

The staffs' understanding of the role of the health department website on health education in a university of medical sciences

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RESEARCH

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ABSTRACT

Background

Health related organizations have sought to design websites to provide various services, including access to relevant information by health care providers.

Aims

The purpose of this study was to investigate the understanding of health care staff members of the role of the health sector website of Semnan University of Medical Sciences in their health education.

Methods

This cross-sectional study was performed on 369 employees of health care institutions affiliated to Semnan

University of Medical Sciences, Iran. An anonymous self-administered questionnaire was developed.

Results

Mean score of the employees' attitudes towards total characteristics of the health website were understanding of concepts of the health website was 3.65, for communications in the health website was 3.27 and for patient-centered of health website was 3.55. The results showed that there were significant relationships among total characteristics of the health website ($P < 0.001$).

Conclusion

One can infer that the University's health department website is not proportionate to most of its domestic clients and could not provide the information needs of the healthcare staff. Therefore, practical and methodological considerations in the design of the website of the health department should be taken into consideration in order to provide user-oriented information on the website.

Key Words

Health care institutions, health department, website, health education

What this study adds:

1. What is known about this subject?

The organizations have sought to design websites to provide various services, including access to relevant information.

2. What new information is offered in this study?

Health department website of a university of medical sciences has to meet its domestic clients' health information needs.

3. What are the implications for research, policy, or practice?

Health department website of a university of medical sciences should use user-oriented interventional strategies such as Website Developmental Model.

Background

The website of Semnan University of Medical Sciences as a communication medium not only introduces the university, faculties and its organizational structure in all areas of the executive, rather by means of such parts as access to the library's general catalog, the publication of electronic journals, message system and Telegraph channel provides the staff of health care institutions with the newest research findings, health information, clinics, basic science, and etc., in order to communicate with their clients. The mission of the University of Medical Sciences is to educate people and promote the health of the community and internal clients such as health care providers. Because the health of health care workers affects the quality of patient care. Then this question is raised: how much has the website of the Semnan University of Medical Sciences been successful in communicating with the staff of healthcare institutions?

Given the fact that health care clients increasingly tend to use Internet for health information,¹ it is necessary that the websites able to provide quality information including comprehensive, accurate, relevant, valid and well-timed information,² to focus more on users. Inattention to the needs of users and their information purposes lead to user dissatisfaction and, ultimately, redesigning of the website, which is often costly. Therefore, the purpose of this study was to investigate the understanding of health care staff members of the role of the health sector Website of Semnan University of Medical Sciences in health education. This study had two hypotheses. The first the health website was user-friendly; and the second was there were significant relationships among characteristics of the health website.

Method

Sample frame

Participants in this study were clinical and para clinical staffs of health care institutions of Semnan University of medical sciences in Iran.

Recruitment methods

The census method was used and the sampling method was not used in the current study.

Sample size calculations

A total of 622 questionnaires were distributed; 369 were returned.

Analysis

The questionnaire used in this study was developed by the authors, after reviewing the related literatures. It was divided into four sections. The first section focused on demographic information (8 questions). The second section comprised a scale to measure the attitudes of the students in relation to the understanding of concepts in the website (3 questions). The third section measured communications in the website (5 questions); and the fourth section evaluated patient-centered in the website (4 questions). Attitudes on each item were measured on a 5-point Likert type scale, where completely disagree=1 until completely agree=5. The mean and standard deviation was reported. A total attitude score for each of the section was calculated based on the mean scores for each of the 12 items (low score ≤ 3.4 ; high score ≥ 3.5). A low score indicated a negative attitude, while a high score indicated a positive attitude. The final version of the questionnaire was distributed among the study subjects in health care institutions. Questionnaires were self-administered, completed anonymously, and returned to the researcher within 72 hours. Curve estimation test was used to clearly show the relationships among characteristics of the health website in significant level of 0.01.

Results

The participants' age mean was 38.5 years. There were 199 (53.9 per cent) female, 234 (63.8 per cent) people were undergraduates, 190(51.5 per cent) people were employees, 144 (39.3 per cent) people had good computer skill. 182 (49.7 per cent) people had good general health. 151 (41.4 per cent) people used of the website monthly. 165(45.1 per cent) used of telegram daily (Table 1).

Table 1: Demographic characteristics

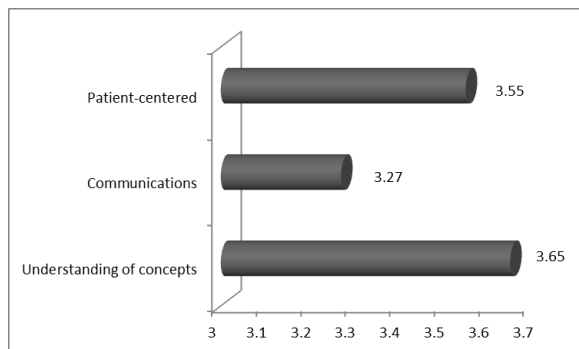
Characteristics		N	%
Age(Year)		38.5±9.05*	
Sex	Male	170	46.1
	Female	199	53.9
Education	Undergraduate	234	63.8
	Postgraduate	133	36.2
Job	Employee	190	51.5
	Physician	17	4.6
	Nurse	53	14.4
	Allied health	49	13.3
	Faculty member	60	16.3

