Why Cessation is a Vital Part of Tobacco Control Policy
Speakers

Linda Bailey, JD, MHS
President & CEO, North American Quitline Consortium (NAQC)

Dr. Robert Totanes
Technical Officer, NCDs and Injuries, Social Determinants of Health, @WHO

Martin Raw, PhD
Director of the ICTC and Visiting Professor @NYU School of Global Public Health

Moderator

Laurent Huber
ASH Executive Director
Impact of the COVID-19 Pandemic on Tobacco Cessation

Linda Bailey, JD, MHS
President and CEO

ASH Webinar
April 22, 2021
Smoking Prevalence of US Adults, 1965-2019

Calls to State Quitlines Through 1-800-QUIT-NOW, 2012-2020

Source: National Cancer Institute, National Institutes of Health. 1-800-QUIT-NOW monthly report on call attempts.

1-800-QUIT-NOW Stats - North American Quitline Consortium (naquitline.org)
Calls to State Quitlines Through 1-800-QUIT-NOW by Quarter, 2019 Compared to 2020

<table>
<thead>
<tr>
<th>Quarter</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter 1</td>
<td>137,877</td>
<td>129,201</td>
</tr>
<tr>
<td>Quarter 2</td>
<td>220,205</td>
<td>133,644</td>
</tr>
<tr>
<td>Quarter 3</td>
<td>220,054</td>
<td>154,232</td>
</tr>
<tr>
<td>Quarter 4</td>
<td>137,488</td>
<td>108,532</td>
</tr>
</tbody>
</table>

Source: National Cancer Institute, National Institutes of Health. 1-800-QUIT-NOW monthly report on call attempts.
1-800-QUIT-NOW Stats - North American Quitline Consortium (naquitline.org)
Calls to State Quitlines Through 1-800-QUIT-NOW by Quarter, January 2019 – March 2021

Source: National Cancer Institute, National Institutes of Health. 1-800-QUIT-NOW monthly report on call attempts.

1-800-QUIT-NOW Stats - North American Quitline Consortium (nquitline.org)
Other Resources

- NAQC report on the impact of the pandemic on tobacco cessation
- I COVID QUIT campaign materials that encourage smokers to quit during the pandemic

Contact information:
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lbailey@naquitline.org
The Global NCD Business Plan and Investment Case for Tobacco Cessation

Dr. Robert Totanes
Technical Officer
Social Determinants of Health
totanesr@who.int
NCDs cause 41 million deaths annually, accounting for 74% of all deaths.

Of the 15.7 million who die prematurely from NCDs, 85% are from low- and middle-income countries.

Despite the staggering burden, NCD programmes and interventions are drastically underfunded – accounts for a disproportionately small share of official development assistance (ODA) funds and overall public health financing.

Both investment and implementation needs to scale up dramatically in order to meet SDGs and other goals by 2030.
Saving Lives, Spending Less

- Original report launched in 2018 containing Return on Investment (ROI) and other figures for the 16 NCD Best Buys

- Interventions in the area of tobacco, alcohol, healthy diets, physical activity, cancer, & diabetes/hypertension management

- Key results:
  - $7 return for every $1 invested
  - Potential to save 8.2 million lives and reduce premature mortality by 15%
  - Gain USD 350 billion in economic benefits
Spotlight on Tobacco Cessation

- The “orphan” area in tobacco control → it’s still a cost-effective intervention!
- Political economy: possibly less resistance to implement
- Scaling up cessation is critical to meet SDGs and other targets
- WHO’s *Commit to Quit* campaign for WNTD 2021
GLOBAL INVESTMENT CASE FOR TOBACCO CESSATION

- Sets out to demonstrate the economic case and return on investment for implementing tobacco cessation interventions in LMICs

- Updated costs/price data, effect sizes, scale-up patterns

- Due to substantial demand for analysis of interventions that did not previously meet the Best Buy threshold, including tobacco cessation

