



A survey study on “Turk-Orthopod”, Turkish electronic discussion group in orthopaedics and traumatology

Türk ortopedisinin elektronik haberleşme ve tartışma grubu “Türk-Ortopod” üzerine bir anket çalışması

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Amaç: Türkçe konuşan Ortopedi ve Travmatoloji hekimleri arasında iletişimi sağlamak amacıyla kurulmuş olan, Türk-ortopod e-grubu kullanıcılarının demografik özellikleri ve grubun akademik anlamda eğitime katkı ve etkisi değerlendirildi.

Çalışma planı: Web sayfası üzerinde doldurulabilecek 27 sorulu bir anket formu hazırlandı. Anket duyurusu elektronik posta mesajı ile gruba iletilerek üyelerin katılımı sağlandı.

Sonuçlar: Anketi 225 üye (%33) yanıtladı. Katılımcıların (224 erkek, 1 kadın; ort. yaş 36.5; dağılım 25-64) büyük çoğunluğu (%74.2) aktif olarak eğitim ortamında bulunuyorlardı; 104'ü bir tıp fakültesi bünyesinde çalışırken, 76'sı (%33.8) öğretim üyesi konumundaydı. Katılımcılar tarafından, İnterneti en sık kullanma amacı (%55.1) bilgiye erişmek olarak belirtildi. En çok ilgi çeken mesajlar, olgu tartışmaları (%60.9) ve bilimsel duyurular (%27.6) ile ilgili olanlardı. Katılımcıların %56.4'ü gelen mesajları genellikle her zaman okuduklarını, %35.1'i ise gruba hiç mesaj göndermediklerini belirtti.

Çıkarımlar: Türk-ortopod, Türk ortopedisinde hızlı ve farklı bir iletişim ağı oluşturmuştur. Bu yeni iletişim kaynağı ortopedi ve travmatoloji eğitimine katkı sağlayabilecek potansiyele sahip görünmektedir.

Anahtar sözcükler: İletişim; bilgisayar iletişim ağı; İnternet; ortopedi; anket.

Objectives: This study evaluated demographic data of Turk-orthopod members, an electronic mailing list organized for communication between Turkish speaking orthopedic surgeons, and the contribution of the mailing list to the academic improvement and education of its members.

Methods: A twenty-seven item questionnaire was prepared for online survey and an e-mail message was sent to the members of the e-group asking them to respond to the questionnaire.

Results: The response rate was 33% (n=225; 224 males, 1 female; mean age 36.5 years; range 25 to 64 years). A great majority of the respondents (74.2%) worked in a teaching hospital as a member of active education; 104 respondents worked in a medical school, and 76 respondents (33.8%) had a faculty membership. Access to scientific information (55.1%) was the most frequent reason for using İnternet. Messages related to case discussions (60.9%) and scientific announcements (27.6%) received the most attention and interest. Of the participants, 56.4% reported to have read all the incoming messages, and 35.1% reported not to have sent any messages to the group.

Conclusion: Our electronic discussion group, Turk-orthopod, has proved to be a quick communication tool, presenting a considerable potential to contribute to continuous medical education of Turkish orthopedists.

Key words: Communication; computer communication networks; İnternet; orthopedics; questionnaires.

In recent years, there are significant rapid growths and developments at communication technology for reaching and going shares in the requested information and providing it to people.

Internet has been using by almost all people with each passing day. According to a public questionnaire which was circulated by the internet users including the question of "what were the indispensable developments at technology?" answered as web and e-mail generally⁽¹⁾. Internet has also been a very important means of communication for sharing the academical knowledge and accumulations. Besides printed publications and scientific meetings, communication and discussion groups, which are called as e-groups, draw attention significantly with their cost and speed effectiveness. There are many e-groups in different fields of major professional interest on the net. Orthopedics and Traumatology e-groups can be reached at http://www.orthopaedicweblinks.com/Email_Lists/index.html (reached on January 08th, 2004).

In order to provide our Turkish colleagues to connect and get across on the net, an e-group has been organized in March, 2000 and called as "Turk-Orthopod"⁽²⁻⁴⁾. The total number of memberships has been expanded each and every day and reached to 801 as to data of January 08th, 2004. In about 4 years, 2061 messages had been sent to group totally.

