



WELLINGTON

Strategies: Cessation

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Outline

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- Definition of addiction
- Nicotine
- Nicotine Replacement Therapy
- Pharmacokinetics and Reward
- Conclusion

Definition of addiction

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- American Society of Addiction Medicine
- Addictions cause physical changes in the brain
- Therapies are needed to alter physical changes in the brain
- For example: nicotine replacement therapy

Rationale for NRT

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- Nicotine is the main reason why smoking is addictive
- Nicotine causes release of rewarding neurotransmitters
- Nicotine is safe
- Lots of other chemicals in cigarette smoke cause harm
- Quit smoking – get withdrawal symptoms because low nicotine
- Take NRT, safe nicotine, reduce withdrawal symptoms

NRT works, cold turkey

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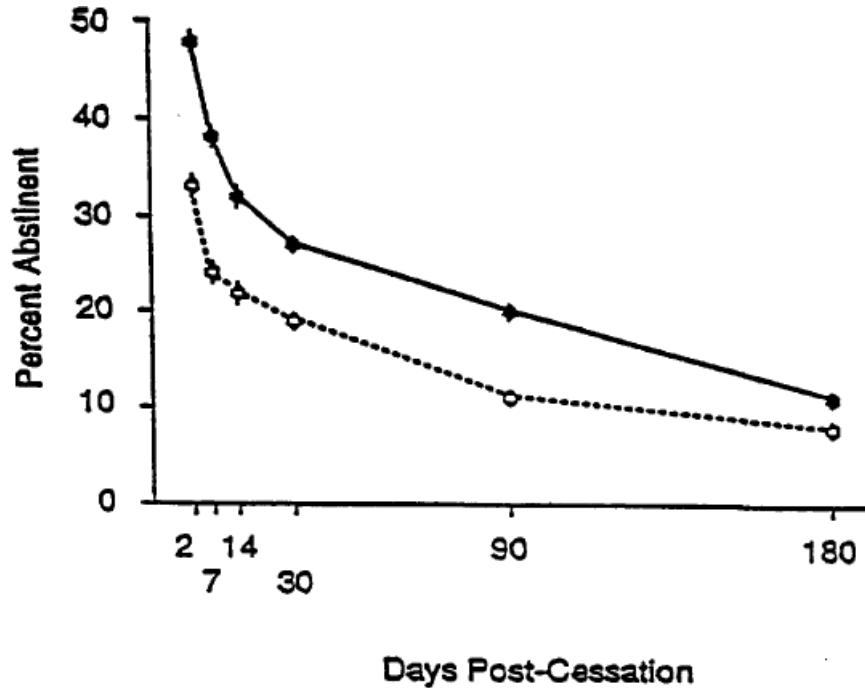
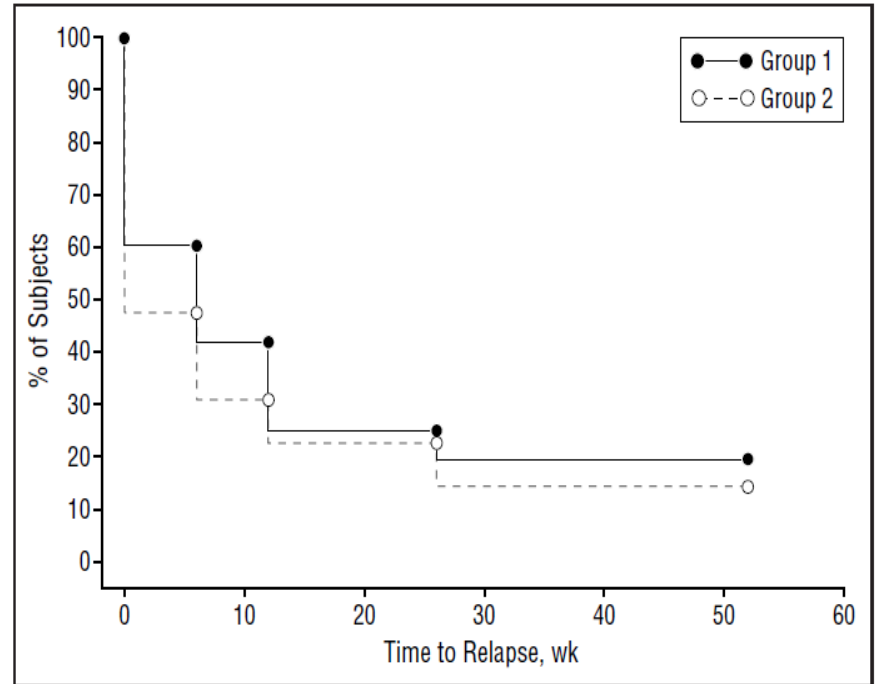


FIGURE 1 Percent abstinent by self-report and observer report using criterion of complete abstinence (dotted lines and open circles) or criterion of less than 1 cigarette/day (solid lines and solid circles).

