HEALTHCARE FACILITIES WEBSITE AND THEIR IMPACT ON CUSTOMER SATISFACTION FROM THE PERSPECTIVE OF CUSTOMER RELATIONSHIP MANAGEMENT (CRM)

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Abstract: Recently, customer relationship management (CRM) applications have also shown importance in areas where demand exceeds supply. The core of CRM is based on marketing and communication with the customer is an important part of the marketing philosophy. The primary objective of this study is to highlight the importance of dental healthcare website elements from the customer's perspective in terms of customer satisfaction. The primary data included 448 respondents. The parameters of the website were assessed in the research, where it was found that there should be a term management element and a reminder system (e.g. SMS) on the dentist's website. In general, it can be said about linking the primary e-communication between the doctor and the patient, the doctor should primarily focus on inviting the patient to attend a medical examination or should provide information about preventive examinations. These issues have the greatest impact on overall satisfaction. These outputs were achieved using frequency and descriptive statistical characteristics and regulatory models (ridge, lasso, elastic net) and a multiple linear regression analysis model.

Keywords: Website, patient satisfaction, e-communication management, dental healthcare facilities

DOI: 10.17512/pjms.2019.19.2.06

Article's history:
Received December 19, 2018; *Revised* March 22, 2019; *Accepted* May 02, 2019

Introduction

Organizations are currently facing the challenge of introducing innovative customer-oriented management strategies, Smirnov et al. (2017) and Lajcin et al. (2012) |highlighted the importance of these strategies. According to Nowak et al. (1998), in a very narrow context, customer-oriented management is an integrated marketing communication (IMC) application. Nowadays, it is not enough for organizations to provide high-quality services, organizations need to effectively communicate about what customers should know about the currently available and planned services, inform customers about what the organization is doing and what it doesn't, but also remind them of important information what leads to customer

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loyalty (Duncan and Moriarty, 1998; Rajnoha and Lorincová, 2015; Stefko et al., 2016; Stefko et al., 2017; Minh and Huu, 2016). The importance of recommendations (WOM) in brand management and the overall image of the organization is emphasized by Yaman (2018). Rainie and Fox (2000), Ford et al. (2013), Chen et al. (2018) unequivocally highlight the positive effects of electronic communication with the patient (internet and website).

It is clear from the above that the Internet and the information provided on the website are the least useful in the healthcare sector. Based on these facts the main objective of this study is to derive useful results for extending our knowledge about the importance of website elements as forms of electronic communication in terms of customer satisfaction in the dental health care environment. In case of developing country like Indonesia which is currently struggling to develop strategies towards successful distribution of healthcare providers across the country (Boyle and Plummer, 2017; Supriyana et al., 2019), the model can be used as a reference in communicating what has been achieved through digital communication.

Literature Review

The satisfaction of the patient can be seen as one of the essential elements of health care (HC) assessment and health care provision (Lieskovska et al., 2015). The relationship between health care quality and satisfaction of the patient was examined by experts from different points of view, e.g. based on demographic characteristics in dental health care (Kamra et al., 2016; Stefko et al., 2018), or according to the severity of the disease (Otani et al., 2012), etc., and it is concluded that there is a certain link between the nature of the research object and the methodology of investigation. Pontello et al. (2017) in their study confirm the impact of perceived quality on patient satisfaction on their intention to recommend the dentist to their acquaintances. We can assume that the satisfaction of the patient is influenced by a large number of elements. In terms of satisfaction, relatively high importance is attributed to the staff, doctors, and having their patients' best interest in mind (Siyoto and Putri, 2017). Among the main factors shaping the dissatisfaction of patients, Androniceanu (2017) included the following factors (1) "not listening – ignoring" the patient, (2) using medical English when speaking, (3) not providing enough information, (4) insufficient time for the patient. Three of the four factors are connected to communication. The importance of customer satisfaction is also highlighted by the ideas of relational marketing, which, according to Larentis et al. (2018) operates in shaping trust, engaging in regular interactions to achieve mutual cooperation, value and loyalty. Khizar et al. (2016), confirm the positive effects of IMC implementation in relation to organization awareness and customer loyalty to the organization.

