

# Web-based information on tobacco cessation for oral health professionals

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## INTRODUCTION AND OBJECTIVES

Some studies have been conducted regarding the content and quality of the web-based information for patients searching for smoking cessation advice and e-learning training programs about tobacco cessation for health care practitioners. However, to the best of our knowledge, no information about the quality of websites providing information on smoking cessation (training/learning) dedicated to oral health professional is available.

The aim of the present study was to identify and evaluate the content and the quality of web pages providing information about smoking cessation for oral health care professionals.

## METHODS

Websites were identified using Google and Health on Net (HON) search engines using the terms “smoking cessation OR quit smoking OR stop smoking OR 3As OR 5As OR tobacco counselling AND dentistry OR dental clinic OR dentist OR dental hygienist OR oral health professionals”. The first 100 consecutive results in each site were considered for the study.

Quality assessment was rated using the DISCERN questionnaire, the JAMA Benchmarks and HON seal. Smoking cessation content was assessed using an abbreviated version of the Smoke Treatment Scale (STS-C) and the Smoking Treatment Scale-Rating (STS-R). To assess legibility the Flesch Reading Ease (FRES) and the Flesch-Kinkaid Reading Grade Level (FKRGL) were used. Websites were also classified into multimedia and non-multimedia and friendly and non-friendly usability.

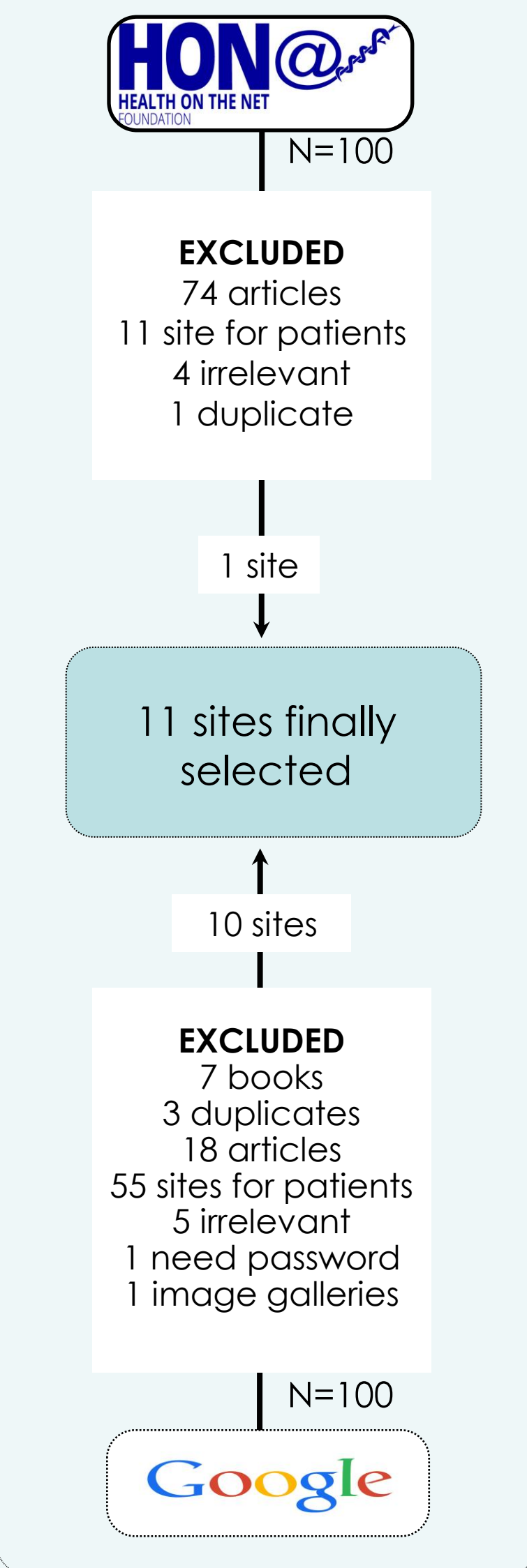
## RESULTS

Among the 200 sites founded (100 of Google and 100 of HON) only 11 met the inclusion criteria, and mainly belonged to Governmental institutions (n=8); the other being prepared by Professional Associations (n=2) and non-profit organization (n=1). Only 3 were exclusively dedicated to smoking cessation.