- Planned for release as a separate product by World No Tobacco Day in May 2021, data/results to be added to the web portal
GLOBAL INVESTMENT CASE FOR TOBACCO CESSATION

- Shows the costs and benefits from implementing tobacco cessation interventions at the highest level:

<table>
<thead>
<tr>
<th>Programme Costs</th>
<th>Cessation Interventions</th>
<th>Health Benefits</th>
<th>Economic Returns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brief advice</td>
<td>National toll-free quitline</td>
<td>Number of quitters</td>
<td>Productivity gains / social benefits</td>
</tr>
<tr>
<td>NRTs</td>
<td></td>
<td>Lives saved</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Morbidity avoided</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Healthy life years gained</td>
<td></td>
</tr>
</tbody>
</table>
OTHER ELEMENTS

- Variations on cost estimates based on targets and the level of cost-coverage for specific interventions
- Other potential cost-effective cessation interventions (mCessation / Chatbots, health technologies / apps, drugs available in different markets)
- Possible access to country-specific figures – ROI, cost estimates, impact
- Categories of financing options / models (TBD)

➢ Comprehensive methodology document on how to generate national / country-specific investment case (UN Interagency Task Force on NCDs)
PROJECT TIMELINES

February
- Global NCD Business Plan
  - Initial data & figures

March
- Tobacco Cessation Investment Case
  - Costing & impact
  - Initial results
  - Feedback, drafting, clearance

April
- Feedback, drafting, clearance

May
- Launch

Summer
- Launch
THANK YOU!

Dr. Robert Totanes

totanesr@who.int
Cessation – a vital part of tobacco control policy

Martin Raw PhD

Director, International Centre for Tobacco Cessation (ICTC)

Visiting Professor
New York University School of Global Public Health
Why cessation?

- Cessation support is needed by the many tobacco users that are addicted
- Only cessation offers health gains in the short to medium term
- Cessation support is effective and cost effective
- Low cost measures exist that countries could implement NOW
Nicotine is addictive

- Most tobacco users are addicted when young
- In ‘mature’ markets like USA, Europe, 60% to 70% want to stop
- In these countries the population cessation rate at one year is only about 5%
- Many never succeed and die prematurely as a result

For sources see ASH paper “World No Tobacco Day 2021 and the right to health”
Unless current smokers quit, deaths will rise dramatically in the next 50 years.

Estimated cumulative tobacco deaths 1950-2050 with different intervention strategies:

- Baseline
- If proportion of young adults taking up smoking halves by 2020
- If adult consumption halves by 2020

Cessation is effective and cost effective

- Support can increase cessation rates to 20%
- Even low cessation rates can achieve huge population health gain
- For example, brief advice given throughout the healthcare system
- Cessation is one of the most cost effective of all healthcare interventions

For sources see ASH paper “World No Tobacco Day 2021 and the right to health”
Cessation is being neglected

WHO MPOWER Report 2019:

“Global targets for reducing tobacco use will not be reached unless current tobacco users quit”

“Tobacco cessation support worldwide remains low”

“Many countries still have no national cessation strategy”
Survey of tobacco dependence treatment in 142 countries

*(n = 172, 142 responses = 83% response rate; published in *Addiction* 2017)*

<table>
<thead>
<tr>
<th>Does your country</th>
<th>% Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have an official national treatment strategy?</td>
<td>32</td>
</tr>
<tr>
<td>Have a budget for treatment?</td>
<td>25</td>
</tr>
<tr>
<td>Offer to help healthcare workers to stop using tobacco?</td>
<td>44</td>
</tr>
<tr>
<td><strong>Mandatory recording of tobacco use in medical notes</strong></td>
<td>30</td>
</tr>
</tbody>
</table>
Tobacco use in healthcare workers
Table 3.1: Selected studies of GP smoking prevalence

