ORIJINAL ARTICLE

A qualitative research on the factors determining product awareness and product preference in promoting medicines by digital tools

Ali Karaman[1], Yakup Durmaz[2]

[1]Hasan Kalyoncu University, Institute of Social Sciences, Gaziantep, Turkey
[2]Hasan Kalyoncu University, Faculty of Economics Administrative and Social Sciences, Department of Marketing, Gaziantep, Turkey

Abstract

The aim of the present study is determination of the factors that are effective in product awareness and product preference in digital promotion. A semi-structured interview form was used to identify the views of the nineteen participants in total. The interviews were done by the researcher. All the data obtained from the participants were coded, categorized and resolved by using content analysis technique with Maxqda12 program. The most important factor determining the product preference in the digital promotion is the product effectiveness in terms of the product characteristics. Factors that determine the product awareness include new developments and sharing up-to-date data of products were at 34% rate; and, data sharing with evidence related to the products was important with rate of 24%. In conclusion, in order to increase product awareness, it is necessary to transfer the product characteristics in full, complete and unbiased version. However, when it comes to product preference, it was determined that the characteristics of triple multifactorial factors such as product, employee and firm are determinative.

Keywords: Qualitative research, medicine, healthcare market, pharmaceutical products, drug prescribing

Introduction

Pharmaceutical companies use various tools and methods to promote their products. As a result of innovations in digitalization management [1] and promotions, digital advertising tools have begun to be used in promoting products. In addition to product experts, digital technologies are also being used in promotional activities in the Turkish pharmaceutical sector [2].

The product specialists visit physicians, dentists and pharmacists within a certain plan and schedule to transfer the characteristics, advantages and benefits of the products on the basis of scientific evidence in order to promote the products of the company and to increase their sales.

In promotion and marketing activities in Turkey, the product experts as representatives of pharmaceutical companies, they are obliged to comply with the laws and regulations set by the Ministry of Health. These obligations are stated in the "Regulation on the Promotion Activities of Medicinal Products for Human Use". According to the directive, the product experts can not promote and submit the promotional materials to people other than health professionals (physicians, dentists, pharmacists) [3]. While product specialists perform promotional and marketing activities, they must also use the brochures and other promotional materials prepared by the marketing and medical departments of the pharmaceutical companies in accordance with the legal framework and competition rules related regulations.

The purpose of this study is to determine what factors would affect the products' awareness and the preference of the products in terms of the digital tools that the firms and the product specialists use during the visits and presentations for physicians due to the promotion. In the study, the following questions were identified as problems and investigated by interview method:

• What are the factors that determine "product awareness" in promoting medicines with digital tools?

• What are the factors that determine "product preference" in promoting medicines with digital tools?

Material and Method

The method of this research is the interview method which is widely used in the field of qualitative researches. In addition to the interviews, the documents used in the presentations were also included in the analysis. The main purpose of using the

*Coresponding Author: Ali Karaman, Hasan Kalyoncu University, Institute of Social Sciences, Gaziantep, Turkey
E-mail: alikaraman09@hotmail.com

qualitative research method in the study is to identify the factors that determine the awareness and preference of the products in promotions made by the pharmaceutical companies with digital arguments through an exploratory approach. In this context, it is aimed to reach the data on the subject of research using semi-structured interview form in order to reveal the determinants of awareness and preference [4,5].

The questions such as "what", "why" and "how" were used in the interview questions in order to get a detailed idea about the research topic and to reach the details [6,7]. Data obtained by using the semi-structured interview method was analyzed using the content analysis method.

For this study, ethical approvals from the ethics committee of the university with legal permits from the authorities in Turkey have been taken. Interviews are based on volunteerism. For this reason, the participants' approvals were taken prior.

Sampling

In this study, it was looked at whether the participants included in the survey were directly involved in the research rather than their power to represent the universe [8]. For this reason purposeful sampling methods are used [9]. The number of interviewed participants started without a definite number, but interviews were terminated due to the fact that the information obtained from participants about the subject was found to be frequent and that the "saturation point" was reached. Saturation point to a situation means that there is sufficient evidence regarding to the research problem. Researchers reaching this point are advised to stop data collection [7]. In this direction, interviews were conducted with 15 expert physicians and 4 product specialists from 8 different branches which are Physical Therapy and Rehabilitation, Internal, Cardiology, Otorhinolaryngology, Neurology, Psychiatry, Brain and Neurosurgery, and Chest Diseases.

