cancer Program via email invitation to participate in focus groups of up to 8–10 participants consecutively. A third focus group was held to present and discuss preliminary data analysis findings. HCPs self-identified by calling the research assistant and completed consents for participation. In total, 16 HCPs were placed in three focus groups, including nine radiation therapists, five registered nurses, one registered dietitian, and one physiotherapist from August to December 2013.

Patient Population

Inclusion criteria included diagnosis of lung cancer, current or former smoker, 18 aged \geq years, and English fluency. Posters were displayed in the waiting areas of the Odette Cancer Centre, including clinic rooms and elevators. Patients self-identified their interest by calling the research coordinator as directed. Consenting individuals participated in one interview session, either in person or over the telephone, and, at that time, provided baseline demographic information, including age, gender, date of cancer diagnosis, number of years smoking, current smoking status, and number of previous quit attempts. The size of the patient population was based on the number of participants required to gain a full range of participant perspectives. The iterative sampling technique enabled

the development of analytic categories until saturation is achieved. Of 55 patients accrued, 19 were interviewed from August to December 2013.

A semistructured approach was locally designed and used, which included primary questions and question probes to guide the patient interviews and health care professional focus groups. Both focus groups and interviews were audio recorded in their entirety. The recordings were transcribed verbatim and subsequently destroyed. The interview guide for patients included the data collection for demographics, which occurred at the beginning of the interview as a strategy to build rapport and increase comfort. Interviews were conducted by a research associate trained in qualitative methodology/interviewing and smoking cessation best practice. Exploratory questions were asked about how discussions with HCPs were initiated regarding tobacco use and smoking cessation, patient perspectives related to the discussion, communication style of health care providers, barriers and facilitators to discussing smoking cessation, and discussion of stigma related to lung cancer and smoking. Questions asked of HCPs included methods to identify smokers and then mirrored patient interview questions, including initiating discussion of smoking cessation, communication style, assumptions of patient perspectives related to smoking cessation, barriers and facilitators to discussing smoking cessation, and discussion of stigma related to lung cancer and smoking.

Data Analysis

Simple descriptive statistics, such as means and frequency counts, were used to analyze demographic data for the patient population. A qualitative descriptive approach was used to analyze the focus group and interview data. Multiple readings of each focus group and patient transcript were analyzed using narrative thematic analysis through the process of coding. Steps included preliminary familiarization with data, generation of initial codes (with the generation of a coding manual), searching for themes among codes, reviewing themes, defining and naming themes, and producing a report. Four investigators independently read and coded all the transcripts and discussed analysis and coding throughout the process of coding. Careful evaluation of data by these investigators confirmed the general findings with critical questioning of the analysis through researcher triangulation. Records of each focus group transcript were maintained for references and checks.

Ethics

Institutional ethics review approval was obtained for this study.

Results

Emerging Themes From HCPs

A total of 16 HCPs were placed in three focus groups, including nine radiation therapists, five registered nurses,

one registered dietitian, and one physiotherapist. Emerging themes included: identification of smokers, triggers to start a conversation, approach (palliative, HCP perception of patient's receptivity, repetition, and reinforcement), gaps and barriers, rationale for cessation, and judgment.

Identification of Smokers

Cigarette smell and patient smoking history were the dominant ways to identify smokers. Triggers to start a conversation involved smell, disease site, and if the patient brought up the topic themselves.

I wouldn't (begin that conversation). You see if people are a smoker. Or if I don't even know if they're a smoker but I can smell the smoke ask them are they are a smoker and ... did the doctor explain to you blab, blab....what would I do with everybody that I thought (smoked), if I hadn't already talked to them before about it.

Approaching Patients

Factor affecting HCPs' tendency to approach patient was foremost the *perception of patient receptivity* in a subjective sense during an encounter. The dominant factor influencing HCPs from not approaching smoking cessation was *palliative patients*, as there is a common belief that given a limited prognosis, one should avoid dampening the patients few joys in life such as smoking.

If that's one of the things that they enjoy ... you don't obviously know but their probably not necessarily going to live that long then why take that away from them really, I mean really.

Reinforcement and repetition strategies were thought to be the most effective by HCPs. Specifically reinforcing how tough it is to quit and that cutting back (reducing tobacco per day) is encouraged, that every little bit is recognized. Repetition was identified in the context of repeating the message and acknowledging the daily efforts and offering continual emotional and practical support.

Reinforcement "I would say are you still smoking or have you quit or if they have quit I really reinforce how great that was and how difficult that would (be),... or just give that positive reinforcement if they have quit or they have been cutting back."

Repetition "Acknowledge their efforts on a daily basis and even if they say I managed yesterday smoking four, five, or six cigarette. Say, fine, at least you tried. Good maybe tomorrow will be better. Acknowledge the fact that they are actually trying to do something."

Gaps and Barriers to Smoking Cessation

HCPs identified factors that interfered with smoking cessation such as not having enough tools (eg, training, cessation aids, minimal literature, and patient education materials), poor documentation, lack of time to develop rapport/be involved in the process, no training on addiction, and lack of confidence.

Having the time and place to sit and talk with them sometimes. I'm just very rushed in the clinic and you don't get the time you need and a place that you can actually talk in private

I findbecause we are not able to get as involved, as sometimes they would like more than we are able to offer them and the physicians aren't able to get involved with participation so they are asked to go to the family doctors.... so it (is) not uncommon that they'll ask for more in depth assistance than we can provide them. They have to go seeking it you know and they have to have that motivation and that initiative to then take it to another physician.