<table>
<thead>
<tr>
<th>Country</th>
<th>Method and sample details</th>
<th>Published</th>
<th>% who smoke</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>National survey (n=1194) in 8 of 28 regions</td>
<td>2005</td>
<td>44.2</td>
</tr>
<tr>
<td>Denmark</td>
<td>Postal questionnaire with 313 GPs</td>
<td>1993</td>
<td>33</td>
</tr>
<tr>
<td>Greece</td>
<td>National questionnaire of 1,284 physicians including 370 GPs</td>
<td>2007</td>
<td>38.6</td>
</tr>
<tr>
<td>Italy</td>
<td>Regional phone interview</td>
<td>2003</td>
<td>28.3</td>
</tr>
<tr>
<td>Netherlands</td>
<td>Postal survey with GPs and other physicians.</td>
<td>1990/93</td>
<td>38</td>
</tr>
<tr>
<td>Romania</td>
<td>Survey, details not given, n=1136, p=0.05</td>
<td>2000</td>
<td>43.2</td>
</tr>
<tr>
<td>Slovakia</td>
<td>European postal survey of GPs</td>
<td>2005</td>
<td>48.5</td>
</tr>
<tr>
<td>Sweden</td>
<td>European postal survey of GPs</td>
<td>2005</td>
<td>3.7</td>
</tr>
</tbody>
</table>

Stead M, Angus K, Holme I, Tait G (2007) Review of the literature on factors that facilitate and hinder use of smoking cessation interventions by GPs, and of interventions to change GP behaviour. CRUK Centre for Tobacco Control Research
Prevalence of tobacco use in healthcare workers: A systematic review and meta-analysis

Kapka Milanov, Tricia M. McKeever, Ann McNiel, Martin Raw, Rachael L. Murray

1 UK Centre for Tobacco and Alcohol Studies, School of Medicine, Clinical Sciences Building, Nottingham City Hospital, University of Nottingham, Nottingham, United Kingdom. 2 UK Centre for Tobacco and Alcohol Studies, Institute of Psychology, Psychiatry & Neuroscience (IPPN), Kings College London, London, United Kingdom. 3 NYU College of Global Public Health, New York University, New York, New York, United States of America. 4 NYU Medical School, New York, New York, United States of America

These authors contributed equally to this work.

Abstract

Objectives
To estimate tobacco use prevalence in healthcare workers (HCW) by country income level, occupation and sex, and compare the estimates with the prevalence in the general population.

Methods
We systematically searched five databases: Medline, EMBASE, CINHAL Plus, CAB Abstracts, and LSACIS for original studies published between 2000 and March 2016 without language restriction. All primary studies that reported tobacco use in any category of HCW were included. Study extraction and quality assessment were conducted independently by three reviewers, using a standardised data extraction and quality appraisal form. We performed random effect meta-analyses to obtain prevalence estimates by World Bank (WB) country income level, sex, and occupation. Data on prevalence of tobacco use in the general population were obtained from the World Health Organisation (WHO) Global Health Observatory website. The review protocol registration number on PROSPERO is CRD42016041231.

Results
229 studies met our inclusion criteria, representing 457,415 HCW and 63 countries: 29 high-income countries (HIC), 21 upper-middle-income countries (UMIC), and 13 lower-middle- and low-income countries (LMIC). The overall pooled prevalence of tobacco use in HCW was 21%, 31% in males and 17% in females. Highest estimates were in male doctors in UMIC and LMIC, 35% and 45%, and female nurses in HIC and UMIC, 21% and 25%. Heterogeneity was high (~I² ~ 90%). Country level comparison suggested that in HIC male HCW tend to have lower prevalence compared with males in the general population while in
Prevalence of tobacco use in healthcare workers

229 studies, 457,000 healthcare workers, 63 countries
Data collected 2000–2016

Overall – 21%
Highest – 45%

Highest: Male doctors lower middle income countries

There are still very few high quality up-to-date studies
This is a seriously neglected area
Cost effectiveness, availability, affordability
## Availability