For assessing and realizing the value of the web users from orthopedic surgeons, we had conducted a questionnaire study⁽⁴⁾. At our first questionnaire study, there were some limitations including the generality of questionnaire and the small number of respondents. Therefore, we arranged a new questionnaire study for understanding and determining the demographic characteristics, outstanding features of messaging type and internet using viewpoint of Turk-Orthopod E-group members and their contribution and influence on education.

Material and method

At first hand, a draft questionnaire form has been prepared and sent to 20 orthopedists via e-mail for getting their general evaluation, criticisms and suggestions. In accordance with the responses, this questionnaire finalized and put on the web as a very easy file to be filled out.

The questionnaire file has been prepared with Php web based programme and Mysql data based has been used. System was working on Linux systems (Plexus Information Technologies, Ankara). The web page address of the questionnaire form has been sent to group members via e-mail on March 2003. The data obtained from the group members' web

accessions has been prepared as an Excel sheet file (Microsoft Excel, 2000). A descriptive statistics has been used to evaluate the results obtained.

Results

Two hundred twenty five members responded, which was 33% of the total members (n=686, reached at March 2003). Except one member all were male (99.6%). The mean age was 36.5 years (range 25-64).

The occupations, working place and training positions are shown in Table 1. Most participants (55.1%) stated that accessing knowledge is the most frequent reason for using internet (Table 2). To the

Table 1. Sociodemographic data of the respondents

	Number	%
Occupational status		
Orthopedic surgeon	97	43.1
Faculty	76	33.8
Resident	48	21.3
Other	4	1.8
Work place		
Faculty of Medicine	104	46.2
Teaching Hospital	43	19.1
State Hospital	30	13.3
Social Insurance Hospital	23	10.2
Private Hospital	19	8.4
Other	6	2.7
Faculty Position		
Yes	167	74.2
No	58	25.8
Training Position		
Trainer	106	47.1
In-training	54	24.0
Other	8	3.6
No response	57	25.3

Table 2. Reasons of internet use of respondents

Number of choices	Number	%
1. Accessing knowledge	124	55.1
Communication	90	40.0
2. Communication	124	55.1
Accessing knowledge	69	30.7
3. Shopping	45	20.0
Online Banking, Advertising	29	12.9
4. Shopping	18	8.0
Entertainment, Games	14	6.2
Online Banking, Advertising	13	5.8

question "Which e-mail messages are mostly preferred by you?", 137 (60.9%) stated case reports and discussions, 62 (27.6%) announcements, 18 (8%) common orthopedic questions, six (2.7%) ethical discussions, and two (0.9%) congratulation messages.

The participant's views concerning e-mails of the mail list are summarized in Table 3. Generally, the members were reading the messages every time, but their message sending frequency was low.

Twenty-one (9.3%) participants have a personal web site. One hundred two (45.3%) respondents did not have and did not plan to establish any website. Ninety-nine (44%) were planning to found one as soon as possible. To the question if they have an e-

mail address on their business cards, 58% answered positively. Questions about patient education on the internet and the use of internet by the patients are shown in Table 4.

Discussion

Up to date, there are few studies that have reported regarding to analyze the member profiles and their interest on internet of medical electronic mailing lists. Gilas et al. (5) reported a survey study about surginet an electronic mailing list of general surgeons. Authors concluded that medical mailing lists are neither designed to, nor do they replace or challenge peer reviewed journals, textbooks, but they are an important part of medical educations. Hernandez-Borges et al. (6) evaluated different mailing lists of pediatrics in terms of member profiles, message properties and activities. They concluded that the medical mailing lists are not fulfilling of printed media and medical journals, however these lists does seem to positively contribute to the medical education.