One of the essential elements in the issue of satisfaction in today's digital era is the presentation on the Internet. Bačík and Gburová (2016) highlight the importance of Internet communication through selected types of advertising in relation to

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customer satisfaction. The fact that the Internet is the most widely used source of information about health care, which is confirmed by several studies, contributes to the importance of communication on the Internet (Jacobs et al., 2017; Hesse et al., 2005). Hollihan (2018), in his study about oral health care, points out that many patients rely on inaccurate and incomprehensible information despite the enormous growth of online information. In this context, it is desirable to point out the need for websites with relevant health-related content. The website has taken over a certain share of physical communication, such as recommendations, feedback, general information, communication, and etc. Gruen et al. (2006), or Park and Lee (2009), point to the importance of reputation and eWOM (recommendation). Nowadays, the quality of the website is considered a turning point in the functioning and development of the business. Many authors emphasize linking the quality of a website, e.g. Bai et al. (2008) and Musa et al. (2015) in a developing country. In the field of dental health care, there are not many sources where a website has been evaluated. Schwendicke et al. (2017) highlight the importance of multiple elements in health care websites and also highlight the importance of information. It can be assumed that beneficial activities are also shaping the satisfaction through the quality of a website. In connection with increasing patient satisfaction, it is also desirable to draw attention to SMS notifications by healthcare providers, e.g. in areas of pregnant women (Ngabo et al., 2012; Parker et al., 2012), asthmatics (Prabhakaran et al., 2010, Lv et al., 2012), diabetics (Wong et al., 2013; Dick et al., 2011), in areas of dental care (Prasad and Anand, 2012), or SMS as a part of mHealth (mobile health care) (Abaza and Marschollek, 2017). In a broader context, whether we are talking about a website or SMS, we can consider it as a modern tool for managing the relationship with patients. Kim et al. (2007) state the benefits of customer relationship management as: (1) increasing customer loyalty and customer retention; (2) increasing profitability; (3) creating customer value; (4) customizing products and services; (5) improving product and service quality. Satisfaction and loyalty of patients can be effectively supported by the CRM management strategy. The importance of CRM elements and their increasing trend, thus increasing importance in SMEs in CR are described by Chromčáková et al. (2017). There are several studies on CRM in health care e.g. by Choi et al., (2013); Quero et al., (2016). CMR works with customer-related information using tools and information technology to meet the needs and create a long-term and mutually beneficial relationship, helping to achieve competitive advantages in different areas (Blery and Michalakopoulos, 2006; Ngai et al., 2009; Hung et al., 2010). e-CRM is a combination of a traditional CRM model and electronic applications. Many organizations do not use the full potential of new digital tools and thus do not take advantage of the opportunities that are provided to them (Centobelli et al., 2016). Oumar et al. (2017) argue that organizations that have implemented the basic e-CRM procedures take advantage of many benefits, e.g. excellent customer service, better profitability, sales, expanded customer base, and broader market share.

Based on previous research and theoretical assumptions we formulated our main hypothesis i.e. that there are significant differences in the assessment of website technical elements and in the assessment of e-communication elements from the patient's satisfaction perspective.

Methodology

The primary objective of this study is to highlight the importance of website elements from the customer's perspective in terms of customer satisfaction. This paper has an applied character, where the output in the form of determining the technical aspects on the website and the impact will show the importance of the presentation on the Internet. The research can be characterized as primary. The selection of the respondents (dental health care patients) was based on quota selection (n=200) through direct mail and selection based on respondents' availability and volunteering (n=300) in the form of electronic inquiry on social networks. The quota selection was based on the proportional characteristics of the population in terms of gender. In the questionnaire, an inquiry item focused on the year of birth, where the category "born before 1985" (n=52) was excluded from further investigation. The following table visualizes the selection of the attributes.

