SMOKING AND THE INTERNET IN SCHOOLS, OR USEFUL LINKS FOR SMOKERS

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Abstract: *Reliable information is an important precondition both to prevention and to giving up smoking. The Internet is the source of information most widely used by contemporary students. The information available on the Internet is, however, of extremely varying quality. Our aim was to choose the best websites devoted to smoking. Our pilot group contained a total of 20 freely available websites shown in the leading positions by search engines in response to the inquiry "smoking". The assessors were 41 students in year five of general medicine competent to make an assessment from the specialist viewpoint. In addition to their expertise, the other aspects assessed in terms of the quality of these websites were their topicality, their clarity, understandability, contacts, graphics, comprehensiveness, specificity, originality, links, advertising and overall effect. 29 students considered the pages at http://www.kurakovaplice.cz the website of the highest quality.*

Key words: *websites about smoking, smoking, giving up smoking, the Internet*

Introduction

An increasing prevalence of smoking among the young has been seen since the beginning of the nineteen nineties, in complete contrast to the trend seen among the adult population, which is characterised by a fall in the number of smokers (Sovinová and Csémy, 2000).

An individual's decision as to whether to begin smoking, give up smoking, or what method to choose when trying to give up smoking is based on the information available to him or her. The Internet serves as the primary tool in looking for information among contemporary schoolchildren, which makes it likely that they will also look for information about smoking on the Internet too.

Ever-increasing numbers of quitting programmes around the world are using the Internet environment. Intervention over the Internet would appear to be more effective than self-treatment (Huttone, Wilson, Apelberg et al., 2011), though it has not yet been proven to be more effective than traditional forms of therapy (Szatkowski, McNeill, Lewis et al., 2011). No study has, however, as yet made a comparison of the quality of Czech Internet pages targeted against smoking.

Our aim was to map out this unexplored area. We wanted to find the best information on smoking designed for the general public. The quality of individual websites is, however, a relative term, as the significance of the assessment criteria is dependent on the purpose for which we are making our assessment. In a similar way as web designers will place higher demands on the appearance of their website and its functionality, with the actual content being less important to them, so we have focused in particular on the specialist aspect of the information presented, how topical and understandable it is, its structure and comprehensibility, while playing down the importance of the graphic design of these sites.

The characteristics of the research group

Our group was comprised of a total of twenty anti-smoking websites, which were assessed during our research. These pages were freely accessible and appeared in the leading positions when the keywords smoking, quitting smoking and cigarettes were entered into commonly used Internet search engines (Google and Seznam).

Assessment

The assessment of these websites was part of the practical coursework for the subject Preventative Medicine for students of general medicine at Masaryk University. The assessors were students in year five who had already become acquainted with the issue of smoking during the course of their studies, meaning that their assessment carried more weight in expert terms than an assessment by members of the general public. At the start of the week, before completing their questionnaires, the students were given detailed instructions regarding the method of assessment. Their attention was, in particular, drawn to Internet pages focusing on bioresonance – a method of helping people quit smoking that is extremely widespread commercially, though whose effectiveness has not been scientifically proven. During the week, the students then looked at the individual sites, made an assessment of them, and handed in their assessments at the end of the week.

Criteria assessed

All the sites were assessed individually with respect to a number of aspects. These various quality aspects were marked differently according to their importance. The maximum score resulting from the sum total of all these items was 100. The number in brackets given in the following enumeration of qualitative indicators represents the range of scores the students were able to give in the assessment of the given item. The questions the students asked themselves in making their assessment are given after the individual items.

- Expertise (0 – 9 points): Does the site reflect the latest scientific knowledge? Is it based on scientific facts?
- Topicality (0 – 7): Is the information given on the site regularly updated? Does it

follow the latest trends and knowledge?