Turk-Orthopod is the first and unique mailing list regarding Orthopaedics and Traumatology in Turkish(4). After the organization of Turk-Orthopod, different subspecialities of Turkish orthopedics organized their own mailing lists (Spine, orthopaedic oncology, etc.). Turk-Orthopod is the largest and the most active list of the orthopedic discussion lists in organized Turkish Language(7,8). It is very important to communicate with mother tongue language as there are many discussion lists that have been organized in English(9-11). However, members of Turk-Orthopod

Table 3. The views of the participants concerning incoming messages

Question	Median	Range	Every time		Frequently		Sometimes		Rarely		Never	
			1	2	3	4	5					
			n	%	n	%	n	%	n	%	n	%
Did you send any mail to the group? (n=225)	4	1-5	2	0.9	7	3.1	46	20.4	91	40.4	79	35.1
Do you read every mail you receive? (n=224)	1	1-5	127	56.4	83	36.9	13	5.8	-	-	1	0.4
Did you every send a case report to the group ? (n=224)	5	2-5	-	-	1	0.4	7	3.1	20	8.9	196	87.1
Did you receive any informative answer to your case report? (n=66)	4	1-5	10	4.4	10	4.4	10	4.4	4	1.8	32	14.2
Did you participate in by contributing? (n=219)	5	1-5	1	0.4	6	2.7	32	14.2	46	20.4	134	59.6
Should mails be moderated? (n=218)	2	1-5	75	33.3	37	16.4	48	21.3	17	7.6	41	18.2

Table 4. The views of respondents concerning patients' education by internet

Question	Median	Range	Every time		Frequently		Sometimes		Rarely		Never	
			1	2	3	4	5	1	2	3	4	5
Did any patient force you by knowledge from the internet? (n=225)	4	1-5	2	0.9	2	0.9	48	21.3	71	31.6	99	44.0
Do you feel positively on patients gathering information from the internet? (n=225)	2	1-4	95	42.2	100	44.4	26	11.6	1	0.4	-	-
Would patients be misinformed by the internet (n=221)	3	1-5	8	3.6	54	24.0	129	57.3	26	11.6	4	1.8
Are you afraid of patients using the internet? (n=223)	5	3-5	-	-	-	-	14	6.2	24	10.7	185	82.2
Did you give your patient an web address for information? (n=223)	5	1-5	3	1.3	7	3.1	45	20	53	23.6	115	51.1
Did you ever contact your patient by e-mail? (n=222)	4	1-5	3	1.3	11	4.9	47	20.9	52	23.1	109	48.4

can discuss and communicate by using their mother tongue language.

Internet is a revolution of the information technology. The communication with using an electronic mailing list is a new and also funny communication way. However the numbers of electronic mailing lists are increasing rapidly and a person can belong to many lists. Therefore internet users have to read too many new e-mail messages in their mailboxes, then this may lead to new troubles, such as over information, wasting time and presentations of non peer-reviewed information.

The quality control of medical information on the internet is a new problem regarding evolution of information technology. Although there are many studies that have reported on quality control of medical information on the internet, a few studies have been reported regarding electronic mailing lists. In our study, messages related to case discussions and scientific announcements received the most attention and interest. Of the participants, 93.3% reported to have read all the incoming messages, always or frequently. These findings are important to show significant interest of the participants on the messages. However of the participants, 75.5% reported to never or rarely send e-mail to the list. This finding suggests that Turk-orthopod is a reading electronic mailing list.

Another important problem of electronic mailing lists is moderation of the incoming messages as some people use electronic mailing lists for sending spam mails about advertisements, financial issues, shopping, etc. Sometimes patients or their relatives belong to electronic mailing lists for searching medical information about their disorders. All of these concerns lead to moderation of the sending e-mails to the list.

We observed same problems in our e-mail list. Therefore our message archive is open only to members. Sending e-mail to the list is also restricted for only members. The messages sent from new members are moderated for a short time. All of the senior members can send e-mail without moderation. As a reply to the question of "should the messages sending to the list be moderated?", 50% of the participants reported "yes" and 18.2 % reported "never" (Table 3). Internet is open information area but it is important to show respect to all the members during communication.

Internet provides medical information to the patients and their relatives (14-16). In past, medical information was hidden by doctors, but now patients can easily reach the medical information using the internet. Gordon et al. (16) in a survey study reported that one of the four patients admitted to a Rheumatology clinic has used internet for searching medical information about their disorders in last 12 months. We asked in our questionnaire form: "did any

patient force you by a knowledge from the internet?" Majority of the participants have reported to meet this condition as "rarely" or "never" (Table 4). This condition can be explained by there are very few web pages regarding orthopedics in Turkish language (13,17). But, in future our patients will reach to internet, more often.