Computer skill	Weak	24	6.6
	Moderate	107	29.2
	Good	144	39.3
	Excellent	91	24.9
General health	Very bad	3	0.8
	Bad	7	1.9
	Moderate	44	12
	Good	182	49.7
Use of website	Never	26	7.1
	Daily	82	22.5
	Weekly	106	29
	Monthly	151	41.4
Use of telegram	Never	24	6.6
	Daily	165	45.1
	Weekly	84	23
	Monthly	93	25.4

*Mean±SD

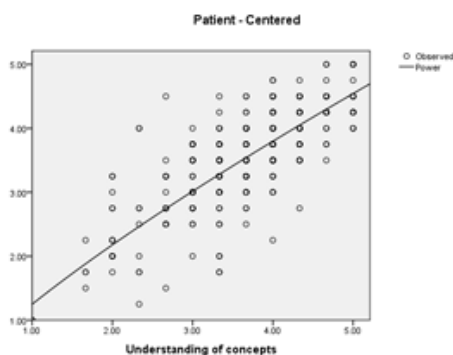
Mean score of the employees' attitudes towards understanding of concepts was 3.65 (Figure 1).

Figure 1: Total means of the study subjects' attitudes towards the characteristics of the health website quality



The results showed that there was a significant relationship between characteristics of understanding of concepts and patient –centered of the health website ($P<0.001$) (Figure 2).

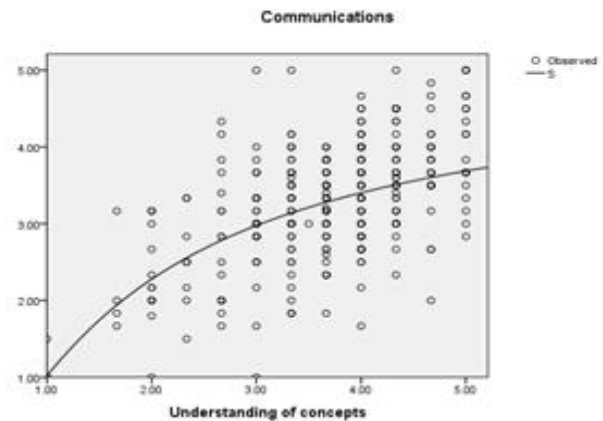
Figure 2: Relationship between understanding of concepts and patient –centered of the health website



$$R^2=0.372, F=211.232, P<0.001$$

The findings showed that there was a significant relationship between characteristics of understanding of concepts and communications of the health website ($P<0.001$) (Figure 3).

Figure 3: Relationship between understanding of concepts and communications of the health website



$$R^2=0.373, F=211.897, P<0.001$$

Discussion

The results rejected the first hypothesis. Because the communications were poor on the health sector website and the health care staffs did not have a good understanding of health concepts at the university health department website.

The study done by Devine showed that website users easily asked questions from each other and responded to each other and did not have to go to another website.³ Hazara & Bhandari found in their research that too much information on websites and the lack of link between their parts caused the information not to be easily accessible to users.⁴ Sahusilawane et al. did also find that some users prefer to receive the information they need verbally through others over going to a specific website.⁵

The findings confirmed the second hypothesis of this study. Because this study clearly showed that if the staff cannot properly understand the concepts used in the information available on the health department website, they would not be able to communicate with the website meaningfully and make informed health decisions.

The present study contained a number of limitations. First, the present study used a user-dependent methodology to assess the quality of health department website, which needed only users' understanding and that is not an easy task because the quality of a website cannot be assessed by

merely collecting users' understanding. The second limitation was the small sample size. It is suggested that a study be conducted with a larger sample size. Third, there is no gold standard for evaluation of capabilities of a website. The study's implication is to emphasize the importance of training and design of a university health department website using electronic health software. Thus, the results of this study are important for designers. Designers should first focus on quality aspects that affect the expectations and perceptions of users, and then connect these qualities with the goals of the website.

Conclusion

Upon this study, one can infer that the University's health department website is not proportionate to most of its domestic clients and could not provide the information needs of the healthcare staff. Therefore, practical and methodological considerations in the design of the website of the health department should be taken into consideration in order to provide user-oriented information on the website. It is expected that if a medical university is to increase the health literacy of its staff through its website, it should use user-oriented interventional strategies. The use of the Website Developmental Model seems to be appropriate for the design and development of a website. This is a user-oriented and comprehensive approach to design and development of a website for clients.

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PEER REVIEW

Not commissioned.

CONFLICTS OF INTEREST

The authors declare that they have no competing interests.

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ETHICS COMMITTEE APPROVAL

Ethics approval was obtained from the Semnan University of Medical Ethics Committee (IR. SEMUMS. REC.1395.204).