

Arabic Websites Relevant to Patient Information about Spinal Cord Injury: Characteristics and Quality Assessment Using the DISCERN Tool

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Abstract

Background: Spinal cord injury (SCI) requires special healthcare and rehabilitation. **Objective:** The article describes and qualitatively assesses Arabic websites relevant to patient information about SCI. **Materials and Methods:** In March 2018, Google was searched using the Arabic translation of SCI. The first 100 results were assessed against inclusion and exclusion criteria. The following data were collected: Website name, URL, its category, SCI topic, and whether Health on the Net (HON) code was included in this study. In addition, the quality of them was assessed using the DISCERN tool. **Results:** A total of 13 websites were included in this study. Only two websites included HON code. Majority of them (>10) included information about the definition of SCI, its causes and its complications. Eight of them mentioned available treatment options. Most of them were blogs. Two of them were from hospital that is advertising for their SCI healthcare. According to the quality level assessment, 30.8% were of poor quality, 23.7% were of fair quality, 23.7% were of good quality, and 23.7% were of excellent quality. **Conclusion:** This study shows that the current available Arabic websites with SCI are insufficient. Moreover, their quality needs to be improved. In addition, there is no available governmental or institutional website with patient information about the topic. Governments, universities, and associations are encouraged to fill this gap to prevent probable patient risks that may arise from it. Some recommendations regarding quality improvement are provided.

Keywords: Arabic, quality, spinal cord injury, websites

INTRODUCTION

Spinal cord injury (SCI) is one of the most overwhelming injuries with accompanying sensory, motor, and autonomic dysfunctions.^[1] Moreover, secondary long-term cardiovascular, respiratory, urinary and bowel complications, osteoporosis, pressure ulcers, depression, and pain are common among patients with SCI.^[2] Due to the postinjury sequelae, patients with SCI need special care and rehabilitation.^[3,4] However, because of staff shortage or limited care resources, communicating directly with the patients to provide them with the information they need regarding their health needs may be affected.^[5,6]

With internet penetration to >3 billion people globally, availability of health information on the Internet is growing rapidly, and this trend seems to continue proliferating.^[7-10] For example, in 2013, nearly six in ten US adults surfed the net for online health information.^[11] Despite being quick

and easy, searching for health information on the net could bear some risks. These could range from risk to privacy and confidentiality to promotion of unapproved medicines.^[12-14]

Arabic is the sixth most spoken language in the world with >420 million, mainly in the Middle East and North Africa (MENA) region. There are abundant resources in English providing information about SCI. However, the literature is lacking an assessment pertaining to qualitative assessment of websites about SCI in Arabic. This article aims to summarize the characteristics of Arabic websites relevant to patient information about SCI and also provides qualitative assessment of them.

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MATERIALS AND METHODS

In March 2018, the Arabic translation of SCI (إصابة/إصابات النخاع الشوكي) was used to locate top Arabic websites with information about SCI. The search was conducted on the Google search engine (<http://www.google.com>) since it is the most used search engine in the MENA region.^[15,16] The search history and cookies were cleared before the search to avoid potential impact on the search results.

The first 100 results (first 5 pages) were examined. Exclusion criteria included the following: research article, dictionary, videos, social network pages, news, and encyclopedia. The following data were collected: Name of the website, its URL, topic and whether containing Health on the Net (HON) code.^[17,18] The websites were examined if containing any information pertaining to one of the following topics: definition of the SCI, causes of the injury, complications following it, health needs and rehabilitation and treatments options. If the website contained any of these topics, it got a score of one. If the specific subtopic is not mentioned, it got a score of zero. In addition, included websites were categorized as governmental, association, foundation, hospital, institution, or blog.

Moreover, the quality of the websites were assessed using the DISCERN tool.^[19,20] The DISCERN tool rates the quality based on 16 questions. The answer to the question could be no (1 score), partial (2, 3, or 4 scores) or yes (5 scores). Each website could attain a maximum of 80 scores.

The DISCERN tool has been validated and used in many previous publications.^[21,22] The quality of the websites was categorized into the following: very poor quality (<27), poor quality (27 < 39), fair quality (39 < 51), good quality (51 < 62), and excellent quality (>62). Descriptive statistical analysis including the mean and standard deviation (SD) of the DISCERN scores were performed.^[23]

RESULTS

After performing the search and judging the results according to the inclusion and exclusion criteria, 13 websites were included in this study [Table 1]. Two websites were foundations websites, two websites were hospital websites, and nine websites were blogs. Only two are using the HON code at the time of the search. According to the topic reporting: all included websites reported definition of SCI, 12 websites included the causes, 11 websites included complications, 9 websites reported about health needs and rehabilitation, and only 8 websites wrote about the treatment choices. According to the quality assessment, the mean DISCERN score was 48.85 (SD 115.75) [Table 2]. Moreover, according to the quality level assessment, 30.8% were of poor quality, 23.7% were of fair quality, 23.7% were of good quality, and 23.7% were of excellent quality. None of the included websites was of very poor quality.