Validity and Reliability of the Scale

In this study, the validity of the questions was analyzed using Lawshe's "content validity ratio" [10]. In Lawshe's Content Validity Ratio (CVR) method, the experts evaluate the expressions in the measurement tool as "appropriate", "acceptable" or "not appropriate". The number of "appropriate" responses by the experts for each statement creates a high or low Lawshe coefficient. This coefficient varies from minus one to plus one. If more than half of the experts are marked as "not appropriate" for a substance, the result is negative and that substance has to be removed from the scale. In a different narrative, if more than half of the assessors indicate that they are "appropriate" for a substance, the relevant substance will have content validity. Thus, the conceptual form of the measurement tool has been pre-evaluated by experts [11].

The content validity of the interview form designed for this research was delivered to 18 specialist field experts (10 specialists and 8 experts) during February - April 2017 period via face to face interview or other ways of communication (mail, telephone). Since the content validity ratio (CVR) calculated as a result of the evaluations is close to $+1$, the questions are found to be statistically significant. As a result, the content validity index of the research questions was determined as 0.96.

Reliability and transparency are very important in qualitative research. In order to achieve this, each interviewer was asked to give a short summary of the interview by the researcher and to convey

it to the participant and to indicate the opinions of the participant about the accuracy of the summary. Participant confirmation is a method used to ensure the credibility of the research. In this method, the researcher passes a summary to each participant and asks what he/she understands at the end to get feedback from each participant to evaluate the accuracy of the summary. In this way, misunderstandings are avoided and credibility of the opinion is ensured [12].

Consistency ratios of the codes calculated to compare the codes generated by the researcher and an independent person who is an expert in the field of qualitative research. Code is considered to have a high degree of reliability if it exceeds 80%. In this study, the code consistency rate of the codes determined in the research was found as 91%. Thus, codes are thought to have a high degree of reliability [5].

Data

Interviews were conducted with doctors who have different specialist fields and participants who work as product specialists. The average age of participants was 38 years old, and the average year of professional experience was 8 years. The lowest age among the participants was found as 31 years old, the highest age was 55 years old. Participants were found to have the lowest professional experience of 2 years and the highest of 24 years. Some of the interviews were done manually by the researcher and the majority was recorded with a voice recorder. Active use of the voice recorder in the study can be considered as a situation that reduces data loss.

It was determined that all of the physicians involved in the study (100%) were visited by product specialists. It was identified with the help of demographic questions to see what kind of promotion tools were ussing during these visits. These were iPad, e-conferences and meetings, e-mail marketing and web site membership.

Data Analysis

In this study, the "content analysis" technique proposed by Strauss and Corbin [13] was chosen as the analysis unit. Therefore, all the data obtained from the participants were coded, categorized and resolved [7]. In the study, all data were read repeatedly by the investigator to determine the codes to guide the analysis [6]. For the next stage, the codes that constitute a meaningful are gathered together and categorized [5,13]. Then all the generated codes and interview data were transferred to the "MAXQDA12" program to reach the results frequency and percentage distributions of codes [14].

Results

As a result of the analysis, it is seen that awareness and preference factors are shaped around two main categories. These categories include; "Factors determining product awareness in digital promotion" and "Factors determining product preference in digital promotion". Details of the findings of these categories are given below.

The Results of the Factors Determining Product Awareness in Digital Promotion

In this category, it was tried to discover what factors determine the product awareness in digital promotion. When the frequency and percentage distributions shown in Table 1 are examined, the ratio of "new development and up-to-date data" code is found to

be 34.69% while the "evidence data sharing" with 24.49%. The third place is the "minimal comparison," which is the code that has been created to express less comparison between medicines. The ratio of this code is 16.33%. The ratios of the other codes are as follows; indicating the importance of using an efficient tool "first efficiency then cost principle" and "interesting content meetings"

is 6.12%. The ratio of "adverse effect sharing", "highlighting differences" and "medicine-medicine interaction sharing" codes is 4.08%. For the factors that determine product awareness in digital promotion, eight codes were reached and a total of 49 statements were encoded.