- Contacts (0 – 6): Does the site offer the possibility of consultation with an expert? Does it provide the possibility of making an on-line order with a clinic? Are contact details given here (address, telephone, e-mail)?
- Clarity (0 – 5): Is there a clear web structure? Can I find the necessary information easily, or is it difficult to find my way around the pages, meaning that searching for information takes a long time?
- Understandability (0 – 5): Is the information presented in a sufficiently clear and understandable way for the public? Does the site contain too many specialist terms that are not explained?
- Comprehensiveness (0 – 5): Does the site provide a comprehensive overview of the issues (the composition of cigarette smoke, the mechanism of effect, the consequences of smoking, giving up smoking, the legislation, history, etc.), or does it have merely a limited focus?
- Specificity (0 – 4): Does the site offer special sections for specific groups (pregnant women, children, parents)? Is an emphasis placed on specific information for each of these groups?
- Graphics (0 – 3): Does the site make good use of typeface, colour and images, or is the overall design of the site hopeless or old-fashioned?
- Links (0 – 3): Does the site offer a good number of links (including links to foreign language pages) related to smoking and everything associated with smoking, or is this area entirely neglected?
- Originality (0 – 2): Is the information presented in an original way? Is the site full of ideas and other items of interest, or is the method of presentation entirely ordinary?
- Advertising (0 – 1): Is the principal aim of the site the promotion of a commercial preparation, or does it feature minimal advertising?
- Overall effect (0 – 50): Does the site offer everything it should and can it be recommended to others? Or is it just a waste of time to look at this site?

Results in figures

The following table presents aggregate results (averaged values are displayed for each site assessed):

	Expertise (0 – 9)	Topicality (0 – 7)	Clarity (0 – 5)	Understandability (0 – 5)	Contacts (0 – 6)	Graphics (0 – 3)	Comprehensiveness (0 –)	Specificity (0 – 4)	Originality (0 – 2)	Links (0 – 3)	Advertising (0 – 1)	Overall effect (0 – 50)	Total (0 – 100)
http://www.kurakovaplice.cz	8.2	6.2	4.4	4.6	5.3	2.2	4.6	3.8	1.5	2.3	0.8	44.6	88.7
http://www.odvykani-koureni.cz	7.5	6.3	4.6	4.6	5.3	2.3	3.8	2.1	1.0	2.0	0.9	38.3	78.4
http://stop-koureni.cz	7.6	5.9	4.4	4.6	4.4	1.9	4.3	3.5	1.0	1.1	0.9	38.0	77.6
http://www.dokurte.cz	7.1	4.6	3.9	4.2	4.5	1.7	3.3	1.9	0.8	2.7	0.8	33.9	69.8
http://jakprestat.cz	5.9	4.8	3.8	4.4	1.4	1.6	2.7	1.6	0.8	1.9	0.5	27.3	56.5
http://stopkoureni.cz	5.6	4.9	3.8	3.9	2.2	2.0	1.1	1.3	1.3	2.1	0.7	27.2	55.7
http://cs-cs.help-eu.com	5.4	4.7	2.5	4.1	3.9	1.7	2.1	1.8	1.1	1.3	0.7	24.1	53.4
http://www.nicorette.cz	5.1	4.8	3.9	4.4	1.7	2.3	1.5	1.5	0.9	0.4	0.3	22.0	48.6
http://www.nekourit.cz	4.5	6.2	4.0	3.7	5.0	2.5	1.2	0.5	0.8	0.7	0.3	19.2	48.4
http://www.koureni.biz	4.5	4.3	3.5	4.1	1.0	1.0	1.7	0.9	0.3	0.8	0.4	18.0	48.3
http://www.exnico.com	4.8	4.7	2.8	3.0	3.3	1.8	2.2	1.0	0.7	1.1	0.2	19.2	44.2
http://koureni.podrobneji.cz	4.2	3.9	3.0	4.0	0.7	1.4	1.7	2.1	0.6	0.6	0.5	16.8	40.1
http://koureni.sweb.cz	2.8	2.0	2.8	3.2	0.8	1.4	0.8	0.4	0.8	0.4	0.5	21.6	36.9
http://www.odvykani.info	4.7	3.3	3.7	4.2	0.2	0.5	1.3	0.2	0.0	0.7	0.5	16.2	35.3
http://www.stopnikotin.com	2.8	3.2	3.2	3.4	2.2	1.4	0.6	0.2	0.5	0.6	0.2	12.2	31.3
http://prestat.kourit.cz	2.1	2.0	2.0	3.6	1.6	0.6	1.4	0.4	0.3	0.3	0.4	15.0	30.9
http://www.kourenistop.cz	2.3	3.5	3.0	2.7	1.8	1.2	0.3	0.7	0.7	0.2	0.3	9.2	29.2
http://www.odvykani-koureni.snadno.eu	2.0	2.2	3.0	2.2	1.0	1.2	0.2	0.0	0.2	0.0	0.3	7.5	19.7
http://www.jaknekourit.cz	1.4	3.3	3.6	3.0	1.9	0.7	0.1	0.9	0.6	0.0	0.4	4.0	19.4

Kuřákova plíce was judged the site with the greatest expertise (8.2 points), followed by Stop-kouření (7.6) and Odvykání-kouření (7.5).

