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Özgün Araştırma / Research Article

Türk Aileleri Çocuk Yetiştirirken Sağlıkla İlgili Konularda İnterneti Etkin Kullanabiliyorlar mı?

Can Turkish Families Use the Internet Effectively in Matters Related to Health while Raising Children?

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Özet

Amaç: İnternet diğer birçok alanda olduğu gibi sağlık alanında da yaşamın önemli bir parçası haline geldi. Bu nedenle bu çalışmada, ailelerin çocuk yetiştirme ile ilgili konularda internet kullanım alışkanlıklarının değerlendirmesi amaçlanmıştır. **Gereç ve Yöntem:** Bu çalışma, Mart 2017-Temmuz 2017 tarihleri arasında, pediatri polikliniğine başvuran, 18 yaşın altında çocukları olan ebeveynlere uygulanan bir anket formu kullanılarak yapılmıştır. **Bulgular:** Katılımcıların (n:489) ortanca yaşı 32 yıldır. Çocukları altı yaşından küçük olan aileler çoğunlukla (%57.8) internette büyüme ve gelişme konusunda arama yaptıklarını belirtirken, 6-12 yaşları arasında ve 12 yaşından büyük çocuğu olan aileler çoğunlukla internette okul başarısı ile ilgili bilgiler hakkında arama yaptıklarını belirtmişlerdir (sırasıyla %44.7 ve %58.2). Katılımcıların %87.5'i çocuklarını bir sağlık merkezine götürmeden önce problemleri hakkında internette arama yaptıklarını ve yarıdan fazlası (%56.6) konu hakkında internetten elde ettikleri bilgileri yararsız bulduklarını ya da kararsız kaldıklarını ifade etmişlerdir. **Sonuç:** Ailelerin çocuklarını büyütürken karşılaştıkları özellikle sağlıkla ilgili konularda interneti etkili bir şekilde kullanamadıkları gözlemlenmiştir. Aileler sağlık hizmetlerini almaları sırasında internetin faydaları konusunda bilgilendirilmeli ve teşvik edilmelidirler.

Anahtar Kelimeler: adolesan, çocuk, aile, sağlık, internet

Abstract

Objective: The internet has become an important part of our lives in the field of health, as well as in many other areas. For this reason, in this study, it was aimed to evaluate the internet usage habits of the families about child rearing. **Method:** This study was conducted between March 2017 and July 2017 using a questionnaire applied to parents with children under the age of 18 who applied to the pediatric outpatient clinic. **Results:** The median age of the participants (n: 489) is 32 years. The families with children under 6 years old stated that they mostly (57.8%) searched the internet for information about growth and development, while the families with children between 6 and 12 years old and > 12 years old reported that they mostly searched the internet for information about school success (44.7% and 58.2%, respectively). Of the participants, 87.5% reported that they searched the internet for information about their problems before taking their children to a healthcare center, and more than half (56.6%) stated that the knowledge they obtained from the internet was useless or they remained indecisive with regard to this issue. **Conclusion:** It has been observed that families are unable to use the internet effectively, especially in health-related issues, which they encounter while raising their children. Families should be informed about the benefits of the internet and encouraged when they receive health services. **a**[1]

Key words: adolescent, child, family, health, internet

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INTRODUCTION

The internet is widely used throughout the world. According to data from March 2017, 57.4% of the Turkish population was using the internet, and according to data from November 2017, 54.4% of the global population was using the internet (Gerber and Eiser, 2001). Today, the rational use of the internet has many benefits with regard to time saving and economical gain. Individuals can reach unlimited information in a quick, inexpensive, and accessible way through the use of the internet. However, some of the missing, wrong, and dangerous information that can/or cannot be obtained from the internet may cause numerous negative outcomes. Today, the internet is widely used in the health field, and the proper use of the internet in the health field can have a positive impact on human health, as well as save time and money. For example, in a study conducted in Sweden, it was reported that web-based programs provided to children with family histories of alcohol abuse and psychiatric problems were successful (Murray, 2003). In another study, it was stated that virtual care was a lower cost alternative when compared to other settings (Ferguson, 2000).

