The treatment and epidemiology of smoking cessation in people with common mental disorders

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MY DISCLOSURES & FUNDING

No conflicts of interest

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WHAT I’M GOING TO TALK ABOUT

• The association between smoking cessation and mental health
• Integrating smoking cessation treatment into routine psychological services (IAPT) for people with common mental illness
UK smoking prevalence in people with and without anxiety, and depression, years 2006 to 2015

- Anxiety: 33.7% in 2015, 28.9% in 2006
- Depression: 33.7% in 2015, 28.9% in 2006
- No mental disorder: 10.9% in 2015, 10.9% in 2006

WHAT HAPPENS TO MENTAL HEALTH AFTER QUITTING SMOKING?

Change in mental health after smoking cessation: systematic review and meta-analysis

Gemma Taylor doctoral researcher\(^1\), Ann McNeill professor of tobacco addiction\(^2\), Alan Girling reader in medical statistics\(^3\), Amanda Farley lecturer in epidemiology\(^1\), Nicola Lindson-Hawley research fellow\(^2\), Paul Aveyard professor of behavioural medicine\(^2\).
CHANGE IN MENTAL HEALTH AFTER SMOKING CESSATION: A SYSTEMATIC REVIEW AND META-ANALYSIS

Standardised mean difference and 95% confidence intervals: the difference in change in depressive symptoms from baseline to longest follow-up in people who stopped smoking compared to continuing smokers

<table>
<thead>
<tr>
<th>Study</th>
<th>Standard mean difference (95% CI)</th>
<th>Weight (%)</th>
<th>Standard mean difference (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solomon 2006</td>
<td>-0.01 (-0.35 to 0.37)</td>
<td>9</td>
<td>0.01 (-0.35 to 0.37)</td>
</tr>
<tr>
<td>Berlin 2010</td>
<td>-0.30 (-0.72 to 0.12)</td>
<td>7</td>
<td>-0.30 (-0.72 to 0.12)</td>
</tr>
<tr>
<td>Blalock 2008</td>
<td>-0.58 (-1.00 to -0.16)</td>
<td>7</td>
<td>-0.58 (-1.00 to -0.16)</td>
</tr>
<tr>
<td>Dawkins 2009</td>
<td>-0.39 (-0.88 to 0.10)</td>
<td>5</td>
<td>-0.39 (-0.88 to 0.10)</td>
</tr>
<tr>
<td>Kahler 2011</td>
<td>-0.28 (-0.69 to 0.13)</td>
<td>7</td>
<td>-0.28 (-0.69 to 0.13)</td>
</tr>
<tr>
<td>Vazquez 1999</td>
<td>-0.12 (-0.44 to 0.20)</td>
<td>11</td>
<td>-0.12 (-0.44 to 0.20)</td>
</tr>
<tr>
<td>Busch 2011</td>
<td>-0.30 (-0.67 to 0.07)</td>
<td>9</td>
<td>-0.30 (-0.67 to 0.07)</td>
</tr>
<tr>
<td>Kahler 2002</td>
<td>-0.69 (-1.09 to -0.29)</td>
<td>8</td>
<td>-0.69 (-1.09 to -0.29)</td>
</tr>
<tr>
<td>Munafó 2008</td>
<td>-0.09 (-0.27 to 0.09)</td>
<td>21</td>
<td>-0.09 (-0.27 to 0.09)</td>
</tr>
<tr>
<td>Kinnunen 2006</td>
<td>-0.21 (-0.42 to 0.00)</td>
<td>17</td>
<td>-0.21 (-0.42 to 0.00)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100</td>
<td>-0.25 (-0.37 to -0.12)</td>
</tr>
</tbody>
</table>

Test for heterogeneity: τ²=0.01, χ²=12.83, df=9, P=0.17, I²=30%
Test for overall effect: z=3.89, P<0.001

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<table>
<thead>
<tr>
<th>Outcome</th>
<th>Stopping smoking vs. continuing smoking</th>
<th>Antidepressant treatment vs. placebo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>0.37 (0.70 to 0.03)</td>
<td>Range: 0.23 (0.32 to 0.14) to 0.50 (0.77 to 0.23)</td>
</tr>
<tr>
<td>Depression</td>
<td>0.25 (0.37 to 0.12)</td>
<td>Range: 0.11 (0.26 to 0.04) to 0.47 (0.59 to 0.34)</td>
</tr>
</tbody>
</table>

CRUK POPULATION RESEARCHER FELLOWSHIP: THE ESCAPE TRIAL

Stage 1: Co-design a smoking cessation intervention for delivery across UK national mental health services (IAPT)

Stage 2: Test the intervention in a multi-centre randomised controlled pilot, feasibility and acceptability trial (ESCAPE)

INTERVENTION BASIC STRUCTURE

Parallel treatment of smoking and mental health, in IAPT.

Delivered by IAPT therapists during usual therapy sessions during individual sessions.

IAPT service users with depression and/or anxiety, who smoke daily.

5-15 minutes per therapy session, 6 sessions.

Smoking cessation medication + behavioural support.

TAU + delayed referral to smoking cessation services.

ESCAPE – RECRUITMENT TO DATE

Recruited = 98

Oxford
- Tx = 36
- Control = 36

Avon & Wiltshire
- Tx = 11
- Control = 10

North East London
- Tx = 1
- Control = 1

Black Country
- Tx = 1
- Control = 2

### ESCAPE PRELIMINARY RESULTS

<table>
<thead>
<tr>
<th>3-month follow-up</th>
<th>Treatment A</th>
<th>Treatment B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of “do not attends”, M (SD)</td>
<td>1 (1)</td>
<td>1 (1)</td>
</tr>
<tr>
<td>Withdrawn from IAPT %</td>
<td>35% (12/34)</td>
<td>31% (11/36)</td>
</tr>
<tr>
<td>Self-report quit %</td>
<td>15% (3/20)</td>
<td>40% (10/25)</td>
</tr>
<tr>
<td>CO / saliva cotinine-verified quit %</td>
<td>0% (0/20)</td>
<td>24% (6/25)</td>
</tr>
</tbody>
</table>

Benefits of stopping smoking for people with poor mental health

For people with a mental health condition, smoking cessation improves both physical and mental health and reduces the risk of premature death.

Stop smoking support
is effective for people with poor mental health

Stopping smoking can be as effective as antidepressants & reduce the amount of psychiatric medication needed

Julian's Story

Stopping smoking while dealing with a mental health condition

Stopping smoking while dealing with a mental health condition
ACKNOWLEDGEMENTS

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Kate Bartlem
Alison Shaw
Chris Metcalfe

UKCTAS Smokers’ Panel / Nicotine Discussion Panel
PWPs, & researchers involved in ESCAPE
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North East London Foundation Trust
Oxford Health NHS Foundation Trust
Black Country Healthcare Partnership Trust

Questions?
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