Odvykání-kouření (6.3 points) was judged the most topical site, followed by Kuřákova plíce (6.2) and Nekouřit (6.2).

Contacts were judged best on the sites Odvykání-kouření (5.3 points), Kuřákova plíce (5.3) and Nekouřit (5).

The best site in terms of clarity was Odvykání kouření (4.6 points), followed by Kuřákova plíce (4.4) and Stop-kouření (4.4).

The sites that were easiest to understand were Stop-kouření (4.6 points), Kuřákova plíce (4.6) and Odvykání-kouření (4.6).

The sites Kuřákova plíce (4.6 points), Stop-kouření (4.3) and Odvykání-kouření (3.8) were considered the most comprehensive.

Students considered Kuřákova plíce (3.8), Stop-kouření (3.5) and Odvykání-kouření (2.1) to be the most specific sites.

Dokuřte (2.7 points) featured the best links section, followed by Kuřákova plíce (2.3) and Stop kouření (2.1).

The sites with the greatest originality were Kuřákova plíce (1.5 points), Stop kouření (1.3) and Help-eu (1.1).

Advertising was least annoying on the sites Odvykání-kouření (0.9), Stop-kouření (0.9) and Kuřákova plíce (0.8).

Students considered Kuřákova plíce (44.6 points), Odvykání-kouření (38.3) and Stop-kouření (38.0) the most effective sites.

The sites holding the leading positions in the overall assessment were also the ones that came out best in terms of their overall effect – Kuřákova plíce in first place (with 88.7 points), Odvykání-kouření in second place (with 78.4) and Stop-kouření in third place (77.6).

The other sites were not always ranked in the same order in terms of their effect and their total score, which may have been the result of pronounced shortcomings in individual areas that were reflected in the overall assessment.

The site Kouření (19.4 points) was adjudged the worst site.

It is clear from these results that the sites Kuřákova plíce, Odvykání-kouření and Stop-kouření featured in the leading positions for all items assessed in the vast majority of cases, which provides further evidence of their high quality.

A comparison of the four best Internet pages on smoking

1. http://www.kurakovaplice.cz
More than half of the students consider Kuřákova plíce the best site (29 of 41 students). These pages were ranked in first place in terms of expertise, comprehensiveness, specificity, originality and overall effect. Their dark design and drastic images of organs damaged by smoking are striking and provide the greatest visual discouragement of smoking. A number of students were, however, put off by the look of these pages, though positive responses predominated. This site offers a large amount of information, other items of interest and videos presented in a clearly arranged manner. In addition to important information, it also offers quizzes and polls. The contacts given here represent something of a virtual clinic.

2. http://www.odvykani-koureni.cz
Odvykání-kouření finished in second place about ten points behind the site ranked in first place. It was ranked in first place for the individual criteria topicality, clarity, contacts, graphics and advertising.

These pages are divided into a section for the general public and a section for professionals that is devoted to the anti-smoking drug Champix (vareniclin), though this manages to retain a high degree of objectivity. These pages also feature a large number of other items of interest, games and competitions. They also feature striking smokers' stories and an ex-smoker's certificate, and calculators of money saved and the risks involved in giving up smoking. Their links to other pages on similar topics are, however, a weak spot.

3. http://stop-koureni.cz
Stop-kouření occupied third place with just a slightly smaller points total than Odvykání-kouření. It was ranked in first place in terms of understandability. These pages are also divided into a section for the general public and an expert section that is, however, markedly less sophisticated. These pages offer a detailed history of smoking and the legislation. The section Myths about Smoking is also interesting. Stop-kouření is also

one of the few sites to offer the possibility of registration. This site contains a minimum of advertising, and also lacks links.

4. http://www.dokurte.cz
Dokuřte finished in fourth place with a significantly lower points total. This site's strong point is the greater clarity of links with a similar focus; its weak point its lower topicality. This site is operated by the Czech Coalition against Tobacco. It contains less information than the preceding pages. Certain students felt there was a lack of specific advice as to how to give up smoking, and assessed the site's design as old-fashioned. They welcomed the rapid and clear search for non-smoking restaurants.