Based on our review of the literature, we came across many research studies about internet usage in the health field; however, we did not find any studies about the internet usage habits of families raising children. In this report, we evaluated the internet usage habits of families in issues related to children, particularly the health related issues that they faced while raising their children. We also determined the issues in which they needed more knowledge, their shortcomings, and the aspects that should be guided and supported. In addition, we attempted to understand how far the relationships between healthcare receivers and healthcare providers have come (Lowrey and Anderson, 2006; Akerkar and Bichile, 2004; Eysenbach and Köhler, 2002; Potts and Wyatt, 2002; Anderson, 2001). In this study, it was aimed to evaluate the internet usage habits of the families about child rearing.

MATERIALS and METHODS

This study was conducted from March 2017 to July 2017 using a survey form filled out by families with children under the age of 18 years old who presented to the pediatric outpatient clinic in hospital. Written approvals were obtained from the families who wished to participate in this study, and those families who did not want to participate in the study were excluded. The survey form was created by the authors of this paper by reviewing the relevant studies in the literature (Carpio-Escalona and González-de-Olano, 2018; Ross, Fishman,Wang, 2017; Lowrey and Anderson, 2006; Rice, 2006; Eysenbach and Köhler,2002; www.internetworldstats.com/stats.htm;www.pewinternet.org/2002/05/22/vitaldecisions-a-pew-internet-health-report).

The survey form consisted of 93 questions about the sociodemographic characteristics of the families, the subjects about their children that they researched on the internet, and their internet use habits in the field of health in their daily lives. These were used for the study after their employability and analyzability were attested to in a preliminary study. The preliminary study was carried out with 20 families from the same pediatric outpatient clinic.

Ethical approval was obtained for this study from University of Health Sciences, Ankara Child Health and Diseases Hematology Oncology Training and Research Hospital.

Table 1. Some information about families' internet usage habits.

Statement	n	%
Families searching the internet before taking children to the doctor	428	87.5
Families who find internet search useful	212	43.4
Families who find internet search useless	75	15.3
Families who are undecided about this issue	202	41.3
Families who think there is information pollution related to pediatric diseases on the internet	326	66.7
Families asking the physician about the information they have on the internet about their children	309	63.2
Families who trust the physician when the information obtained from the internet and the physician conflict	456	93.3
Families who say that they have been harmed by the information they have obtained from the internet	18	3.7
Families making the necessary feedback with the wrong information on the internet	147	30.0
Families recommending the information they have obtained from the internet	255	52.1

Statistical Analyses

IBM SPSS Statistics for Windows (Version 22.0; IBM Corp., Armonk, NY, USA) was used for the statistical analyses. The descriptive data were presented in frequencies (%). The continuous variables were presented as medians (interquartile ranges) because they were not normally distributed. The differences were considered to be statistically significant if they had p values of < 0.05.

RESULTS

A total of 489 participants (78.5% females) with a median age of 32 years old (interquartile range: 28–37 years) were included in this survey study. 73.2% of participants were college graduates or had more advanced educational levels. Of the participants, 53.4% (n=261) only had children <6 years old, 19.8% (n=97) only had children >6 years old, and 26.8% (n=131) were both younger than < 6 years old and >6 years. The participants stated that they spent a median of 120 (interquartile range: 60–180 minutes) minutes per day on the internet. The area with the most usage was social media. Some information about families' internet usage habits is shown in Table 1.

Of the participants, 56.4% of the families with children <6 years old had 2 two or more children. The participants stated that they searched the internet most often for information about growth and development (57.8%), followed by vaccinations, beginning supplementary food, breast milk, physician selection, sleep, and television watching. The internet search subjects and frequencies of the families with children <6 years old are shown in Table 2.

Table 2. Internet usage habits of families with children <6 years old regarding their children's health.