8% at 6 months



25% at 6 months

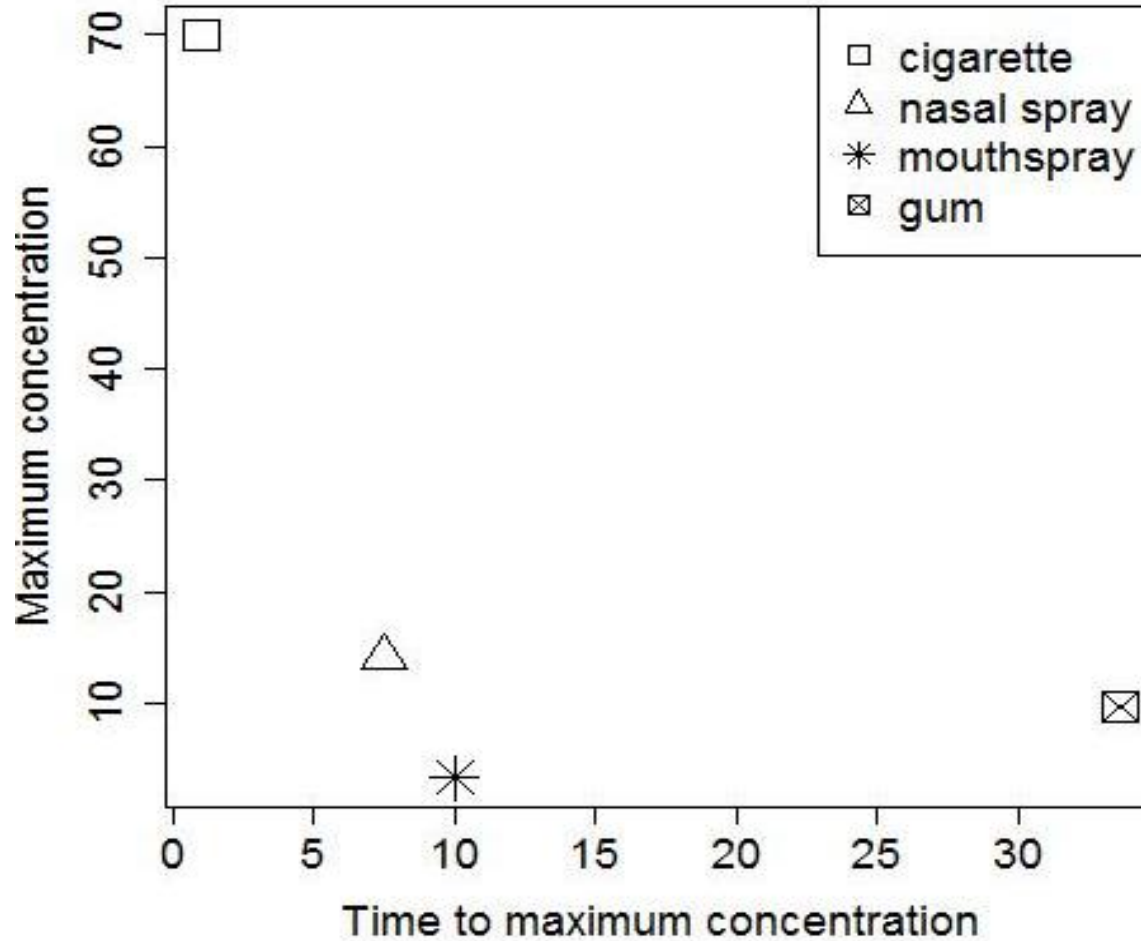
NRT: room for improvement

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- NRT doubles 12 month quit rates
- But it doubles them from 5% to 10%
- Champix more effective than NRT monotherapy
- Champix only equally effective as NRT combo
- Ways to increase quit rate
 - Higher dose
 - Higher dose same kind of NRT
 - Combination therapy
 - Faster acting
 - Behavioural
 - Long-term nicotine maintenance

NRT: room for improvement

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Need to inhale nicotine to get it to the brain rapidly and get reward

Conclusion

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- Cold turkey is not effective for most people
- Need rapid nicotine in combo with patch
- Need new very rapid NRT