Table 1.The Frequency and percentage distributions of factors determining product awareness in digital promotion

Name	Frequency	Percentage	Percent(Valid)
The Factors Determining Product Awareness in Digital Promotion\New development and up-to-date data sharing	17	34,69	34,69
The Factors Determining Product Awareness in Digital Promotion\Data sharing with evidence	12	24,49	24,49
The Factors Determining Product Awareness in Digital Promotion\Minimal comparison	8	16,33	16,33
The Factors Determining Product Awareness in Digital Promotion\First efficiency then cost principle	3	6,12	6,12
The Factors Determining Product Awareness in Digital Promotion\Interesting content meetings	3	6,12	6,12
The Factors Determining Product Awareness in Digital Promotion\Adverse effect sharing	2	4,08	4,08
The Factors Determining Product Awareness in Digital Promotion\Highlighting differences	2	4,08	4,08
The Factors Determining Product Awareness in Digital Promotion\Medicine-medicine interaction sharing	2	4,08	4,08
THE FACTORS DETERMINING PRODUCT AWARENESS IN DIGITAL PROMOTION	0	0,00	0,00
Total (Valid)	49	100,00	100,00
Missing Data	0	0,00	-
Total	49	100,00	-

From the data in Table 1, it is seen that the factors that determine the product awareness, the new development and the up-to-date data sharing and data sharing with evidence are the most weighted. It is also emphasized that it is better to give as little space as possible to medicinal comparisons while promoting product awareness. It has been emphasized that the digital promotional tools that are planned to be use should be primarily efficient and their contents must be in an interesting way. Participants emphasized that when products are promoted, the side effects (adverse effects) of the products must be shared. Finally, it has been pointed out that the importance of informing about the differences between the medicines and the interactions of the drugs. It is thought that giving weight to these issues will contribute positively to the awareness of the products. Some participant statements about the factors that determine product awareness in digital promotion are given below.

The participant statements about new development and up-to-date data sharing:
"Literature sharing is important, the other criterion may be to share new developments" (INT-D\ID1; Position: 46-46).

"...case presentations can be made. Reference to clinical trial data may be made. The price should not be emphasized frequently. The price is not determinant. Scientific study data should be emphasized more" (INT-D\ID3; Position: 50-50).

The participant statements about data sharing with evidence:
"At the e-conferences, to show the patient and say that this patient began to walk using this drug etc. It is very unnecessary to present things like. After all, you present it to physicians, to scientific people. No need to present it like a TV commercial. Using meta analyzes and scientific evidence would be better in promotion" (INT-D\IB1; Position: 31-31).

The participant statements regarding minimal comparison between medicines:
"...of course this is a marketing so they are making their advantages more prominent than other companies. If a product is new and

contain new information it may be shared in the first place by comparing with other products. But friends are always on it. This is not good" (INT-D\ID4; Position: 48-48).

"Comparisons with rival products can cause adverse effects if done too often. It may cause discomfort. Comparisons can be made using scientific study data" (INT-D\ID3; Position: 50-50).

The Participant statements regarding to share side effects and medicine-medicine interactions of products:
"They should also describe the side effects of the drug. Because what to do when you are confronted with a side effect, and what to do to prevent side effects of the medicine should be explained. In particular, they should emphasize side effects of medicine in big letters. The side effects are not told very often but it should be explained. They probably do not explain side effects because of not wanting to reduce the preference of medicine" (INT-D\IG1; Position: 52-52).

The Results of the Factors Determining Product Preference in Digital Promotion

In this category, it was tried to find out what factors determine the product preference in digital promotion. When the frequency and percentage distributions shown in Table 2 are examined, it is seen that "potent" code that generated to indicate the product effectivity from the product characteristics has the highest frequency (f = 23). Subsequently, the "working style" code, which is a characteristic of the employee's characteristics and which reflects the employee's perception of work, comes with (f = 19) frequency. In the third place, it is seen that the "scientific study data" code which is created to identify the scientific evidence of the product from the product characteristics frequency (f = 18). This is followed by the the "good relationship" code which is belong to sub-codes from the work perception that are the characteristics of the employee (f = 17) frequencies. And another code "human factor" comes with (f=17) frequency. Another characteristic of the worker perception

is the"regular frequent visits" code. The frequency of this code is (f = 16). Participants emphasized with (f = 13) frquency the code "firm strategies" which is created to emhisize the firm characteristics. And "product dominance" code that indicating the level of knowledge of the product that the employee is working with is (f = 12). The "personality" code reached to indicate the effect of personality on the product preference is (f = 11). The emphasis was placed on the "safety-quality" code (f=9), which was established to express the effect of product safety and quality on product preference. Participants emphasized that the presentations must be supported by scientific videos that is seen as another factor as effective in product preference. They emphasized with (f = 9) frequency to the code "scientific video assisted presentations" created for this purpose.