Table 1. Selection (n) characteristics

Variable	Category	n	percent	missing
Gender	Female	268	59.82%	0.00%
	Male	180	40.18%	0.00%
Year of birth	1985 - 1995	150	33.48%	0.00%
	After 1995	298	66.52%	0.00%
Social status	Employed	63	14.06%	0.00%
	Unemployed	13	2.90%	0.00%
	Student	372	83.04%	0.00%

The previous Table 1 indicates that the pattern distribution in terms of gender characteristics is not optimal. This disproportion was caused by the fact that women were more willing to fill out a questionnaire on social networks. Slight differences also occurred in case of social status. These inaccuracies in case of gender and social status do not have the potential to systematically undermine the representativeness of the selection. The analyses are divided into two blocks. The first describes the elements (aspects) that the website should contain from the perspective of the patient and the second determines the importance of the impact of the communication elements (activities) on the overall patient satisfaction.

Block I

In this part of the analysis, the technical elements that a website should contain in terms of patient satisfaction were assessed. There were six entries in this analysis that were shown by the following abbreviations when evaluating: *Regularly published info – general information (important changes, office hours, vacation,*

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disability, price list, etc.); Booking tools – scheduling system (online calendar, in my account where I can see when my dentist is available and when he is not, of course, with the option of making an appointment when he is available)); Actual info – updated information about the doctor (increased qualification, new devices, earned awards, etc.)).; Feedback – (simple questionnaire, what you liked and what you did not as well as the evaluation of the results seen in the graph); Term – Appointment reminder system (SMS message or email the day before the scheduled examination); communication platform – (when we just need to ask something and no personal contact is needed). Frequency analysis (graph of the individual categories) and descriptive analysis (minimum, first quartile, median, average, third quartile and maximum) were used to evaluate the results.

Block II

An entry determining the degree of satisfaction on a five-degree scale entered the analyses. The quantity is described in the graph in Figure 1. Independent variables (e-communication factors) with a five-degree scale (Positively, Rather positively, Neither positively nor negatively, Rather negatively, Negatively) entered the analysis. In the questionnaire, the respondents had the opportunity to choose the option "I cannot judge" what is considered as missing. The entries are listed below: *Preventive - Information about preventive examinations; Booking – Booking an appointment; Appointment reminder – Reminder of the date (e.g. the day before in advance); Office hours - Information about changing office hours (during the summer holidays). Treatment trends - Information on new treatment trends; Upgrading qualifications - Information on upgrading qualifications, courses, congresses, etc.; Price – Information about the price; Health General – General information about our health; Recommendation – Review from a friend; Internet references - References available on the Internet; Others - Information about the doctor and his services from other sources; Overall Satisfaction - How would you rate the overall satisfaction with your dentist?* Table 2 below describes the frequency of the categories in the listed items.

Table 2. Independent variables - frequency

	A*	B	C	D	E	F	G	H	I	J	K
1	19	11	95	75	69	68	48	11	25	50	38
2	22	26	59	73	53	61	54	37	20	39	43
3	71	59	99	110	124	107	115	79	111	132	119
4	116	143	65	92	83	98	101	140	118	85	101
5	208	202	110	77	85	62	115	174	139	82	98
Total	436	441	428	427	414	396	433	441	413	388	399
NA	12	7	20	21	34	52	15	7	35	60	49

Note: *A - Preventive; B - Booking; C - Appointment reminder; D - office hours, E - Treatment trends; F - Upgrading qualifications; G - Price; H - Health General; I - Recommendation; J - Internet references; K - Others

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In Table 2, the higher number represents a more positive assessment. The NA line represents the frequency when respondents chose the option "I cannot judge. First of all, descriptive statistics were used in the analysis and to show the relation between the outputs the Kendall τ-b method was used. The imputation of missing data was performed by the MICE technique (Multiple Imputation by Chained Equations) by Predictive Mean Matching (Buuren et al., 2011). Methods for regulating regression analysis were used to determine the effect:

$$\text{Ridge regression } SSE_{ridge} = \sum(y - \hat{y}) + \lambda \sum \beta^2 \qquad (1)$$

$$\text{Lasso regression } SSE_{lasso} = \sum(y - \hat{y}) + \lambda \sum |\beta| \qquad (2)$$

$$\text{Elastic net } SSE_{elastic\_net} = \sum(y - \hat{y}) + \lambda[(1 - \alpha)\sum \beta^2 + \alpha \sum |\beta|] \qquad (3)$$

$$\text{In linear regression analysis model } y_i = \beta_0 + \beta_1 X_i + \ldots + \beta_n X_p + \varepsilon_i \qquad (4)$$

The justification of the methods is in the high number of independent variables (11), in the potential collinearity, which is shown in Table 3 and in the data scale (ordinal), which is not optimal for using linear regression analysis.

