The Relationship Between Type II Diabetes and Smoking

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"How can we most successfully educate type II diabetics of all ages who are current smokers about the high risk that smoking poses on the progression of their diabetes and support them to quit smoking?"

Type II diabetes and smoking are two of the biggest health issues in current New Zealand context. The current New Zealand health targets for 2016/2017 (Ministry of Health, 2016) include "providing better help for smokers to quit" and "raising healthy kids", which highlights that obesity is increasing in all areas of society and a high BMI is now the leading health risk in New Zealand (the primary indicator of developing type II diabetes), closely followed by tobacco smoking (Ministry of Health, 2016). Research around the relationship between smoking and type II diabetes shows strong evidence for smoking being a causal factor in developing type II diabetes (Chau et al., 2015). The strong link between the two factors shows that smokers are 30 – 40 percent more likely to develop type II diabetes than someone who doesn't smoke (Centers for Disease Control and Prevention, 2017).

Literature Review

- Being a smoker is often associated with other unhealthy behaviours that can favour weight gain such as poor physical activity, lack of a healthy, balanced diet and a higher alcohol intake (Willi, Bodenmann, Ghali, Faris & Cornuz, 2007).
- Studies completed by Chau et al. (2015) found that deniability and perceived lack of association about the link between diabetes and current smoking status was also another large barrier to smoking cessation.
- There are specific needs for type II diabetics around smoking cessation education related to their diabetes and a lack of awareness around the connection between the two health factors (Sherman, 2005).
- Padmawati, Ng, Prabandari & Nichter (2009) discusses that when questioned, individuals do not associate smoking with increased blood glucose levels or complications of diabetes, even though they are aware of all the other common conditions that smoking is known to be associated with such as cancers, hypertension and lung disease

Recommendations

- Include education about relationship between smoking and diabetes disease causation and progression in annual diabetic checks.
- Include brief smoking cessation advice and support as part of every interaction with relevant health consumers (including annual diabetic checks).
- As a health care provider, be available and accessible to the client for education and support.

Conclusion

Type II diabetes and smoking are very prevalent in the current New Zealand population. There is large potential to decrease these statistics by successfully educating and supporting affected people and the general public about the strong correlation these two health factors have. It will be important to include addressing the lack of awareness, misconception and deniability of this correlation, the importance of the health professional's role in bringing about health behavior change and the importance of ongoing support and use of available, accessible resources.

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Rationale

The strong correlation between smoking and developing type II diabetes later in life was evident in my initial literature review (Chau et al., 2015). What was not so evident was whether the general public was aware of this link and potential effects it has on their health, which is why I chose to research how we could most successfully educate the public about this issue. I utilised the PECOT model (Whitehead, 2013) to evolve my research question from "Is there a relationship between cigarette smoking and developing type II diabetes later in life?" to my more specific research question: "How can we most successfully educate type II diabetics of all ages who are current smokers about the high risk that smoking poses on the progression of their diabetes and support them to quit smoking?".

I chose to present my literature review in a visual way in poster form because it is shown to be a great way to structure information, place information in context and, importantly, make information more memorable to its readers (Ellstrom, 2013). Visual presentation is also a useful tool when wanting information to reach a large audience of people as it can be presented in a variety of places and be seen by a wide audience (Ellstrom, 2013). Using a visual presentation is relevant for this particular literature review topic as it is important to promote awareness and inform health professionals and the general public about the current issues discussed in this review. A visual presentation would ensure that the information in this review would be seen by the widest audience, remain memorable and most likely to encourage people to use this information to make a difference to their own lives or the lives of their clients..

PECOT Category	Information relating to question	Explanation
Population	Type II diabetics, who are current smokers, of all ages.	All type II diabetics, who are current smokers, would benefit from educated about the higher risk of developing complications and having less control over their disease as a result of their smoking status, regardless of their age, ethnicity or cultural factors.
Exposure (intervention)	Type II diabetics who are current smokers that have received education about the link between smoking and diabetes, increased risk of diabetic complications or support/advice to quit smoking.	Will be looking for articles that have used a qualitative design, where the participants have discussed their experience and knowledge level of their diabetes and current smoking status to find interventions that have been beneficial and successful.
Comparison/ Control	Type II diabetics who are current smokers that have not received education about the link between smoking and diabetes (or are unaware of this link), increased risk of diabetic complications or support/advice to quit smoking.	Interested in the comparison between people that have and haven't received some intervention. Also discovering any interventions that are ineffectual for educating and supporting type II diabetics about smoking effects on their disease and smoking cessation.
Outcome	Be able to identify the best methods for educating and supporting type II diabetics that are current smokers about the link between these two health factors and ideally supporting them to quit smoking.	Want to be able to understand how through evidence-based research we can improve upon the current support and education services we are currently providing type II diabetics, who are current smokers, of all ages to improve their general health for present and later in life.
Time	N/A	N/A

(Whitehead, 2013, p63)

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