One of the remarkable aspects of the research is that they emphasize the use of both human and technological innovations among the factors that determine the product preference of the participants. In order to express this situation the code "digital + human factor" generated determined with (f = 8) frequency. And also clinical experiences and face-to-face visits have also been identified by participant statements as the factors affecting product preference. These statements are sembolized with the codes "Clinic experience" and "Face-to-face visit." The frequencies of these codes are (f = 7).

As the factors that determine the product preference, the incidence of low side-effects, the original product, havin data in guidelines, low price, first product in market were also factors that were particularly emphasized by the participants. Other factors that are indicative of the preference in the product preference and which have a low frequency are as follows: well known company, the patient's feedbacks, the clinical experience that transfered by the speakers at the conferences and meetings, the external appearance of the employee, to be able to behave in a balanced way between work and out of work life, innovator company, having plus effectivity besides indications, strong field staff and to be visited by the region managers of the company. The frequency and percentage ratios of these codes are as shown in Table 2. With regard to the factors that determine product preference in digital promotion, 33 codes including sub codes were reached and a total of 251 statements were encoded.

Table 2. The frequency and percentage distributions of factors determining product preference in digital promotion

Name	Frequency	Percentage	Percentage(Valid)
Product characteristics\Potent	23	9,16	9,16
Work perception\Working style	19	7,57	7,57
Product characteristics\Scientific study data	18	7,17	7,17
The Factors Determining Product Preference in Digital Promotion\Human factor	17	6,77	6,77
Work perception\Good relationship	17	6,77	6,77
Work perception\Regular frequent visits	16	6,37	6,37
Firm characteristics\Firm strategies	13	5,18	5,18
Work perception\Product dominance	12	4,78	4,78
Employee characteristics\Personality	11	4,38	4,38
Product characteristics\Safety-quality	9	3,59	3,59
The Factors Determining Product Preference in Digital Promotion\Scientific video assisted presentations	9	3,59	3,59
Firm characteristics\Reliable company	9	3,59	3,59
The Factors Determining Product Preference in Digital Promotion\Digital + human factor	8	3,19	3,19
The Factors Determining Product Preference in Digital Promotion\Clinic experience	7	2,79	2,79
The Factors Determining Product Preference in Digital Promotion\Face-to-face visit	7	2,79	2,79
Product characteristics\Low side-effects	7	2,79	2,79
Product characteristics\Original product	7	2,79	2,79
Product characteristics\Data in guidelines	7	2,79	2,79
Product characteristics\Low price	6	2,39	2,39
Product characteristics\First product in market	5	1,99	1,99
Firm characteristics\Well known company	5	1,99	1,99
Product characteristics\Patient's feedbacks	4	1,59	1,59
The Factors Determining Product Preference in Digital Promotion\Transferring clinical experience	4	1,59	1,59
Work perception\Employee appearance	3	1,20	1,20
Work perception\Balanced behavior	2	0,80	0,80
Firm characteristics\Innovator company	2	0,80	0,80
Product characteristics\Having plus effectivity	2	0,80	0,80
The Factors Determining Product Preference in Digital Promotion\Strong field staff	1	0,40	0,40
The Factors Determining Product Preference in Digital Promotion\ Region manager visits	1	0,40	0,40
The Factors Determining Product Preference in Digital Promotion\Employee characteristics	0	0,00	0,00
Employee characteristics\Work perception	0	0,00	0,00
The Factors Determining Product Preference in Digital Promotion\Product characteristics	0	0,00	0,00
The Factors Determining Product Preference in Digital Promotion\Firm characteristics	0	0,00	0,00
THE FACTORS DETERMINING PRODUCT PREFERENCE IN DIGITAL PROMOTION	0	0,00	0,00
Total (Valid)	251	100,00	100,00
Missing Data	0	0,00	-
Total	251	100,00	-

From this data, it can be said that the most important factor determining the product preference in the digital promotion is the product effectivity from the product characteristics. Factors such as personality, working style, good relationship, regular and frequent visits and product dominance by the employee are found to have a decisive weight in the product preference. The fact that the firm is a reliable company and a well known company is also considered as a decisive factor in product preference. Pointing out the importance of the human factor, it has been specifically stated that it will not be possible to make sufficient promotions using digital tools alone. For this reason, it has been considered as an important factor that digital tools should be used with the human element as well.