Table 3. Paired correlations of independent variables - Kendall τ b

Kendall τ b	A	B	C	D	E	F	G	H	I	J	K
Preventive (A)	1.00	0.54	0.33	0.38	0.45	0.36	0.40	0.44	0.36	0.33	0.35
Booking (B)	0.00	1.00	0.33	0.37	0.28	0.33	0.39	0.39	0.38	0.31	0.31
Appt. reminder (C)	0.00	0.00	1.00	0.54	0.44	0.41	0.30	0.27	0.29	0.35	0.34
Office hours (D)	0.00	0.00	0.00	1.00	0.53	0.53	0.43	0.35	0.37	0.45	0.35
Treatment trends (E)	0.00	0.00	0.00	0.00	1.00	0.67	0.51	0.42	0.41	0.51	0.49
Upgrading qualific. (F)	0.00	0.00	0.00	0.00	0.00	1.00	0.51	0.38	0.41	0.57	0.51
Price (G)	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.45	0.45	0.45	0.41
Health General (H)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.53	0.33	0.37
Recommendation (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.46	0.50
Internet references (J)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.65
Others (K)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00

The previous table is divided into two parts, below the diagonal line there is the asymptotic significance of the test and above the diagonal is the relationship rate. From this it can be concluded that in all cases there is a significant relation to a relatively high degree.

Results

As the definition of methodological requirements, the results are also divided into two parts.
Block I - Website Attribute Preferences
The following section is devoted to the evaluation of website elements. This part has an applied character and its outputs represent the information that defines the technical elements of the website in the part with patient's satisfaction. The

following table 5 shows the basic values of descriptive statistics that have evaluated the issues.

Table 5. Descriptive – website attribute

	Regularly published info	Booking tools	Actual info	Feedback	Term	Communication platform
Min.	1.00	1.00	1.00	1.00	1.00	1.00
1Q	4.00	4.00	3.00	3.00	4.00	3.00
Median	5.00	5.00	4.00	4.00	5.00	4.00
Mean	4.24	4.31	4.06	4.03	4.27	3.95
3Q	5.00	5.00	5.00	5.00	5.00	5.00
Max.	5.00	5.00	5.00	5.00	5.00	5.00
Have web page (NA)	80.00	78.00	79.00	79.00	78.00	79.00

The highest average value occurred in case of booking tools - the planning system (online calendar, etc.) and the lowest in case of the communication platform - (when we just need to ask something and no personal contact is needed). The following figure visualizes the abundance found and points to the importance of selected technical elements in terms of satisfaction.
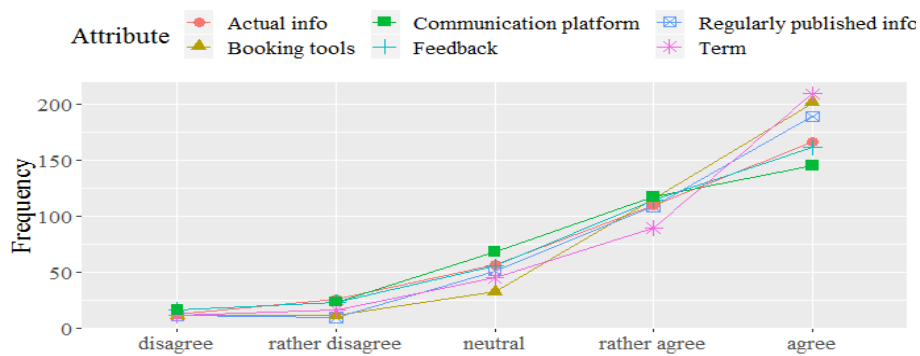
Figure 1. Frequency - Website technical attributes

From this it can be concluded that no technical element is significantly differently evaluated. For simplicity, we focused on the highest level of rating dominated by Term - Appointment reminder software (SMS message or email day before the scheduled examination) and Booking tools - scheduling system (online calendar, in my account where I can see when my dentist is available and when he is not, of course, with the option of making an appointment when he is available).