Which pages cannot be recommended?

The Internet pages assessed here include many commercial pages promoting a new method of giving up smoking – bioresonance. This form of treatment using a BICOM instrument promises high effectiveness without the use of drugs, with no pain, minimal side effects and, most importantly, almost immediate effects. No breathtaking results have, however, ever been scientifically proven, and the effectiveness of this method is comparable with other alternative methods of treatment (Heřt, 2010).

Discussion

The fact that this is the first piece of research into the given issue provides wide scope for discussion. The methodology employing a points system may be one of the first points of discussion. Should the assessment criteria be supplemented to include other aspects? Do some of the items assessed overlap? Is the number of points awarded to the individual aspects balanced?

The validity of the results is another point for discussion. A basic feature of websites is their changeability over time with an impermanence of content. The question is, then, for how long the results presented will remain valid. Websites of a higher quality can, however, be generally said to show a tendency towards permanence and continual improvement.

We consider the use of the results to be the most important topic for discussion. What is the best way in which the results can be disseminated? It would be appropriate to acquaint doctors and teachers above all with the results, as they can influence their patients and pupils. In addition to the publication of the results in reviewed journals and their presentation at conferences, it would also be appropriate to disseminate them by means of fliers at doctors' surgeries and in schools or by e-mail. Below, we present a number of suggestions as to how to work with the results in the school environment.

Possible uses of the results in schools

The information obtained can be used in the school environment in various ways. If sufficient time is available we can perform a similar assessment at primary or secondary schools. Pupils would thereby obtain an overview, in an unforced way, of current

anti-smoking websites and the information they provide. As school pupils do not have the same level of education and grasp of the issues concerned as university medical students, it would, however, be extremely difficult for them to assess the professionalism of the information presented. This shortcoming could be alleviated by expert instruction emphasising recognition of the pseudoscientific texts that propagators of alternative methods are so happy to employ.

Joint projects, during which pupils would discuss smoking, could be a suitable opportunity for comparing the quality of individual websites.

If the assessment of websites proves demanding for pupils from the viewpoints of time and organisation, we could merely acquaint them with the results. In this case it would again be more useful to select an active form of processing the information, e.g. by means of biology essays about smoking, the basics of IVT, or subjects focusing on social education.

If even this method of passing on new knowledge and information proves impossible, we recommend at least presenting the results on school and classroom notice boards or other places where information for pupils is presented.

Conclusion

It can be far from easy to find your way around the sea of information on the Internet, particularly for the uninitiated. Our assessment of anti-smoking websites can save time, effort and maybe even money for those looking for information. Our tips for verified websites can provide help in giving up smoking (if we cannot, due to a lack of time, pass on information about smoking in person, which would be the ideal situation), strengthen people's resolve to give up smoking and, let's hope, also provide some much-needed motivation. Correct decisions are reached on the basis of the correct information, and this information, as our pilot assessment shows, is provided above all by the websites http://www.kurakovaplice.cz, http://www.odvykani-koureni.cz, http://stop-koureni.cz and http://www.dokurte.cz. Doctors can recommend these sites to their patients and teachers to their pupils.

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KOUŘENÍ A INTERNET VE ŠKOLE ANEB KAM ODKÁZAT KUŘÁKY

Abstrakt: Spolehlivé informace jsou důležitým předpokladem k prevenci i odvykání kouření. Nejpoužívanějším zdrojem informací, se kterým současní studenti nejvíce pracují, je internet. Informace, které tu můžeme získat, však vykazují velmi rozdílnou kvalitu. Naším cílem bylo vybrat nejlepší webové stránky věnované kouření. Náš pilotní soubor obsahoval celkem 20 volně dostupných webových stránek, které zaujímaly přední místa ve vyhledavačích při dotazu na kouření. Hodnotiteli bylo 41 studentů pátého ročníku všeobecného lékařství kompetentních k posuzování odborného hlediska. Kromě odbornosti byly dalšími posuzovanými apsekty kvality stránek aktuálnost, přehlednost, srozumitelnost, kontakty, grafika, komplexnost, specifičnost, originalita, odkazy, reklama a celkový přínos. Za nejkvalitnější stránky považovalo 29 studentů stránky http://www.kurakovaplice.cz.

Klíčová slova: webové stránky o kouření, kouření, odvykání kouření, internet