# **Original Article**

# Oral Health Information Being Delivered to Yazd Population in 2011

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#### Abstract

**Introduction**: The discipline of oral public health is known as a science and art of dealing with population oral health. In order to improve public awareness followed by changing people's life style it is necessary for the society to be exposed to massive oral health information. The aim of this study was to evaluate the roots of oral health information being delivered to the Yazd population in 2011.

**Materials and Methods:** In this descriptive cross sectional study 16 blocks in urban areas of Yazd city were randomly selected. A total of 400 subjects (8 years and above) were interviewed and the questionnaire filled. The data were analyzed using descriptive analysis with SPSS 18software.

**Results:** Two hundred and twenty four male subjects (56%) and 173 female subjects (44%) participated in this study. According to this study the main sources of oral health information on Yazd population where mass media (radio & television) (22.3%) and dentists (14.5%). It was also believed that radio and television and dentists were potential sources of oral health information. It was revealed that 67.5% of the population had access to the internet. The use and the potential of internet for access to oral health information were in sixth place.

**Conclusion:** Oral health officials put more time and effort for providing oral health programs in order to improve oral health conditions in the society. Science using the internet as a source of oral health information for access in the society was less important than some other countries are the main due to, language problems, investment in this area is recommended.

Keywords: Oral health, Information Science, Mass media

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# Introduction

The growing life expectancy has created a number of challenges for society and for the dental profession. One of these challenges is the increasing number of people.

Community dentistry and oral health field are known as a science and art which cause prevention of oral disease with improving oral health and quality of life following its social effects.

In order to promote general oral health it is necessary to know the oral health problems of society, their cause and effect. Therefore efficient interventions have been designed to overcome the problem <sup>[1]</sup>.

Changing patient's behavior I. e. Lifestyle is a main route for preventing oral disease as well as promoting social health which is emphasized by health officials<sup>[2]</sup>.

Prevention of diseases is based on the evaluation of problem and situations and cause the problem and determination of possible interventions including its necessary procedures in order to increase the people's awareness of health issues which could lead to changing their lifestyles, it is necessary for the society to be exposed to health information.

The first step to reach this goal, is to determine the routes which people usually obtain their health information following this, this second step is policymaking based on the aforementioned information by health officials <sup>[3]</sup>.

Abdellatif<sup>[4]</sup> et al studying (2004) showed that, generally first rout of obtaining

information for the respondent were dentists (48%) followed by journals (32%) and in next stage families and banners.

In another study, Hargraves et al (2003) has evaluated the status of person's health information in America. Their results showed only 38% of adults received their health information through other routes except their doctor and62% of American received their health information from their doctors. They concluded the level of people health information depended to their demand had affected their diagnosis and treatment that could promote the overall health care system <sup>[5]</sup>.

To the best of our knowledge no study has been done about him routs of delivering of information in the Iranian community. Awareness about this source can play the main role in strategic planning for health promotion in the society.

The aim of this study was to evaluate the route of oral health information being delivered to Yazd population in 2011.

# **Materials and Methods**

In this study 16 parts of Yazd city were selected from the proportional population sampling according to the municipal census data, 2006 with  $\alpha$ ,d=%5.

397 questionnaires were completed by individuals above 18 years of age. Data were collected by questionnaire and interview. Each questionnaire consisted of 2 parts, demographic data and open source questions Journal of Community Health Research. 2013; 2(3):147-153. http://jhr.ssu.ac.ir

have been designed by the community oral health department and also its validity and reproducibility were approved. Member of household with age higher than 8 years old participated in this study as inclusion criteria.

Data were analyzed using SPSS18 software, statistical descriptive method andk-2 test.

#### Results

In the present study, routes of oral health information in Yazd city have been assessed by 397 completed questionnaires of which 224 (56.4%) men and 137(43.6%) females participated.

The mean age of subjects was of subjects were 30.74+12.08, in response to this question "which methods do you use for delivering oral health information?"67.8% out of participating individual have answered.

They identified radio, television, dentist, journal, book, teacher, family, internet and newspaper as major sources respectively. There was no statistical difference between the main sources of delivering information between two genders (Table 1) (P=0.132).

Routs of delivering	Gender		Total	Percentage
	male	female		
Media and TV	49	40	89	32.8
Dentist	31	27	58	21.4
Journal	22	9	31	11.4
Book and teacher	23	7	30	11.1
Family	17	11	28	10.3
Internet	8	13	21	7.7
Newspaper	4	4	8	3
Other sources	4	2	6	2.2
Total	158	113	271	100

**Table 1:** Main important sources of oral health delivering information

Also there was no statistical difference between age and main sources of delivering information. (P=0. 286).In response to this question "in your opinion what's in the best way of obtaining information about oral health?" 77.5% out of samples answered to this question and they expressed media, television, dentists, family, book and teacher, journal, leaflet and internet as a better route of delivering information respectively. There were no significant differences between gender and most important routes. (Table 2) (P=0. 243).