<table>
<thead>
<tr>
<th>Does your country</th>
<th>% Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have nationwide specialised treatment facilities?</td>
<td>26</td>
</tr>
<tr>
<td>Integrate brief advice in existing services?</td>
<td>44</td>
</tr>
<tr>
<td>Have a national telephone quitline?</td>
<td>23</td>
</tr>
<tr>
<td>Have cessation support via text messaging?</td>
<td>17</td>
</tr>
</tbody>
</table>
### Availability of medications by income level

<table>
<thead>
<tr>
<th>% of respondents who said available</th>
<th>All</th>
<th>High</th>
<th>UM</th>
<th>LM</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NRT gum</strong></td>
<td>72</td>
<td>96</td>
<td>60</td>
<td>61</td>
<td>53</td>
</tr>
<tr>
<td><strong>Bupropion</strong></td>
<td>60</td>
<td>90</td>
<td>58</td>
<td>39</td>
<td>18</td>
</tr>
<tr>
<td><strong>Varenicline</strong></td>
<td>54</td>
<td>88</td>
<td>48</td>
<td>36</td>
<td>6</td>
</tr>
<tr>
<td><strong>Cytisine</strong></td>
<td>14</td>
<td>10</td>
<td>13</td>
<td>19</td>
<td>12</td>
</tr>
</tbody>
</table>

Percentage of respondents who said available

High=High income countries; UM=Upper middle income countries; LM=Lower middle income countries; Low=Low income countries
## Affordability of medications by income level

<table>
<thead>
<tr>
<th>Medication</th>
<th>All</th>
<th>High</th>
<th>UM</th>
<th>LM</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRT gum</td>
<td>66</td>
<td>88</td>
<td>58</td>
<td>45</td>
<td>33</td>
</tr>
<tr>
<td>Bupropion</td>
<td>57</td>
<td>73</td>
<td>43</td>
<td>36</td>
<td>33</td>
</tr>
<tr>
<td>Varenicline</td>
<td>54</td>
<td>77</td>
<td>32</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>Cytisine</td>
<td>68</td>
<td>80</td>
<td>80</td>
<td>57</td>
<td>50</td>
</tr>
</tbody>
</table>

Percentage of respondents who said affordable

High=High income countries; UM=Upper middle income countries; LM=Lower middle income countries; Low=Low income countries
Table 2. Affordability\(^a\) of health-care smoking cessation interventions.

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Affordability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low-income (Nepal)</td>
</tr>
<tr>
<td>Automated text messaging</td>
<td>7.7</td>
</tr>
<tr>
<td>Brief health-worker advice</td>
<td>2.7</td>
</tr>
<tr>
<td>Printed self-help materials</td>
<td>2.4</td>
</tr>
<tr>
<td>Cytisine</td>
<td>1.7</td>
</tr>
<tr>
<td>Nortriptyline</td>
<td>1.4</td>
</tr>
<tr>
<td>Proactive telephone support</td>
<td>1.0</td>
</tr>
<tr>
<td>Face-to-face behavioural support</td>
<td>0.9</td>
</tr>
<tr>
<td>Bupropion</td>
<td>0.5</td>
</tr>
<tr>
<td>Varenicline</td>
<td>0.5</td>
</tr>
<tr>
<td>NRT (single)</td>
<td>0.4</td>
</tr>
</tbody>
</table>

\(^a\)Affordability is the ratio of per capita gross domestic product (GDP) to the cost per life year gained, i.e., in order for an intervention to be affordable, the 'additional' cost of saving a life-year must be equal to or less than a country's per capita GDP (WHO criteria for 'highly cost-effective'); e.g., an affordability score of 2 means that the 'extra' costs required to save each life-year is half of a country's per capita GDP (hence the intervention in question is affordable).