The contents of the information	Often (%)	Sometimes (%)	Rarely (%)
Breastfeeding	46.1	17.6	36.3
Formula	33.9	21.9	44.2
Complementary feeding	49.2	21.5	29.3
Vitamine-mineral supplementation	32.1	26.5	41.4
Pacifier, bottle feeding	24.8	20.6	54.6
growth-development	57.8	10.2	32.0
Sleep	45.3	21.1	33.6
Vaccines	54.3	14.4	31.3
Teething, mouth and dental health	26.6	28.0	45.4
Bathing information	21.1	27.3	51.6
Accidents	38.7	19.9	41.4
Toilet training	35.9	20.0	44.1
Television, tablet, computer use	42.2	20.7	37.1
Seeing, vision problem, eye examination	30.8	17.2	52
Shoe suggestions	30.1	25.4	44.5
Book selection	33.2	30.1	36.7
Safe travel in traffic	25.4	25.4	49.2
Protection from harmful effects of the sun	31.6	22.7	45.7
Toy selection and games	40.7	23.8	35.5
Preschool institution selection	21.8	15.2	63
Physician suggestions	46.1	17.6	36.3
Hospital suggestions	39.4	18.4	42.2

The families with children >6 years old (61.1%) had two or more children. The participants with children between 6 and 12 years old stated that they searched the internet most often for information about school success and school selection (44.7%) (Table 3).

Table 3. Internet usage habits of families with children aged between 6 and 12 years regarding their children's health.

The contents of the information	Often (%)	Sometimes (%)	Rarely (%)
Healthy eating habbits	36.2	25.5	38.3
Obesity	17	19.2	63.8
Vaccines	21.3	17	61.7
Sport courses	27.1	12.5	60.4
Book selection	38.3	23.4	38.3
Mouth and dental health	36.2	25.5	38.3
Behavior problems	27.7	25.6	46.7
Learning difficulty	17.1	21.2	61.7
Speech disorders	17.0	17.0	66.0
Seeing problems	12.7	25.6	61.7
Hearing problems	10.6	23.4	66.0
Orthopedic problems	8.5	21.3	70.2
Friend relationships	31.9	14.9	53.2

Table 3. Internet usage habits of families with children aged between 6 and 12 years regarding their children's health.

The contents of the information	Often (%)	Sometimes (%)	Rarely (%)
Smoking, alcohol use	23.4	17.0	59.6
Substance abuse	27.6	21.3	51.1
Television, tablet, mobile phone, computer use	36.1	12.8	51.1
School performance	44.7	14.9	40.4
School suggestions	44.7	10.6	44.7
Music courses	17.1	31.9	51.0
Foreign language education	34.0	27.7	38.3
Physician suggestions	19.2	23.4	57.4
Hospital suggestions	23.4	19.2	57.4

The participants with children >12 years old stated that they searched the internet most often for information about the school success of their children (58.2%), followed by college education, and the use of the television, tablet, mobile phone, and computer (Table 4).

Table 3. Internet usage habits of families with children aged between 6 and 12 years regarding their children's health.

The contents of the information	Often (%)	Sometimes (%)	Rarely (%)
Healthy eating habbits	38.6	16.3	45.1
Mouth and dental health	15.3	21.4	63.3
Obesity	18.1	21.7	60.2
Stres and anger control	33.7	21.2	45.1
Friend relationships	38.6	30.7	30.7
Seeing problems	16.3	21.2	62.5
Orthopedic problems	11.4	22.3	66.3
Behavior problems	24.1	22.1	53.8
Sport courses	34.3	19.2	46.5
Music courses	23.1	24.6	52.3
Smoking	16.4	11.3	72.3
Alcohol use	14.7	9.1	76.2
Substance abuse	16.4	11.3	72.3
Television, tablet, mobile phone, computer use	44.2	8.3	47.5
Gun violence	17,5	17.5	65.0
Cosmetics use	22.4	16.2	61.4
School performance	58.2	20.9	20.9
Foreign language education	38.4	23.2	38.4
University selection	47.2	14.3	38.5
Relations with the opposite gender	17.3	18.4	64.3
Physician suggestions	24.2	24.2	51.6
Hospital suggestions	22.5	26.4	51.1

