## Background

- Cigarette smoking is a leading cause of preventable diseases and death
- 42 million Americans smoke cigarettes
- Over 440,000 Americans die from smoke-related diseases annually
- 193 billion dollars spent on lost productivity and health care annually
- 40% smokers attempt to quit smoking yearly
- Smoking cessation is a solution to reduce risk of avoidable diseases and death

## Methods

- Search terms: “Smoking cessation” AND “Counseling” AND “Nicotine Replacement Therapy” AND “Smokers” (MESH terms) published terms, limits: adults (18+), published after 2000, Meta-analysis, Systematic Reviews, RCT

## Summary of Literature

<table>
<thead>
<tr>
<th>Citation</th>
<th>Sample/ Setting</th>
<th>Interventions/ Major Variables</th>
<th>Findings</th>
<th>JH Approval</th>
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</thead>
<tbody>
<tr>
<td>Book et al., 2012</td>
<td>884 participants from primary clinics (83.7% women)</td>
<td>(2X) HRT treatment + bupropion</td>
<td>No statistical significant effect on 7-day SA between interventions at 2, 6, 12 months</td>
<td>B</td>
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<tr>
<td>Seley et al., 2005</td>
<td>247 participants from community</td>
<td>(2X) HRT treatment + citalopram</td>
<td>No statistical significant increase in 7-day SA from baseline at 12 months</td>
<td>B</td>
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<tr>
<td>Fiere et al., 2008</td>
<td>1,018 participants from primary care centers</td>
<td>(2X) HRT treatment + citalopram</td>
<td>No statistical significant increase in 7-day SA between all interventions at 3 and 12 months (NRT + citalopram were 11.1% more likely to quit than SA control group)</td>
<td>B</td>
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<tr>
<td>Lancaster &amp; Street, 2012</td>
<td>27 RCT &amp; Quasi-experiments</td>
<td>(2X) HRT treatment + citalopram</td>
<td>No statistical significant increase in SA at 12 months</td>
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<tr>
<td>Marcus et al., 2007</td>
<td>533 participants from community</td>
<td>(2X) HRT treatment + citalopram</td>
<td>No statistical significant increase in 20-day SA from baseline at 3 and 6 months</td>
<td>B</td>
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<tr>
<td>Sokolow et al., 2004</td>
<td>303 participants (62% women)</td>
<td>(2X) HRT treatment + citalopram</td>
<td>No statistical significant increase in 30-day SA from baseline at 6 months</td>
<td>B</td>
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<tr>
<td>Sokolow et al., 2006</td>
<td>214 participants (64% women)</td>
<td>No statistical significant increase in 7-day SA from baseline at 3 and 6 months</td>
<td>B</td>
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<tr>
<td>Velkini et al., 2006</td>
<td>2006 participants from outpatient Women's After Medical Care (78.5% men)</td>
<td>No statistical significant effect on SA between treatment groups</td>
<td>B</td>
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</tbody>
</table>

## Summary of Findings

- Combination of counseling and NRT is more effective than NRT alone in terms smoking abstinence and relapse
- NRT and counseling have short term effect on increased smoking abstinence rates compared to NRT alone
- Findings coincide with current guidelines by US Department of Health and Human Services to provide counseling and NRT for smoking abstinence
- NRT and counseling showed to have gender variations as shown in Boyle et. al.
- Females who smoke > TTP were more likely to quit in the counseling and NRT group than NRT group

## Limitations

- Absence of biochemical validation of self-reported smoking abstinence in some studies influences validity of results
- Over-representation of low income women in multiple studies
- Insufficient sample sizes in few studies

## Next Steps

- All providers should assess smoker’s intention to quit smoking and offer counseling and NRT
- Provide psychosocial support in conjunction with NRT will increase proportion of successful attempts to quit smoking
- Identify optimal dose of psychosocial support and NRT to promote short-term smoking cessation and long-term abstinence
- Identify gender variation to smoking cessation interventions