As a therapist I don't feel that I have enough training ... to deal with addiction..... in our training we are not trained to... deal with that aspect of our job. It's not something that we are trained to do....I feel sometimes I don't have ... enough information to give them, so I think that lacks. Maybe we would have a little bit of more in that area.

The rationale for cessation was understood to include lowering the risk of recurrent or new cancers in the future, treatment being less effective while smoking, safety issues with oxygen, and overall improvement in lifestyle and health.

Judgement

Two concepts of judgment were discussed by HCPs. The first involved challenging the patient who denies the role of smoking in their disease.

... but I will say, realistically the smoking is probably part of this (the disease), I understand you don't think it is but I won't let them get away with hearing that it isn't because hopefully they hear it from enough of us maybe they are going to (quit).

The second involved HCPs' desire not to add to blame/guilt. It is understood that many patients feel they are themselves responsible for causing their cancer because of their smoking and feel ostracized because of negative judgement placed on them, especially if unable to quit during treatment.

Addiction was discussed in relation to lack of personal experience among HCPs with smoking and being unable to relate from a personal level. Some identified understanding addiction with regard to chemical dependence and nicotine, whereas others identified accountability as a theme and felt that it is the responsibility of the patient to conclude for themselves that they need help.

Emerging Themes From Patients

Nineteen individual patient interviews were conducted with a mean age of participants of 74.5 years (range 51–87 years); participants had smoked more than 20 years with three participants still smoking at the time of the interview; all participants had tried at least one quit attempt, and all except one were all diagnosed from 1 to 5 years before the time of the interviews.

The identified themes were categorized into three topic areas: knowledge (eg, impact and why they should not smoke), individual decision to quit (eg, motivators), and the social unacceptability of smoking (eg, the public perception of smoking over the last 40 years). Themes from the patient perspective and/or experience included discussion focused on the difficulty in quitting, family impact (influence, support, and enabler), individual decision to quit, socially unacceptable, harm recognition, uncertainty on how to approach quitting, accomplishment in quitting, and time left/stage of cancer (similar to theme identified within HCPs).

...I remember even when my dad died 20 something years ago, he said to me you know I wish I would quit smoking and I didn't listen to him. You see even then, it's all ... because he was a smoker, my dad you see.

you know smokers have become so defensive because it's like everyone ... sees them as the pariah and they have become very defensive because there are a few, not many places you can smoke anymore.

Themes relating to HCPs included the importance of HCP addressing smoking, HCP's view of the relationship between smoking and lung cancer diagnosis, and HCPs' lack of inquiry.

...and if you need some help and you're honest about it and you really want to quit then you should have it available.

... but I think just being open about it and offering the resources ... you've got, and people are open about it there and there seems to be a lot of good resources.

Discussion

Although among HCPs the smell of cigarette smokers was commonly stated as a trigger to initiate a conversation, this may miss a proportion of smokers with less perceived need for support [11] and highlights the importance of strategies by provincial and national leaders to include screening as a priority. A common reason for not starting the discussion was perceived patient receptivity and in palliative patients, as it was felt not to be worth the effort or to allow the patient to enjoy smoking without the guilt/stigma. This is despite the myriad of benefits of smoking cessation to lung cancer patients in all stages, reflecting the ongoing need to educate HCPs about the benefits, and of the high motivation/openness of patients to quit smoking following a new cancer diagnosis [3–8].

Regardless of apparent patient perceptivity, it has been shown that starting the discussion can increase motivation [4], and we identified techniques, such as repetition and reinforcement, that were seen by patients as vital to quitting. The current CCO guidelines were published approximately 1 year after the completion of the patient interviews described here; however, at that time, no studies were identified directly

supporting smoking cessation counseling in their review [22]. Our qualitative data support their recommendation for HCP-mediated counseling in the context of the larger body of work describing the quality of life improvements with smoking cessation with addition of behavioral and pharmacological adjuncts to counseling where possible. However, a limitation in this study is that only 3 of 19 patients interviewed were current smokers, and there may be significant differences in the population of current smokers and for those patients who did not self-identify for the study. In such patients, the identified themes may not as strongly resonate. Nonetheless, continued support and educational training for HCPs, including being informed on the benefits on the quality of life and on treatment outcomes, are important themes moving forward in addressing smoking cessation in patients with lung cancer at OCC and other cancer centres.

Smoking cessation must be a mandatory part of the lung cancer treatment prescription similar to surgery, radiation, and chemotherapy, given its role as a prognostic and predictive marker in lung cancer outcomes. This can be initiated by any member of the IP team including physicians, nurses, pharmacists, social workers, radiation therapists, registered dietitians, occupational therapists, speech-language pathologists, and physiotherapists. The quit attempt when supported by the IP team and patient's family/social supports allows for improved, consistent communication between HCPs and families that is strengthened by linkages to both psychosocial and pharmacological (nicotine replacement therapy) support. Our patients countered perceived notions that they do not want HCPs to say anything—they expect and need them (us) to broach the conversation. Future work will investigate ways to improve HCP and patient education relating to smoking cessation best practice.

Conclusion

Understanding patient and HCP perspectives on smoking cessation will help influence practice to ensure that patients are not judged, assumptions are not made, and individualized and person-centred care is provided to all, regardless of diagnosis and stage of disease. These themes when shared with health professionals may increase the opportunity to deepen their understanding of the patient perspective, reflect on their personally held assumptions and values, and provide insight into communication techniques that patients find most effective.

Footnotes

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