The average DISCERN score was 3.0 and the average score in the FKRGL and FRES was  $13.31 \pm 3.34$  and  $40.73 \pm 15.46$ , respectively. None of the 11 websites achieved the four JAMA benchmarks. The mean score of STS-R among all the websites was  $2.81 \pm 0.95$  out of 5.

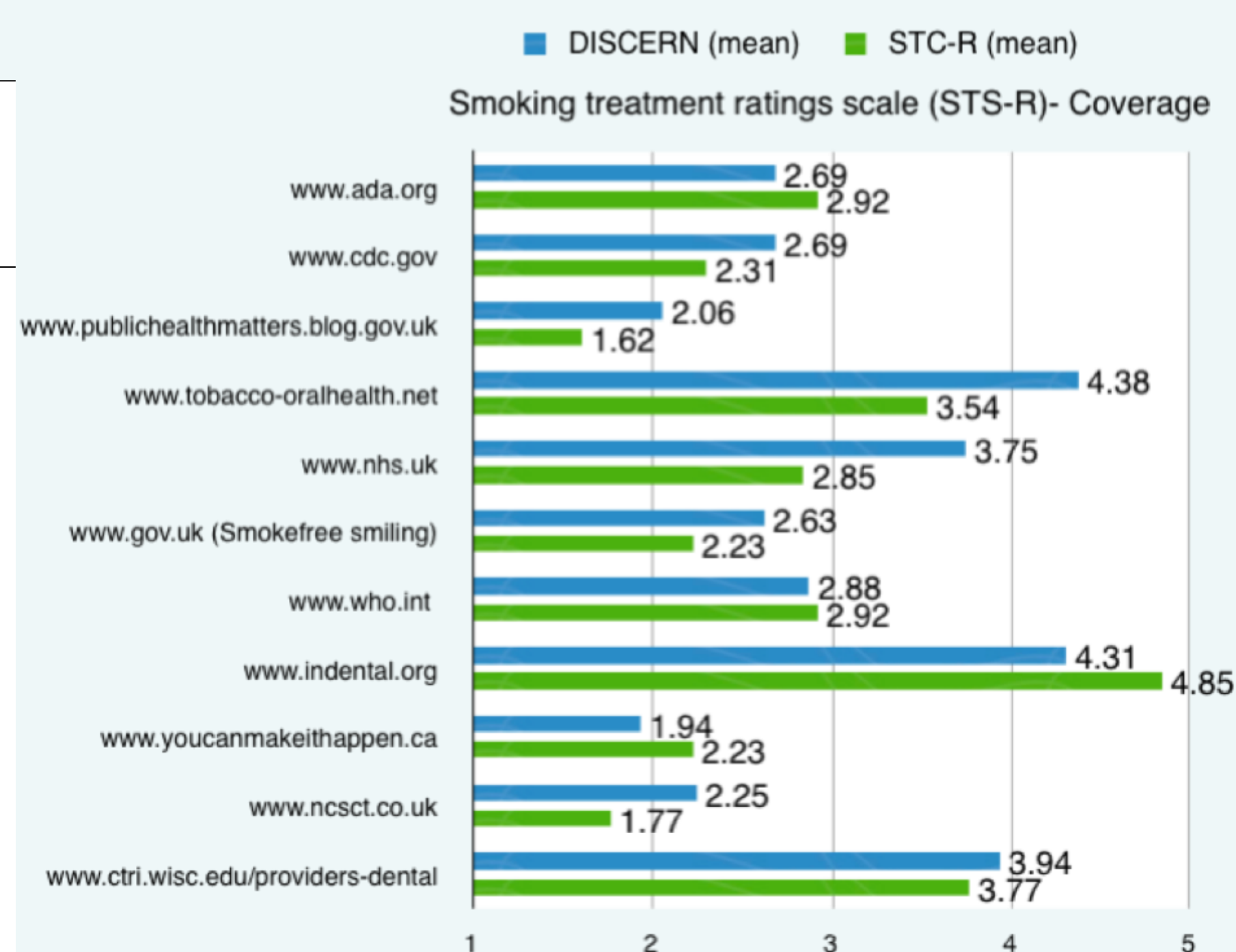
| Smoking treatment ratings scale (STS-R) | Mean | SD   |
|---|------|------|
| Advise: clear                           | 3.45 | 0.82 |
| Advise: strong                          | 3.45 | 0.82 |
| Advise: personalized                    | 2.81 | 1.17 |
| Assess readiness to quit                | 3.36 | 1.03 |
| Assist with quit plan                   | 3.45 | 1.04 |
| Provide practical counseling            | 2.63 | 0.92 |
| Provide social support                  | 2.27 | 1.10 |
| Recommended Pharmacology                | 2.72 | 1.27 |
| Arrange follow up contact               | 2.63 | 1.12 |
| Enhance motivation: relevance           | 3.00 | 1.00 |
| Enhance motivation: risk                | 2.45 | 1.29 |
| Enhance motivation: rewards             | 2.18 | 1.33 |
| Enhance motivation: roadblocks          | 2.18 | 1.33 |