We have some strong issues about our survey method. We performed a pilot questionnaire before the survey. The original questionnaire form was filled on the web with using user-friendly software. We used open-ended questions in some issues for avoiding participants misunderstanding. The most important limitation of the study is the small percentage of participants relative to all members of the list.

In conclusion, Turk-orthopod provides a new and different communication way for Turkish orthopedics. The majority of the participants reported this. This new, funny and quick communication tool present a considerable potential to contribute to continuous medical education of Turkish orthopedists.

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References

1. The Gvu Center [homepage on the Internet]. Atlanta: Gvu's WWW User Surveys; [cited 2004 Jan 8]. Gvu's 9th WWW User Survey. Available from: http://www.gvu.gatech.edu/user_surveys/survey-1998-04/
2. Arazi M, Kapıcıoğlu MİS. İnternet ve ortopedi-travmatoloji. Hacettepe Ortopedi Dergisi 1999;9:112-7.
3. Arazi M. İnternette ortopedi ve travmatoloji ile ilgili hizmetler. Artroplastı Artroskopik Cerrahi Dergisi 2000; 11:114-5.
4. Arazi M, Kapıcıoğlu MIS. Orthopaedic and trauma surgery resources on the Internet: Internet using profile of the Turkish orthopaedic surgeons and the turk_orthopod electronic mailing list. [Article in Turkish] Acta Orthop Traumatol Turc 2000; 34:208-16.
5. Gilas T, Schein M, Frykberg E. A surgical internet discussion list (Surginet): a novel venue for international communication among surgeons. Arch Surg 1998;133:1126-30.
6. Hernández-Borges AA, Pareras LG, Jiménez A. Comparative analysis of pediatric mailing lists on the internet. Pediatrics 1997;100:1-8.
7. Arazi M. Yeni oluşturulan Türkçe ortopedi ve travmatoloji yan dal haberleşme-tartışma grupları. Artroplastı Artroskopik Cerrahi Dergisi 2003;14:126-7.
8. Arazi M, Heybeli N, Kutlu A. Evaluation of the "Turk_Orthopod" electronic mailing list for orthopaedics and trauma surgery. In: 6th Congress of the European Federation of National Associations of Orthopedics and Traumatology (EFORT); 6-10 June, 2003; Helsinki, Finland. Abstract Book. p. 335.
9. Oliver CW. Trauma and orthopaedic surgery on the internet. J Bone Joint Surg [Br] 1999;81:3-6.
10. McLauchlan GJ, Cadogan M, Oliver CW. Assessment of an electronic mailing list for orthopaedic and trauma surgery. J R Coll Surg Edinb. 1999;44:36-9.
11. Ndukwe AU, Eaton C, Oliver CW. The Mailbase hand surgery electronic mailing list. J Hand Surg [Br] 1999;24: 145-7.
12. Golladay GJ, Kirschenbaum IH, Matthews LS, Biermann JS. Internet resources for orthopaedic surgeons. J Bone Joint Surg [Am] 1998;80:1525-32.
13. Heybeli N, Yaman H, Arazi M, Kapıcıoğlu S. Quality assessment of osteosarcoma web sites in Turkish on the world wide web. In: 6th Congress of the European Federation of National Associations of Orthopedics and Traumatology (EFORT); 6-10 June, 2003; Helsinki, Finland. Abstract Book. p. 386.
14. Beredjiklian PK, Bozentka DJ, Steinberg DR, Bernstein J. Evaluating the source and content of orthopaedic information on the Internet. The case of carpal tunnel syndrome. J Bone Joint Surg [Am] 2000;82:1540-3.
15. Beall MS 3rd, Golladay GJ, Greenfield ML, Hensinger RN, Biermann JS. Use of the Internet by pediatric orthopaedic outpatients. J Pediatr Orthop 2002;22:261-4.
16. Gordon MM, Capell HA, Madhok R. The use of the internet as a resource for health information among patients attending a rheumatology clinic. Rheumatology 2002;41:1402-5.
17. Heybeli N. Bilişim teknolojileri ve ortopedi: İnternette kalite kontrol. In: Kuzgun Ü, editör. XVIII. Milli Türk Ortopedi ve Travmatoloji Kongre Kitabı; 18-23 Ekim 2003; İstanbul, Türkiye. İstanbul: Turgut Yayıncılık; 2003. s. 385-7.