\(^b\)Affordable interventions are marked in bold type. Only individual support is included. \(^c\)Dual-form/combination nicotine replacement therapy (NRT) (transdermal patch plus a faster-acting form) is more effective than single-form, but assessing effectiveness and affordability relative to no pharmacotherapy would require indirect comparisons and so are not included here.
Cytisine

- Naturally occurring alkaloid
- Golden Chain (Laburnum anagyroides)
- Structurally similar to varenicline
- Thought to work by reducing withdrawal severity
- Available in Central and Eastern Europe since 1960s
- Appears safe (over sixty years data)
- More effective than NRT
- May be as effective as varenicline
- A full course costs just US$15–20
- Licensed in fewer than 20 countries
- Being considered for the WHO Essential Medicines List
## Affordability Calculator for healthcare interventions to promote and assist tobacco cessation v1.10

<table>
<thead>
<tr>
<th>Intervention Name</th>
<th>Effect</th>
<th>Physician hrs</th>
<th>Other Health Worker hrs</th>
<th>Labour unit cost</th>
<th>Mls/hr or drug unit cost</th>
<th>Total cost</th>
<th>ICER</th>
<th>Affordability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brief advice</td>
<td>2</td>
<td>1.0</td>
<td>0.0</td>
<td>$34.77</td>
<td>$0.00</td>
<td>$35</td>
<td>$2,260</td>
<td>5.2</td>
</tr>
<tr>
<td>Behavioural support: in person</td>
<td>4</td>
<td>0.0</td>
<td>3.0</td>
<td>$64.43</td>
<td>$0.00</td>
<td>$64</td>
<td>$2,094</td>
<td>5.6</td>
</tr>
<tr>
<td>Behavioural support: telephone</td>
<td>3</td>
<td>0.0</td>
<td>2.0</td>
<td>$42.85</td>
<td>$0.00</td>
<td>$43</td>
<td>$1,861</td>
<td>6.3</td>
</tr>
<tr>
<td>Text messaging</td>
<td>4</td>
<td>0.0</td>
<td>0.0</td>
<td>$0.00</td>
<td>$10.00</td>
<td>$10</td>
<td>$325</td>
<td>36.3</td>
</tr>
<tr>
<td>Printed materials</td>
<td>2</td>
<td>0.0</td>
<td>0.2</td>
<td>$4.30</td>
<td>$10.00</td>
<td>$14</td>
<td>$529</td>
<td>12.7</td>
</tr>
<tr>
<td>Single form NRT</td>
<td>6</td>
<td>0.6</td>
<td>0.0</td>
<td>$20.86</td>
<td>$150.00</td>
<td>$171</td>
<td>$3,762</td>
<td>3.2</td>
</tr>
<tr>
<td>Bupropion</td>
<td>7</td>
<td>1.0</td>
<td>0.0</td>
<td>$34.77</td>
<td>$100.00</td>
<td>$135</td>
<td>$2,503</td>
<td>4.7</td>
</tr>
<tr>
<td>Nortriptyline</td>
<td>10</td>
<td>2.0</td>
<td>0.0</td>
<td>$69.55</td>
<td>$20.00</td>
<td>$90</td>
<td>$6,164</td>
<td>10.1</td>
</tr>
<tr>
<td>Varenicline</td>
<td>13</td>
<td>2.0</td>
<td>0.0</td>
<td>$34.77</td>
<td>$300.00</td>
<td>$325</td>
<td>$2,901</td>
<td>4.1</td>
</tr>
<tr>
<td>Cytidine</td>
<td>6</td>
<td>0.6</td>
<td>0.0</td>
<td>$20.86</td>
<td>$20.00</td>
<td>$41</td>
<td>$885</td>
<td>13.3</td>
</tr>
<tr>
<td>In-person support &amp; single NRT</td>
<td>10</td>
<td>0.6</td>
<td>4.0</td>
<td>$106.77</td>
<td>$150.00</td>
<td>$257</td>
<td>$3,338</td>
<td>3.5</td>
</tr>
<tr>
<td>Dual NRT</td>
<td>11</td>
<td>0.6</td>
<td>0.0</td>
<td>$20.86</td>
<td>$300.00</td>
<td>$321</td>
<td>$3,792</td>
<td>3.1</td>
</tr>
<tr>
<td>In-person support &amp; dual NRT</td>
<td>21</td>
<td>0.6</td>
<td>4.0</td>
<td>$106.77</td>
<td>$300.00</td>
<td>$407</td>
<td>$2,518</td>
<td>4.7</td>
</tr>
</tbody>
</table>
FCTC Article 14

