Smoking Factsheet

The experience of the cancer survivor

Strong and consistent evidence has demonstrated poorer outcomes in individuals who smoked before a cancer diagnosis and in those who continue to smoke.[1] Preventing cancer survivors from starting or returning to smoking and helping others to quit is increasingly important.[3] After a cancer diagnosis, particularly in people with cancers of the lung or head and neck, individuals who continue to smoke have increased risk of disease progression as well increased morbidity and mortality.[1, 3, 4]

Key facts

- It is estimated that approximately one-third of individuals with head and neck cancer continue to smoke after diagnosis.[2]
- Adult survivors who continue to smoke after their diagnosis with cancer have: [1, 3]
  - Increased risk of disease progression and mortality
  - A poorer response to treatment
  - Increased number of toxicities and complications of treatment
  - Increased risk of developing a second primary cancer
    - a four-fold increase in risk reported in individuals with small cell lung cancer who continue to smoke over those who quit at diagnosis[4]
  - Lower rates of survival than people who stop smoking
    - more than double the risk of death in individuals who continue to smoke after a diagnosis of early stage lung cancer[4]
- Smoking and alcohol consumption have a synergistic, multiplicative effect rather than an additive effect on the risk of cancer recurrence[5]
- Conversely, smoking cessation has a positive effect. After a diagnosis of a primary lung tumour it has been associated with improved outcomes:[4]
  - Life table modelling based on meta-analysis data estimates 33% five year survival in 65 year old patients with early stage non-small cell lung cancer who continued to smoke compared with 70% in those who quit smoking.
  - It is hypothesised that most of the benefit from smoking cessation is due to a reduced likelihood of cancer progression rather than a reduction in cardiorespiratory deaths.
- Motivation and interest in smoking cessation greatly increase following cancer diagnosis and this could be an effective time to implement a cessation intervention.[6]

Recommended intervention strategies

For survivors who do not use tobacco, health professionals need to emphasise the importance of remaining abstinent.[3]

For survivors who smoke, health professionals need to offer at least a brief intervention to promote smoking cessation. Evidence is accumulating to support the role of motivational interviewing in smoking cessation.[7]

The 5 A's approach has also been recommended as an intervention framework:[3]

1. Ask: Ask and document each patient's tobacco use status at every clinic visit
2. Advise: In a clear, strong, and personalised manner; urge all tobacco users to quit
3. Assess: Determine patient's willingness to make a quit attempt within the next 30 days
4. Assist: If the patient is willing to make a quit attempt, help the patient to quit
5. Arrange: Schedule follow-up contact close to patients stated quit date to reinforce success or intervene as needed if they have relapsed

Quitline has been demonstrated to be a highly effective cessation support, and health professional referrals are an established mechanism for Quitline engagement. Referral to Quitline could be included as standard in survivorship care plans for all people who smoke.[6]

- Smoking Cessation Referral Form

Characteristics of effective smoking cessation programs include:[3]

- Attention to health risk behaviours that may impact smoking status and smoking cessation
- Designing intervention content around a theoretical framework
- Tailoring intervention content to a survivor's 'stage of readiness' to quit smoking
- Using peers to deliver intervention content
- Regular reinforcement of the importance of smoking cessation
- A combination of nicotine replacement therapy or other pharmacotherapy and behavioural strategies for smoking cessation
- High intensity delivery over multiple sessions

Smoking, alcohol use and depression are interrelated and highly prevalent in individuals with head and neck cancer, adversely affecting quality of life and survival. A tailored intervention for individuals with head and neck cancer was developed and tested involving cognitive behavioural therapy, nicotine replacement therapy, and selective serotonin reuptake inhibitors.

The intervention increased smoking cessation rates by 50% over and above enhanced usual care. The intervention was not differentially efficacious in reducing drinking or depressive symptoms.[2]

Challenges have been identified for survivors attempting to quit smoking including:[6]

- long histories of smoking
- pressure for immediate quitting
- high levels of stress and distress
- delayed relapse
- medical contraindications to certain pharmacotherapies

Key Resources

Quitline – Australian Government website
Quitline - 137848
Stopping Smoking. Cancer Council Australia Position Statement
Smoking in Cancer Care (PDQ®). 2013 National Cancer Institute
Cancer Survivors Supporting Each Other To Quit Smoking (On-line forum)
A place for cancer survivors to help each other quit smoking and get quitting information specific to their needs.
Smoking Cessation Guide for Cancer Patients and their Families. 2005 Memorial Sloan-Kettering Cancer Centre
Cancer Survivors and Smoking (US Data)
Quitting Smoking after Cancer Treatment Dana-Farber Cancer Institute
Motivational Interviewing used for smoking cessation:

- The Effective Physician: Motivational Interviewing Demonstration
- The Ineffective Physician: Non-motivational Approach

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