DISCUSSION

The rational use of the internet has numerous benefits. The government, private sector, trainers, academicians, healthcare providers, media workers, web providers, and servers all have a great responsibility for raising social awareness. The use of Web-derived health information can yield more informed persons with a higher likelihood of them adhering to and improving their health outcomes. The potential benefits for the physician–patient relationship include enhanced communication, access to health information, shared decision-making, and a more efficient use of clinical time (Gauld and Williams, 2009; Lowrey and Anderson, 2006; Anderson, 2001; Lindberg and Humphreys, 1998). However, other factors, such as the highly variable quality of the information on the internet, the possible exacerbation of socioeconomic health disparities, and the shifting of the conventional notions of the physician–patient relationship (altering the "traditional" medical authority orientation), could present challenges for healthcare providers (Akerkar and Bichile, 2004; Potts and Wyatt, 2002; Sharf, 1997).

Of the 489 participants (78.5% women) who consented to participate in the survey, 73.2% of them were college graduates or had more advanced educational levels, and the mean age of the participants was 32 years old. This data shows that the survey participants were younger women with higher educational levels. In other studies, women and young persons with higher educational levels were shown to use the internet more commonly to perform searches on health related topics (Rice, 2006; Broom, 2005; Akerkar and Bichile, 2004; Eysenbach and Köhler, 2002). It is obvious that increasing the internet access of mothers and training them regarding the rational use of the internet are important for the development of child and adolescent healthcare because mothers tend to spend more time with their children. In a study that included 819 participants from southern Australia, it was shown that the maternal and child outcomes from a clinic based postnatal health check plus nurse-moderated internet-based support were not inferior to those achieved by a universal home-based postnatal support program (Neuberger, 2000).

In our study, we observed that the families with children <6 years old primarily searched the internet for topics such as growth and development, breast milk, beginning supplementary food, vaccinations, and sleep due to the ages of their children. Again, this group seemed to need to take their children to healthcare centers more often than the other groups. If health professionals share accurate health-related information in a more understandable way, it would reduce the frequency of families presenting to healthcare centers, and it would save time and money (Sawyer et al., 2017; Ross, Fishman, Wang, 2017; Gauld and Williams,2009; Lowrey and Anderson, 2006; Rice, 2006; McNullen, 2006; Akerkar and Bichile, 2004; Anderson,2001; Lindberg and Humphreys, 1998).

The families with children <6 years old (42.2%) wished to have knowledge about the media usage of their children at a rate similar to that of the other groups, which suggests that media usage has dropped to very young ages. These results indicate the importance of training families and children about rational media use, which is defined as the conscious, safe, efficient, and ethical use of media (Bernhardt and Felter, 2004; www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives).

Adolescence is the second period of rapid growth, and it may be a period in which many health related problem can be seen; therefore, the health of adolescents should be closely followed. In our study, we saw that the families with children >6 years old spent less time on the internet, were less in need of seeking medical help, primarily searched the internet for information about their children's education, and conducted health related searches on the internet at a lower rate when compared to the other groups. Moreover, the families with children between 6 and 12 years old searched the internet for information about vaccinations at a low rate (21.3%). We believe that this is the result of the families' lack of knowledge regarding this issue. In a study from Turkey among 408 female participants between 9 and 24 years old, the participants' knowledge about human papillomavirus (HPV) infections and HPV vaccines, their attitudes towards vaccination, and their perceptions about their parental attitudes regarding vaccinations were investigated. In that study 41.6% of the participants had heard of HPV, and 33% knew the causal relationship between HPV and cervical cancer. Eleven percent of the females participating in the study were willing to be vaccinated, but only 1.4% were already vaccinated at that time. The main reason listed