In the following paragraphs, the expression of some participants in high-rate codes for determining the product preference is included. The main purpose here is to increase the level of intelligibility of the codes that have high decisive in product preference by including participant expressions. In addition, the fact that the participant expressions are explicitly included can be considered as an important situation in terms of the reliability of the research findings.

Participant statements regarding the potent of the product and other characteristics of the product:
"I have people who work very well, but I can not write because the molecules, products they work on are not very good. So the molecule must be a good and efficient molecule. The personal relationship with the employee, company or employee is not the reason for my preference. Clinical experience and product-related scientific data lead to preference" (INT-D\IP3; Position: 18-18).

"First of all, the product must be a very good product because you will write the product. You can not write a bad molecule. Actually, let's sort it like this. The product is bigger than the worker, first comes the product and effectiveness..." (INT-D\IKR2; Position: 67-67).

Participant statements about employee's work perception and personality traits:

"If the person is able to transfer the product in full with the concept and dominanting, then it will be really useful and effective" (INT-D\IG1; Position: 54-54).

"...bilateral dialogue between doctor and product specialist, and sincerity are influencing product preference" (INT-D\ID2; Position: 62-62).

Discussion

In the present study, it was seen that the most important factor that has the decisive factor in the product preference in the digital promotion is the product effectivity from the product characteristics. Beside that it has been observed that other features of the product, such as scientific study data, safety-quality, incidence of low side-effects, original product and price, also have a significant weight in product preference. It is seen that the characteristics of the product expert such as working style, good relationship, regular and frequent visits, dominance to the product have a decisive weight in the product preference.

In the literature, the working strategies of product experts who are pharmaceutical company employees investigated the effect of physicians on the product (drug) preference and conducted telephone interviews with nine product specialists in the Vietnamese pharmaceutical industry. For the international companies, the conclusion is that their medicines have high quality and reliability in order to convince physicians to prescribe their medicines. On the other hand, firms that work with equivalent products convince physicians to prescribe their medicines because of the low price. In addition, firms states that low price comes from due to less investment in research [15]. While it is seen that the properties such as efficiency, quality, reliability and originality are important in the preference of products, it is thought that the price is important in the presence of equivalent products and may be an effective element in preference. It is seen that similar results exist between these researches.

According to a study conducted by Sezgin [16] in Turkey, the proportion of those who consider the work styles of product specialists as an important factor on prescribing decision is 48.7%. In the same study, it was emphasized that regular visits to the physicians performed by the product specialists were seen an important factor (51%) in keeping products on the market. Our research findings such as "work style", "regular visit" and "product domination" which determine of the product preference has significant similarity with the results of this study. On the other hand, in the study titled "Role of product specialist in physician's prescribing decision" made by Tosun and Arslan Kurtuluş [17], it was concluded that doctors' weekly prescriptions and product specialist features were found to be positively but weakly correlated. On the other hand, 61.1% of the scientific articles and 50.4% of the previous experiences were stated to be factors that influence the prescribing decisions of physicians.

In the study, 12 statements were emphasized for the "product dominance" code that was reached to express the dominance and knowledge level of the employee's who promote product. High frequency emphasis on this code was interpreted that it is expected from product experts for to be fully dominance to their products by physicians. This result in our study is similar to the results of the Publicis Touchpoint Solutions, Sermo Survey [18]. According to the Sermo Survey results, 81% of physicians respect educated, experienced, product experts who dominate clinical research data and can add value to themselves and their patients. In the same study, 89% of physicians want product experts to convey their product promotions with clinical investigations, trainings, and to include them in their talk. It can therefore be clearly seen from both studies that product dominance is a factor that increases the effectiveness of the product expert. In this respect, the findings of our study and the findings of the Sermo Survey were found to be similar.