There was also no significant difference between age and most important potential sources of delivering information (P=0. 422).

Routs of delivering	Ge	nder	Total	Percentage
	male	female		
Media and TV	89	52	141	45.2
Dentist	33	37	70	22.4
Family	28	19	47	15.4
Book and teacher	11	11	22	7.1
Journal	10	3	13	4.2
Internet	6	6	9	2.9
Other sources	4	4	8	2.9
Total	181	129	310	100

#### Table 2: The most important potential sources of delivering information

### Discussion

The aim of this present study was to evaluate the routes of oral health information being delivered to Yazd population in 2011.

Our results showed that most important routes for delivering oral health information were radio, television (32.8%) and dentists (21.%).

In most of the previous studies main sources of delivering information have been mentioned dentists followed by the media<sup>[2, 6, and 8]</sup>.

In Abdellatif et al studying in 2004, dentist with 48% and media with 32% were the main sources of obtaining oral information. Also individuals' younger than 40 years old had received health information from the media while individual solder than 40 years old received health information through then the dentists<sup>[3]</sup>.

In O`Neill`s study, most of the individual evaluated had received information about oral health via their dentist <sup>[6]</sup>.

Also in Wyne et al's study in Saudi Arabia, media with 32.2% and dentists with34.2% have been reported main routes of delivering oral health information for children <sup>[7]</sup>. It seems, the media's role is increasing in presentation of health information to the society <sup>[8]</sup>.

According to the available data it can be concluded, that nowadays media and dentists are the main routes for delivering oral health information, although it should be kept in mind the studied population characteristic in these studies.

In this study the role of media in delivering information was more than dentists while in other studies this order was vice versa.

In explanation of this finding just reasons could be raised 2 reasons:

1. High performance of the media in the studied population

2. Weaker performance of dentists in this issue

Although based on the results of the present study no clear conclusion could be drawn. Dentist/patient ratio in Yazd (1/1500) considering a good result about delivering information by this group.

On the other hand, the results of other studies must be interpreted with caution. For

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example the subjects in a Wyne's study were toys of school age which knew the study was being performed by a dentist. This fact can influence their responses <sup>[7]</sup>.

Also in Adellatif's evaluated sample were parents of elementary school girls while in this study data were collected from people of a city by clustering method; the sampling method and evaluated group it seems the results of this study is more generalized.

It should also be considered that access of individuals in the media is easier and widespread for receiving information than the other sources.

The number and percentage of referring patients to the dental office has an effective role in the delivering information by the dentists while has not been evaluated in this present study.

In this study media (radio and television with 32.8%) and dentist with 21.4% were most mentioned sources of delivering oral health information, in addition to this they also were reported being the potential sources of this information(media with 45.2% and dentist with 22.4%)

The evaluation of these results showed that these two sources (media and dentist) in addition to the appropriate source have a most potential for delivering of this information so officials should pay attention to the planning of increasing volume and quality of training be media and a dentist.

In comparison between the media and dentists it should be noted that in delivering

health information is that kind of information cannot be chosen by the audience in the media.

It's necessary information being presented in simple language and applicable to the all people with a wide range.

While in other sources such as different social economic group in the community the audience can receive their required information.

Pandering et al (1999) in their study evaluated and arranged access routes of health information in California. In this study internet as a fifth efficient source, dentist and health personnel as a more efficient source were recognized <sup>[9]</sup>.

The results of this study emphasize the importance of health personnel and internet in presenting health information.

The Internet makes it much easier for many, though not all, people to seek health information by them, become more exposed to a wider array of health information, and become more involved in their own health care, for good and bad. Using the Internet for health and medical information has a variety of advantages, disadvantages, obstacles and dangers<sup>[10]</sup>.

In developed societies most of the people asked one website about medical information from their doctors <sup>[11, 12]</sup>. while most of the dentist refuses to introduce this kind of source because of unreliability of the appropriate context on these websites.

Another word, patients often don't recognize a biased information such

information which could shift them towards Genion health information <sup>[11]</sup>.

In another study Greenberg et al (2004) concluded internet is widely increased access to the health information. The circumstances by which people search for health information on websites are quite various. Besides the quality and availability of these sites is different <sup>[13]</sup>.