Website search strategy design



Features of the selected websites by Content and Quality rating

| Website URL  | State       | Affiliation | Site type | Flesch Reading | Flesch-Kinkaid | JAMA Benchmark | Discern Mean | Smoking treatment rating scale (STS-R) |
|--|-------------|-------------|-----------|----------------|----------------|----------------|--------------|--|
| <a href="http://www.indental.org">www.indental.org</a>   | USA         | IDA         | SD        | 25.6           | 16             | 3              | 4.31         | 4.85                                   |
| <a href="http://www.adapregon.org">www.adapregon.org</a>   | USA         | *           | C         | 46.7           | 10.2           | 2              | 3.94         | 3.77                                   |
| <a href="http://www.tobacco-oralhealth.net">www.tobacco-oralhealth.net</a>                       | Switzerland | OHNTPC      | G         | 40             | 13             | 3              | 4.38         | 3.54                                   |
| <a href="http://www.ada.org">www.ada.org</a>   | USA         | ADA         | DS        | 17.3           | 16.4           | 1              | 2.69         | 2.92                                   |
| <a href="http://www.who.int/Tobacco_oral_health_guide">www.who.int/Tobacco_oral_health_guide</a> | USA         | WHO         | G         | 32             | 13.9           | 3              | 2.88         | 2.92                                   |
| <a href="http://www.nhs.uk">www.nhs.uk</a>   | UK          | NHS         | G         | 43.7           | 11             | 3              | 3.75         | 2.85                                   |
| <a href="http://www.cdc.gov">www.cdc.gov</a>   | USA         | CDC         | G         | 75.2           | 7              | 3              | 2.69         | 2.31                                   |
| <a href="http://www.gov.uk/Smokefree_smiling">www.gov.uk/Smokefree_smiling</a>                   | UK          | GOV UK      | G         | 48.6           | 12.1           | 3              | 2.63         | 2.23                                   |
| <a href="http://www.youcanmakeithappen.ca">www.youcanmakeithappen.ca</a>                         | Canada      | PHU         | G         | 35.2           | 17.7           | 0              | 1.94         | 2.23                                   |
| <a href="http://www.ncsct.co.uk">www.ncsct.co.uk</a>   | UK          | NCSCT       | G         | 31.7           | 17.4           | 1              | 2.25         | 1.77                                   |
| <a href="http://www.publichealthmatters.blog.gov.uk">www.publichealthmatters.blog.gov.uk</a>     | UK          | GOV UK      | G         | 52.1           | 11.8           | 2              | 2.06         | 1.62                                   |



## CONCLUSIONS

The mean quality of web pages with information for oral health care professionals about smoking cessation is low and displayed a high heterogeneity. These facts, added to the difficulty of reading, and lack of multimedia resources, might limit their usefulness.

Based on an EU initiative on lifelong learning our group has been commissioned to deliver a web based learning program, designed to be used by healthcare professionals, including dentists and dental hygienists, to increase their professionals' skills in providing smoking cessation advice for tobacco users.

[www.smokingcessationtraining.com](http://www.smokingcessationtraining.com)



Co-funded by the Erasmus+ Programme of the European Union

This project is co-funded by the European Union's Erasmus+ programme 'Smoking Cession Advice: Healthcare Professional Training' under grant agreement N° 2016-1-UK01-KA202-024266.

The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.