Block II. Impact of communication elements on overall satisfaction

The following states show the results of the investigation leading to the fulfilment of the objective and thus to draw the influence of the given communication elements on the overall satisfaction of the patient with dental health care. In the first step, we modified the data and replaced the missing values. In the second step,

we assessed the ability of the model to be evaluated and we showed the importance of independent variables.

Table 6. Descriptive statistics of the original and modified data file

		A	B	C	D	E	F	G	H	I	J	K	OS
Original	$\bar{x}$	4.08	4.13	3.08	3.05	3.15	3.06	3.42	3.97	3.79	3.28	3.45	3.78
	$\tilde{x}$	4.00	4.00	3.00	3.00	3.00	3.00	3.00	4.00	4.00	3.00	3.00	4.00
	SD	1.11	1.02	1.48	1.35	1.34	1.31	1.30	1.07	1.14	1.27	1.24	1.14
	n	436	441	428	427	414	396	433	441	413	388	399	448
	NA	12	7	20	21	34	52	15	7	35	60	49	0
MICE	$\bar{x}$	4.08	4.14	3.08	3.03	3.09	3.01	3.43	3.98	3.76	3.25	3.43	3.78
	$\tilde{x}$	4.00	4.00	3.00	3.00	3.00	3.00	4.00	4.00	4.00	3.00	3.00	4.00
	SD	1.10	1.01	1.48	1.34	1.33	1.29	1.30	1.07	1.15	1.26	1.23	1.14
Original - MICE	$\bar{x}$	0.00	-0.01	0.00	0.02	0.06	0.05	-0.01	-0.01	0.03	0.04	0.02	0.00
	$\tilde{x}$	0.00	0.00	0.00	0.00	0.00	0.00	-1.00	0.00	0.00	0.00	0.00	0.00
	SD	0.01	0.00	0.00	0.00	0.01	0.02	0.00	0.00	-0.01	0.01	0.01	0.00

* A - Preventive; B - Booking; C - Appointment reminder; D - office hours; E - Treatment trends; F- Upgrading qualifications; G - Price; H - Health General; I -Recommendation; J - Internet references; K - Others; OS - Overall satisfaction

A prerequisite for the missing data replacement was to minimize the changes in the file. These changes can be seen in the difference between the justified and the modified file, where these are only minimal deviations that are not capable of greatly influencing the outcome of the investigation.

As can be judged from SSE (sum square error) equations (2), (3) and (4), the λ parameter plays an important role, and the α parameter for elastic net regression (4). At ridge regression (2), α is equal to 0 and λ is equal to 0.251, at lasso regression (3) α is analogously equal to 1 and λ is equal to 0, and finally at net regression (4) α is equal to 0 and λ is equal to 0.25.

The following table 4 shows root mean square error (RMSE) and R2 determinations based on decadic cross validation at five replicates. The highlighted values represent the best ranking in a given characteristics.

Table 7. Comparison of the models

		Min.	Q1	Median	Mean	Q3	Max.
RMSE	linearM	0.6807	0.9044	1.0084	0.9865	1.0860	1.1961
	ridgeM	**0.6609**	0.9059	**1.0015**	**0.9810**	1.0748	**1.1841**
	lassoM	0.6786	**0.9040**	1.0076	0.9859	1.0849	1.1958
	elastic_netM	**0.6609**	0.9059	1.0016	**0.9810**	1.0749	**1.1841**
R2	linearM	**0.0258**	0.1696	**0.2688**	0.2587	**0.3636**	0.5009
	ridgeM	0.0247	**0.1647**	0.2734	**0.2684**	0.3775	0.5017
	lassoM	**0.0258**	0.1691	0.2692	0.2595	0.3654	**0.5009**
	elastic_netM	0.0247	**0.1647**	0.2734	**0.2684**	0.3775	0.5016

It is clear that the models with the highest value are Lasso and Elastic net. This assertion is primarily based on the central tendency values of RMSE and R2. Here