In our study the use of internet for receiving oral health information was in sixth grade also it was in sixth grade as a source for health information.

Considering these data and in comparison with other studies it seems, that internet has not yet found a suitable place as a source of health information in our society.

This item was 67/5% in our study while in developed countries such as America approximately all people were able to access the internet <sup>[14]</sup>.

Regarding acquiring health information through internet it's necessary to say, people can use internet only if they are able to search, so people need to learn how to search for internet <sup>[13, 15]</sup>.

The aforementioned shows 80% of the American use internet for receiving health information <sup>[16]</sup>.

It should be considered, that evaluation in the present study was about oral health information while other studies have assessed journal health information and in some cases oral health information has been included.

# Conclusion

Oral health officials put more time and effort for providing oral health programs in order to improve oral health conditions in the society. Science using the internet as a source of oral health information for access in the society was less important than some other countries are main due to, language problems, investment in this area is recommended.

### Suggestions

1-training nurses to educate patients in dental offices

2- Insurance to set tariffs for dental health education for preventing of future costs and pivotal health.

3- Specialization guild should be designed leaflets related to patient awareness about health information and will be available them to the public in the dental office.

4- Officials of specialization guild should be devoted part of their website to health information

5- More attention of officials planning for increasing the volume and quality of training programs on media and dentist.

6- Due to the use of internet in schools can create a suitable context for appropriate oral health education. Journal of Community Health Research. 2013; 2(3):147-153. http://jhr.ssu.ac.ir

# References

- Chappel D, Maudsley G, Bhopal R, Ebrahim S. Public health education for medical students: a guide for medical schools. Newcastle upon Tyne, university of Newcastle upon Tyne 1996; 7(3):231-39.
- 2- Department of health. Saving lives: our healthier nation. London, the stationery office 1999; 2(5):139-46.
- 3- Essential Dental Public Health BlanaidDaly,RichardG.Watt 2005; 60-61. [Internet]. Available at: <u>Http://www.coh.dent.sbmu.ac.ir</u>. Updated in 2009.
- 4- Abdellatif H. Oral health knowledge and source of information on fluoride among Saudi parents in Riyadh.Saudi Dental Journal 2004:16(1); 3-8.
- 5- Tu HT, Hargraves JL. Seeking Health Care Information: Most Consumers Still on the Sidelines.Center forStudying Health System Change 2003. pp. 1–4. [Internet].Available at: http://www.hschange.com/CONTENT/537.
- 6. O'Neill HW. Opinion study comparing attitudes about dental health. J Am Dent Assoc1984; 109(6):910-5.
- 7- Wyne AH, Chohan AN, Al-Dosari K, Al-Dokheil M. Oral health knowledge and sources of information among male Saudi school children.Odontostomatol Trop 2004; 27(106):22-6.
- 8- Zeng X, Parmanto B. Proceedings of the American Medical Informatics Association (AMIA)
   Symposium2003. Evaluation of web accessibility of consumer health information websites; pp. 743.
   [Internet]. Available at: http://www.amia.org/pubs/proceedings/symposia/2003/151.pdf. updated in 2009.
- 9- Pennbridge J, Moya R, Rodrigues L. Questionnaire survey of California consumers' use and rating of sourcesof health care information including the Internet. West J Med1999; 171(5-6): 302–305.
- 10- Diaz JA, Griffith RA, Ng JJ, Reinert SE, Friedmann PD, Moulton AW. Patients' use of the Internet for medical information. J Gen Intern MED 2002; 17 (3): 180-5.
- 11.Huang QR. Creating informed consumers and achieving shared decision making. AustFam Physician2003;32 (5): 335-41.
- 12. Ullrich PF Jr, Vaccaro AR. Patient education on the internet: opportunities and pitfalls. Spine (Phila Pa1976)2002; 27(7):E185-8.
- 13. Greenberg L, D'Andrea G, Lorence D. Setting the public agenda for online health search: a white paper andaction agenda. J MED Internet Res 2004; 6 (2): e18.
- 14. Sun P, Unger JB, Palmer PH, Gallaher P, Chou CP, Baezconde-Garbanati L, Sussman S, Johnson CA. Internet accessibility and usage among urban adolescents in Southern California: implications for webbased health research. Cyber psycholBehav 2005; 8 (5): 441-53.
- 15. Kidd M. General practice on the internet. AustFam Physician 2001; 30 (4): 359-361.
- 16. Fox S, Fallows D. Internet health resources: health searches and email have become more commonplace, but there is room for improvement in searches and overall Internet access. Pew Internet & American Life Project Report 2003.