Requires each country to develop comprehensive guidelines, based on scientific evidence and best practice, and to promote cessation of tobacco use and tobacco dependence treatment.
And the FCTC Article 14 Guidelines recommend measures countries could implement NOW

- Conduct a National Situation Analysis
- Develop a national cessation strategy
- Address tobacco use in healthcare workers
- Record tobacco use in medical notes
- Offer brief advice through existing healthcare infrastructure (eg. PHC)
What you can do

Government ministers

• Develop an official national cessation strategy
• Mandate recording tobacco use in medical notes (and do it)
• Train healthcare workers to give brief advice
• Help healthcare workers stop using tobacco
• Offer cessation support through text messaging
• Fast track the licensing of affordable medicines
What you can do

Healthcare workers

• Ask about tobacco use at every opportunity, including while giving the Covid vaccination
• Give brief advice to stop
• Offer practical tips and support if possible
The challenge: a reminder

- About 1,300 million people still use tobacco
- 8 million die prematurely every year because of their tobacco use
- Every day smokers over 35 continue to smoke, they lose 3-6 hours of life, thus for the 500 million current adult smokers
- 62 million days of life are lost every day
- Many want to stop and need help
Conclusion

Tobacco cessation support is effective, cost effective, and affordable, is one of the most cost effective of all healthcare interventions, and is needed by the millions of tobacco users who are addicted.

And yet it is still being neglected.

Let’s work together to help them.
Thank you

Martin Raw PhD

International Centre for Tobacco Cessation

Visiting Professor, New York University School of Global Public Health

Happy to respond to questions by email

martin@martinraw.com
Unaided cessation

• 1000 smokers want to stop but only 10% of them have access to effective support

• 1. 900 don’t have access to support of whom roughly 5% will be abstinent at one year – 45 ex-smokers

• 2. The other 100 have access to specialist support, effectiveness roughly 20% at one year – 20 ex-smokers

• 3. That is 65 ex-smokers most of whom stopped without support

• 4. Does that make no-support the most effective method?

• 5. Does this mean we should abandon support?
Q&A
Stay Involved

Twitter
@ASHorg
@LaurentHuber

Instagram
@ASHorg

Facebook
@ASHglobalAction

Recordings from previous webinars and Live Chats on social media, under “Resources from ASH” here:
ash.org/coronavirus-update

ADDITIONAL RESOURCES
• ASH US Tobacco Industry Interference Index 2020: https://ash.org/2020index
• Stay up to date on COVID-19 and smoking resources here:

NEXT WEBINARS:
Thank you for your participation!
Follow ASH on Facebook for a notification when we go live on Thursday, April 29th
Please stay tuned for announcements about our next webinars:
Register Here (https://default.salsalabs.org/T84647c30-3343-499c-8c48-acf8434583a3/74d96192-d0ed-4ddb-ad64-dfd9c38f1300) for our discussion with all of the Plaintiffs on the FDA Lawsuit on April 30th
AND, the next webinar on “Exposing Current Tobacco Industry Lobbying, Campaign Contributions, Meals, and Gifts” is coming soon!

Toolkit for Advocates
Talking with government and media about the COVID-19 and tobacco use co-morbidity and policies to protect the health of everyone during the pandemic.
ash.org/covid19