In the present study, 17 expressions were emphasized in terms of the "good relationship" code, which is the code that was reached to express the well-developed of employees' relations with physicians. This data has been interpreted as the fact that to have a good relationship with the physicians by product specialists may determine the product preference. This result is consistent with the results of a study conducted by John Mack and Mark Schmukler [19] on conditions affecting physician preference for medications in the United States. According to the research in the USA, in the

first years when the product was introduced to the market, the good relationship between the physician and the product specialist is decisive on the product preference. Both studies emphasized the importance of good relationship. In this respect, similarities were found between the results of our research and the results of the above-mentioned research. On the other hand, emphasis is placed on the importance of scientific knowledge, efficiency, product guidelines and using digital tools such as e-conferences, e-mail marketing in the years when product sales increase and generics are given to the market. These results provide information to pharmaceutical companies about the stage in which digital promotional tools must be actively used. The view put forward in the research is that it is more useful using digital tools such as e- conferences, e-mail marketing after the point of product growth and after the point of entering the generics to the market. After this stage, the physician's product preference will not be changed much. Because the physician has experienced and embraced the product since many years. It is also relevant to trusting the company, its employees, to the product and having a good relationship totally. Here, it is necessary to support the physicians with scientific and real knowledge with the existing relationship. In addition, findings of the triplet effect which is expressed as "confidence to the firm, the employee and the product" that has been carried out are found to be similar to our research results determining the product preference.

It has been seen in the research that human word has been repeated 42 times. It can be thought that promotions made in situations where the human element is actively involved play an important role in product preference because this word has been repeated at a high rate. Some digital promotional tools such as iPad and e-conferences in Turkey are used in combination with the human element. Therefore, it can be said that human factor is seen as an important element in product preference. As a result, besides the digital promotional tools to be used, it is important that the human element is not neglected and both elements are used together. It is especially noted that this is the product specialist that needs to be understood from the human factor. On the other hand, the findings of research that contradict this data are available outside of Turkey. For example, according to a study in the United States, 60% of doctors are suggesting a variety of excuses not to see the product specialists who come for product promotion. And it is stated that this ratio will increase to 80% in 2-3 years. In addition, the majority of doctors said that instead of product experts, they hoped that digital promotional tools such as e-detailing, e-conferencing, e-video would be preferred. So it was expecting an important reduce to the visits to the physician offices by product specialists [19]. The differences in these two research findings are thought to be due to different practices for product promotion between countries and personal preferences of physicians.

Conclusion

In this study, it was determined that new development and current data sharing had the highest weight with 34% from the factors that determine product awareness. In digital promotions, it was concluded that the data sharing with evidence had a weight of 24%.

Another important result has been the emphasis on making product awareness better, giving as little comparisons as possible between medicines. Instead of making comparisons, it has been determined that the company employees should focus on the product they are promoting and that it is not appropriate to describe the weaknesses of competing products.

It has been achieved that the adverse effects of the promoted medicines must be transferred to the physicians. This is necessary for the clinical success, social responsibility and ethically. In summary, factors that determine product awareness in digital promotion are shown in Table 3.

Table 3. The factors determine product awareness in digital promotion

New development and up-to-date data sharing
Data sharing with evidence
Minimal comparison on products
First efficiency then cost principle in choosing digital tools
Interesting content meetings
Adverse effect sharing
Highlighting differences
Medicine-medicine interaction sharing

In the digital promotion, the factors that have the highest effect on the product preference are the product characteristics when it comes to the employee characteristics and the firm characteristics. In addition, it was stated that the human factor should continue to be used in promotions. It has been pointed out that it is important to make scientific video-aided presentations with digital tools. It has been observed that these conditions are the other factors determining product preference.

As a result, it is possible to classify the factors that determine product preference in digital promotion as "Product characteristics", "Employee characteristics", "Firm characteristics" and "other characteristics". All of these characteristics are shown in Table 4. As shown in Table 4, the factors that determine the product preference from product characteristics are as follows: potent product, scientific study data, safety - quality, low side-effects, original product, data in guidelines, low price, first product in the market, patient's feedbacks and having plus effectivity. The factors that determine product preference from employee characteristics are: working style of company employee, have a good relationships with the physicians, regular frequent visits, product dominance, personality structure, employee external appearance and balanced behavior between work and private life. The factors that determine product preference from firm characteristics are: strategies of company promotion, being a reliable company, well known company, innovator company and having strong field staff. Other factors that are decisive in product preference include: human factor, presentation of scientific supported video presentations with digital tools, using digital and human factor together, clinic experience of physicians, face-to-face visit, transferring of clinical experience of speakers in e-conferences and region manager visits.

As a result, it can be considered that the factors that determine the product preference are mulltifactorial but the characteristics of the product and the characteristics of the employee are more determinative in the product preference.

This study was designed as a qualitative research. In this research, the factors that determine product awareness and product preference were found out in promotions made with digital tools. The use of these factors in quantitative research to be done is suggested for further research.