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it is important to say that R2 approximately equal to 0.27 is at the limit of acceptability, but this value is largely influenced by the multiple-variable penalty resulting from the R2 Adjusted methodology itself.
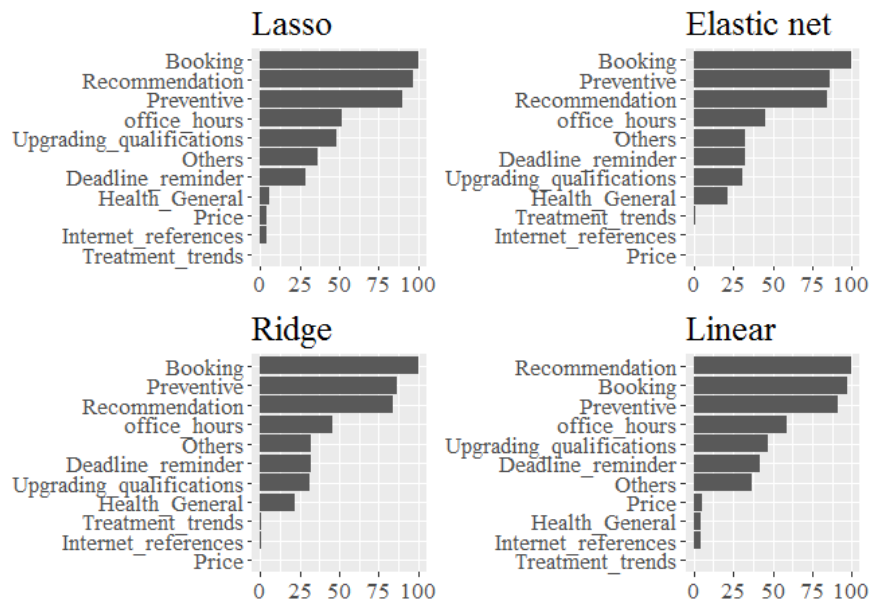

Figure 2. Importance – Website communication attributes and patient satisfaction

Figure 2 shows the importance of selected independent variables. It is advisable to diversify the outputs according to the model evaluation. We attached the highest esteem to Lasso and Elastic net, then to Ridge and to the lowest Linear model. It should be noted that there was little difference between the models. From this it is clear that the following have the highest impact: A group of three variables like Booking, Preventive, and Recommendation. And for these parameters, dentists should concentrate primarily on their communication with the patient.

Results Discussion

The research was based on the idea that a website is a significant aspect of customer satisfaction (Rainie and Fox, 2000; Ford et al., 2013; Chen et al., 2018). According to the patients, the most important elements of e-communication management are the Booking tools as the preferred part of the dentist's website. Another important element that patients would welcome on the dentist's website is the Term feature, which reminds our appointments via SMS or e-mail, following the outcomes of multiple studies by Abaza and Marschollek (2017) or by Prasad and Anand (2012). The results of the study reveal that online ordering of appointments, recommendations (reviews) and information on preventive examinations have the greatest impact on overall satisfaction. The relationship between recommendation and patient satisfaction is two-sided as satisfied patient's

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will recommend to family members the respective healthcare evidenced by the results of a study by Pontello et al. (2017) and Rajiani et al. (2018). Research results show that a website, as one of the IMC tools, can be an effective means of enhancing satisfaction and is a good way to improve the patient's relationships based on the CRM management strategy, thus contributing to the findings of Choi et al., (2013) or Quero et al., (2016).

This fact must be seen as significant from the point of view of small and large healthcare facility managers. Modern trends suggest that an appropriate and functional online presentation in the form of a website is necessary for competing organizations. We also highlight the importance of the content of the website since it is the carrier of information about entities, products and services. Good-quality websites are important especially when a potential customer comes into contact with the healthcare facility for the first time. A website with poorly processed content and features has high potential to deter customers i.e. the new patients. Implementing new technologies and processes from a management perspective has potential to reduce costs. On the other hand, customer satisfaction is improved, which can also affect the customers' perceived value of the provided services. Specifically, in relation to management processes, booking tools on the dentist's website will ease the management of appointments to a certain extent and, on the other hand will increase customer satisfaction. The traditional way of making an appointment is insufficient for the new generation of customers. The new generation, accustomed to validation, needs to know information about the "quality" of the doctor, which in the healthcare sector is considerably irrelevant to the patient. Further research is needed. Introducing an element like the appointment reminder is not technically difficult, and according to a number of studies, it seems to be a good (if not necessary) choice for deployment.

