Does Nicotine Replacement Therapy Help Delaying Weight Gain After Quitting?  

Chmitorz, A., Gradl, S. & Kröger, C. B.

**Background and Aim**

**Background:**
While most cigarette smokers gain less than 5 kg following smoking cessation, about 10% gain up to 15 kg (Filozof, Pinilla & Fernández-Cruz, 2004; Froom, Melamed & Benbassat, 1998).

Weight gain is a primary reason for relapsing after a quit attempt has been made, especially for women (Klesges & Schumaker, 1992).

In clinical trials, it was found that NRT delays weight gain after quitting (Fiore, Jaén, Baker, Bailey, Benowitz, Curry et al., 2008).

The findings are mainly based on controlled clinical settings. Little research has been done on that issue in a "real world" setting.

**Aim:**
Examine the effects of NRT on weight gain at three measurement times.

**Results**

Smokers (n=105) were excluded from the analyses to avoid distortion of results due to the effects of smoking on weight gain.
Likewise, users of buccoprop (n = 1) and varenicline (n = 10) were excluded from the analyses to avoid high levels of variance caused by different therapeutic mechanisms of nonnicotine medication and NRT.

The remaining sample (N = 62; NRT users n = 27; control n = 35) includes only those subjects who provided weight details at t0, t1, and t2.

**Intervention**

In a "real world" setting, NRT users seem to benefit less from the delaying effect on weight gain found in clinical trials. Compared to controlled and supervised clinical settings (Pierce & Gilpin, 2002).

Both the experimental and the control group attended a cognitive behavioural-based smoking cessation programme which included:
- Methods to enhance motivation, self control, self management, skills training, lectures on smoking and smoking cessation, relapse prevention methods, positive enhancement and imagination methods.
- After 4 sessions, smokers stop smoking on a determined quit day.
- Two telephone booster-sessions

In the first session, smokers were informed about medication for smoking cessation. Smokers who decided to use those medications were allocated to the experimental group.

**Discussion**

We examined the effects of medication on weight gain outside clinical trials over a period of 6 months.
In a "real world" setting, NRT users seem to benefit less from the delaying effect on weight gain found in clinical trials. An explanation for this result might be that outside clinical trials, users of nicotine products do not adhere to the package insert and recommendations given for NRT use as they do in controlled and supervised clinical settings (Pierce & Gilpin, 2002).

**Limitations**

Small sample size
No biochemical verification was carried out

**References**