DISCUSSION

SCI injury requires close follow-up of the patients to ensure

Table 1: Characteristics of the included websites. Yes means the website has Health on the Net code. 1 means the website has information about this topic. The total summarizes the overall number of websites with Health on the Net code, and with information regarding each sub-topic

Number	Name	URL	Category	HON code	Topic				
					Definition	Causes	Complications	Health needs and rehabilitation	Treatment
1	WebTeb	https://www.webteb.com	Foundation	No	1	1	1	1	1
2	Feedo	http://www.feedo.net	Blog	No	1	1	1	1	1
3	Mayo Clinic	https://www.mayoclinic.org/ar	Hospital	Yes	1	1	1	1	1
4	Daily Medical Info	https://www.mayoclinic.org/ar	Blog	No	1	1	1	1	1
5	Health for all	http://hfa.mawared.org	Blog	No	1	1	1	1	1
6	Institut Guttman	https://www.guttmann.com/ar	Hospital	Yes	1	-	1	1	-
7	Sohati	http://www.sohati.com	Blog	No	1	1	-	-	-
8	Al-Health	http://www.al-health.net	Blog	No	1	1	1	1	1
9	Arab Doctor	http://www.al-health.net	Blog	No	1	1	1	1	1
10	Seha	http://www.sehha.com	Blog	No	1	1	1	1	1
11	Jordan Heart	http://www.joheart.com	Blog	No	1	1	1	-	-
12	Arab Health and Medical service	http://www.arab-hams.com	Foundation	No	1	1	-	-	-
13	Science Therapies	http://www.sci-therapies.info/	Blog	No	1	1	1	-	-
Total				2	13	12	11	9	8

HON: Health on the Net

Table 2: Quality assessment of the included websites using the DISCERN tool. Website number refers to the order of the website in Table 1

Question number	Question	Website number												
		1	2	3	4	5	6	7	8	9	10	11	12	13
1	Are the aims clear?	5	5	5	5	5	5	5	5	5	5	5	5	5
2	Does it achieve its aims?	5	5	5	5	5	5	5	5	5	5	5	5	5
3	Is it relevant?	5	5	5	5	5	5	5	5	5	5	5	5	5
4	Is it clear what sources of information	1	1	1	1	4	1	1	1	1	1	1	1	1
5	Is it clear when the information used or reported in the publication was produced?	1	1	1	1	4	1	1	1	1	1	1	1	1
6	Is it balanced and unbiased?	5	5	5	5	5	4	4	4	4	5	4	3	4
7	Does it provide details of additional sources of support and information?	1	1	1	1	4	1	1	1	1	1	1	1	1
8	Does it refer to areas of uncertainty?	5	5	5	5	5	5	5	5	5	5	5	2	4
9	Does it describe how each treatment works?	5	3	5	5	2	1	1	2	3	5	1	1	1
10	Does it describe the benefits of each treatment?	5	3	5	4	2	1	1	2	3	4	1	1	1
11	Does it describe the risks of each treatment?	2	2	2	2	1	1	1	2	3	3	1	1	1
12	Does it describe what would happen if no treatment is used?	5	4	5	4	1	1	1	2	3	3	4	1	1
13	Does it describe how the treatment choices affect overall quality of life?	5	3	5	5	3	1	1	2	2	4	1	1	1
14	Is it clear that there may be more than one possible treatment choice?	5	3	5	5	2	1	1	2	3	4	2	1	1
15	Does it provide support for shared decision-making?	3	4	5	5	3	1	1	2	3	4	2	1	1
16	Based on the answers to all of the above questions, rate the overall quality	5	3	5	5	3	3	3	3	3	5	3	2	2
	Total	63	53	65	63	54	37	37	44	50	60	42	32	35

receiving the accurate answer to the health information about their case. This could be affected by staff shortage, low healthcare resources or the limited patient-physician interaction time. This article examined the Arabic websites about SCI and assessed their quality. It is clear that there is deficit in the availability of SCI information in Arabic since only 13 websites out of 100 were included in this study. Moreover, most websites have not used the HON code which affects the credibility of their information. In addition, no governmental, institutional, or association websites have been included in this study. Thus, governments, institutions, and SCI association are encouraged to do more efforts to provide the patients with accurate, updated, and balanced information about SCI. In addition, some of the included websites lack information about treatment options for patient with SCI. This information gap may lead patients to be exploited via pursuing unapproved treatments or treatments with doubtful benefits.

Furthermore, according to the DISCERN quality assessment, there are several factors that may improve the quality of Arabic websites about SCI. First, websites need to cite updated references and to provide further reading options to the readers. Second, they need to insist on mentioning the lack of definite treatment currently that could restore the normal functional architecture of the spinal cord. This will help guide readers not to follow advertisements that could propagate unapproved treatments. Third, they should provide elaboration about the options that could alleviate the burden of the post-injury secondary complications. Fourth, information targeting patient's caregivers should be emphasized.

CONCLUSION

This is the first article to examine Arabic websites with SCI information. The current websites need improvements and further high-quality websites are needed.

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Conflicts of interest

There are no conflicts of interest.

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