Table 4. The factors determine product preference in digital promotion

Product characteristics	Employee characteristics	Firm characteristics	Other characteristics
Potent product	Working style	Firm strategies	Human factor
Scientific study data	Good relationship	Reliable company	Scientific video assisted presentations
Safety-quality	Regular frequent visits	Well known company	Digital+human factor
Low side-effects	Product dominance	Innovator company	Clinic experience of physicians
Original product	Personality	Strong field staff	Face-to-face visit
Data in guidelines	Employee appearance		Transferring clinical experience by e-conferences
Price	Balanced behavior		Region manager visits
First product in market			
Patient's feedbacks			
Having plus effectivity			

References

1. Kocel T. İşletme Yöneticiliği. 15th edition. Beta, İstanbul, 2014;525-9.

2. Ercan T, Top M. Importance of drug promotion and marketing activities. Journal of Health Science Institute. 2016;2:01-07.

3. TİTCK, Turkish Medicines and Medical Devices Agency. Beşeri tıbbi ürünlerin tanıtım faaliyetleri hakkında yönetmelik, Resmi Gazete/Official newspaper, Issue. 29405 www.resmigazete.gov.tr/eskiler/2015/07/20150703-2.htm access date, 24.06.2018

4. Bechhofer F, Paterson L. Principles of research design in the social sciences. routledge publications, London, 2000;56,57.

5. Miles MB, Huberman AM. Nitel veri analizi: genişletilmiş bir kaynak kitap. 1st edition. S. Akbaba Altun and A. Ersoy. Translation Eds. Pagem Akademi 34, Ankara, 2015;58,64.

6. Glesne C. Nitel Araştırmaya Giris. 4th edition. A. Ersoy ve P. Yalçınoğlu. Translation Editors. Anı Publications, Ankara, 2014;30,256.

7. Yildirim A, Simsek H. Sosyal bilimlerde nitel araştırma yöntemleri. Seçkin Publications, Ankara, 2013;317-22.

8. Neuman W. L. Toplumsal araştırma yöntemleri: nicel ve nitel yaklaşımlar. 5th edition. Vol. I-II. S. Özge, Translate. Yayın Odası Publications, İstanbul, 2012;320.

9. Creswell J, W. Nitel araştırma yöntemleri: beş yaklaşıma göre nitel araştırma ve araştırma deseni/qualitative inquiry & research design choosing among five approaches 3rd Edition translation. M. Bütün and S.B. Demir, Translation Editor. Siyasal Kitabevi Pulications, Ankara, 2016;156,7.

10. Lawshe CH. A Quantitative approach to content validity. Personnel Psychology. 28, 1975;563-75.

11. Gurbuz S. and Sahin F. Sosyal bilimlerde araştırma yöntemleri: felsefe, yöntem, analiz. 3rd edition. Seçkin, Ankara, 2016;166.

12. Erlandson DA, Harris EL, Skipper BL, Allen ST. Doing naturalistic inquiry: a guide to methods. Sage, Beverly Hils, CA. 1993.

13. Strauss AL, Corbin J. Basics of qualitative research: grounded theory procedures and techniques. Sage Publications, Newbury Park, CA, 1990.

14. Maxqda. https://www.maxqda.com access date, 17.08.2017

15. Le Thu H. Exploring medical representatives strategies to influence doctor's prescribing decisions in Vietnam. 2012. http://www.phmed.umu.se/digitalAssets/104/104566_huyen-le-thu.pdf access date, 09.07.2015

16. Sezgin S. (2017). Tıbbi Mümessillerin Mesleki Algıları Üzerine Bir Araştırma: Muğla İli Örneği. 4th Ulusal Meslek Yüksekokulları Sosyal ve Teknik Bilimler Kongresi (MESTEK), 2017. Mehmet Akif Ersoy Üniversitesi, Burdur, 1041-62.

17. Tosun N. and Arslan-Kurtulus S. The role of pharmaceutical representatives in the prescribing decision of physicians: a pilot study. J International Social Res, 2017;10:889-905.

18. Publicis Touchpoint Solutions, Sermo Survey: what physicians want! Results of a sermo physician survey. 2012. http://www.publicishealthcare.com/Libraries/News_Documents/2012_What_Physicians_Want_Survey.sflb.ashx access date, 08.01.2017

19. Mack J. and Schmukler M. Special report: e-detailing best practices & data. 2005. http://content.marketingsherpa.com/heap/pharma/1.pdf access date, 03.01.2017