Conclusion

The primary objective of this study is to highlight the importance of website elements from the customer's perspective in terms of customer satisfaction. The selected technical elements that the website should contain have been elaborated. Inputs to the analyses were provided through primary research with a sample of 448 respondents. The outputs are shown in Figure 1 and Figure 2.

Even though the main hypothesis was not confirmed - no technical element is significantly differently evaluated, we recommend that healthcare facilities implement within their website the following tools: Term - Appointment reminder software (SMS message or email the day before the scheduled examination) and Booking tools - scheduling systems (e.g. online calendar in our account where we can see when our dentist is available and when he is not, of course, with the option of making an appointment when he is available). For small healthcare facilities we recommend using Software as service (SaaS) applications that are cheaper than a tailor-made software and easier to implement than open-source solutions. Tailor-made software solutions are more convenient for large healthcare facilities.

In terms of communication elements, we strongly recommend to managers who have decided to implement CRM ideology to increase customer satisfaction and focus on variables like booking options, information about preventive examinations, customer recommendations. The present study serves as a basic project for the website.

The biggest limitation of the submitted research is mainly the distribution of the sample, because students represented the biggest group of the research. A similar distribution is expected, but with a lower number of students. The second important limitation of the research is the relatively low value of the determination coefficient.

In the future, the research will focus on specific positions and on the technical level of the elements, as well as on the expansion in the form of mobile applications where the issues will always be assessed in customer satisfaction dimensions.

Acknowledgement

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STRONY OBIEKTÓW OPIEKI ZDROWOTNEJ I ICH WPŁYW NA ZADOWOLENIE KLIENTA Z PERSPEKTYWY ZARZĄDZANIA RELACJAMI KLIENTA (CRM)

Streszczenie: Ostatnio aplikacje zarządzania relacjami z klientami (CRM) również mają znaczenie w obszarach, w których popyt przewyższa podaż. Podstawą CRM jest marketing i komunikacja z klientem, która jest ważną częścią filozofii marketingowej. Głównym celem tego badania jest podkreślenie znaczenia elementów strony internetowej opieki stomatologicznej z punktu widzenia klienta pod względem satysfakcji klienta. Podstawowe dane obejmowały 448 respondentów. Parametry strony internetowej zostały ocenione w badaniu, w którym stwierdzono, że na stronie internetowej dentysty powinien istnieć element zarządzania terminami i system przypomnień (np. SMS). Ogólnie rzecz biorąc, można powiedzieć o łączeniu podstawowej komunikacji elektronicznej między lekarzem a pacjentem, lekarz powinien przede wszystkim skupić się na zaproszeniu pacjenta do wzięcia udziału w badaniu lekarskim lub powinien dostarczyć informacji na temat badań profilaktycznych. Kwestie te mają największy wpływ na ogólne zadowolenie. Wyniki te uzyskano za pomocą częstotliwości i opisowych charakterystyk statystycznych oraz modeli regulacyjnych (grzbiet, lasso, siatka elastyczna) i wielorakiego modelu analizy regresji liniowej.

Słowa kluczowe: strona internetowa, zadowolenie pacjentów, zarządzanie e-komunikacją, placówki opieki zdrowotnej

从客户关系管理(CRM)的角度看医疗设施网站及其对客户满意度的影响

摘要：最近，客户关系管理(CRM)应用程序在需求超过供应的领域也显示出重要性。 CRM 的核心是基于营销和与客户的沟通是营销理念的重要组成部分。本研究的主要目的是从顾客的角度强调牙科保健网站元素在客户满意度方面的重要性。主要数据包括 448 名受访者。在研究中评估了网站的参数，其中发现在牙医的网站上应该存在术语管理元素和提醒系统(例如 SMS)。一般而言，可以说关于医生与患者之间的主要电子通信的联系，医生应该主要关注邀请患者参加体检或者应该提供关于预防性检查的信息。这些问题对总体满意度影响最大。这些输出是使用频率和描述性统计特征和监管模型(脊，套索，弹性网)和多元线性回归分析模型实现的。

关键词：网站，患者满意度，电子通信管理，牙科保健设施