among the participants who were not willing to be vaccinated was a lack of information (Ozyer et al., 2013). Adolescence is a period in which harmful habits, such as smoking and substance abuse, risky sexual behaviors, and firearm violence, tend to increase. Unfortunately, the lack of internet security contributes to an increase in these risky behaviors (Bernhardt and Felter, 2004; www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives; https://cyber.harvard.edu). In our study, the families searched the internet about information about these topics at a low rate. For all of these above mentioned reasons, the medical departments and clinics that deliver preventative medicine should increase the knowledge and awareness of adolescents and their families about adolescent health and the problems that they may face during this period. Sufficient information on the internet on these topics provided by specialists will also help protect and improve adolescent health. Furthermore, the scope of the adolescent health related services in our country should be increased and further popularized (Sawyer et al., 2017; Ross, Fishman, Wang, 2017; Gauld and Williams, 2009; Lowrey and Anderson, 2006; Rice, 2006; Akerkar and Bichile, 2004; Anderson, 2001; Lindberg and Humphreys, 1998).

In our study, 87.5% (n=428) of the participants reported that they searched the internet for information about a problem before taking their children to a healthcare center. More than half (56.6%) of them stated that the knowledge they obtained from the internet was useless or that they were indecisive about this issue. In the present study, 66.7% of the participants stated that there was infollution about pediatric diseases on the internet, while 63.2% stated that they asked their physicians to ensure the correctness of the information about children's health on the internet. According to a study, 54% of the families reported that they searched the internet for information about the problem before taking their children to a healthcare center (Carpio-Escalona and González-de-Olano, 2018). According to another study, 25% of the participants reported that the information they obtained from the internet was contradictory to the information provided by their physicians, and 71% of them reported that they relied on the information they received from their physicians (Ross, Fishman, Wang, 2017). In one study, it was found that the patients who visited the Johns Hopkins Medical Center's pancreatic cancer web site required less face-to-face time to process information and make a sound decision when compared to the non-web using patients (Anderson, 2001).

In our study, only 30% of the participants stated that they provided feedback when they found the wrong information on the internet. The importance of this type of feedback is great for improving the quality of the information provided by websites. Therefore, all of the stakeholders have an important task to spread the rational use of media. Moreover, both internet users and providers should be aware of their legal liabilities (Livingstone and Smith, 2014; Gauld and Williams, 2009; Sillence et al., 2007; Tuil et al., 2007; Lowrey and Anderson,2006; Rice, 2006; Broom, 2005; Falk, 2005; Akerkar and Bichile, 2004; Anderson ,2001).

Healthcare professionals should be "net-friendly healthcare providers," and healthcare providers should be trained with regard to "health informatics" and "patient informatics." In addition, healthcare professionals and healthcare receivers' rates of free access to websites with high quality information should be increased (Gauld and Williams, 2009; Sawyer et al., 2017; Sillence et al., 2007; Akerkar and Bichile, 2004; Anderson, 2001).

In conclusion; we observed that the families included in this study were no able to use the internet effectively, especially regarding the health related issues they faced while raising their children. In addition, the participants had considerable concerns regarding the reliability of the information they obtained from the internet. These results show the great need for websites about child and adolescent health prepared by the healthcare specialists and institutions in our country. In our study, we also observed that the participants relied highly on the information they obtained from their healthcare providers. Therefore, healthcare providers dealing with child and adolescent health should spend time informing families, children, and adolescents about how to take advantage of the internet. They should show them the appropriate internet sources that will answer their growth and development questions, provide them with information on the development of normal behavior, protect them against harmful situations and attitudes, and support their academic performance. Discussing the information obtained from the internet during healthcare visits will prevent the dissemination of

misleading information. The awareness of families should be raised so they bring their children to healthcare follow-up visits at specific intervals until they reach 18 years old in order to support and develop child and adolescent health.

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