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ANALYSIS OF THE IMPACT OF USERS' PERCEPTION OF DIGITAL TECHNOLOGIES IN THE HEALTHCARE SECTOR OF KAZAKHSTAN IN AN INNOVATIVE ECONOMY

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Abstract. The purpose of this study is to examine the impact of population perceptions, i.e., trust and usability, on adoption intention toward digital healthcare technologies (DHTs) in Kazakhstan. Although DHTs hold promise for improved delivery of healthcare, very few studies have looked at the impact on factors like demographic variables in adoption rate from developing countries such as Kazakhstan. A 22-question quality improvement survey was administered to a convenience sample of 101 respondents from various demographic cohorts, focusing on trust and match (satisfaction) as well as barriers they face when it comes to utilizing DHT's. Quantitative analyses demonstrated that younger and more educated generations were the most willing to adopt DHT, while older people in rural areas found it difficult due to technical complexity and access issues with internet technology. Patients trust is very important for accept the use of new technologies and high satisfaction, this it will confirm to McKnight theory and also that in using ICT from Venkatesh model. Healthcare providers, the healthcare management sector and technologists can use this thought-provoking research to inform healthcare policy given the importance of such targeted strategies that aim at advancing adoption in developing countries like Kazakhstan.

Keywords: digital technologies, healthcare, Kazakhstan, demographic variables, user trust, users satisfaction.

Main provisions. Digital healthcare technologies (DHTs) are being more rapidly integrated into care delivery models globally, and include such forms of telemedicine as consulting with a patient through video on demand, use of electronic health records. These developments have the potential to greatly increase patient access to medical treatment, streamline healthcare delivery and aid patients in taking a bigger participation role in their health care. These technologies are positioned to be helpful, but they will only be effective and sustainable if patients trust in such technologies-which is why patient satisfaction needs a focus. The study explained how public perceptions, trust, perceived usability, and satisfaction, along with demographic factors shape intentions to adopt digital health technologies (DHT) in Kazakhstan. The findings provide evidence for targeted provider- and policy-level interventions, including user training, interface simplification, and investment in digital infrastructure, to accelerate the implementation and uptake of DHT within Kazakhstan's evolving health system.

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Introduction. The internet has revolutionized the way we access healthcare and many are turning to a new age of "virtual care." This supported from statistics such as Fortune Business Insights, which foresees the global telemedicine market to have a CAGR of 22.5% in its countries and reach \$185.6 billion by 2026 [1,2]. However, within this massive growth is a lot of variance in how these technologies are perceived and adopted throughout the regions. While research has addressed the advantages and disadvantages of DHTs in a range of countries, little is known how patients might view these systems – particularly as healthcare systems rapidly evolve, like Kazakhstan.

Kazakhstan is an interesting case because it has been working to refine its healthcare system and join the digital era. As a nation of more than 19 million and spanning an array of different geography, such information is essential in spotting trends among Kazakhstani patients on the use and perceptions of digital healthcare technologies. Despite significant investment in digital health by Kazakhstan, including roll-out of the Damumed mobile health app, few studies pertain to patient acceptability. For US populations that might suggest a very low adoption rate of these digital tools: less than 0.1 percent (cite) According to the Kazakhstan Ministry of Healthcare, there has been some success in this regard; however, about only 30% have fully adopted them as per news reports it indicates potential barriers to more widespread implementation by the public at large [3].

In an attempt to fill this research void, the current study will explore patients' perceptions on digital healthcare technologies in Kazakhstan. This study will allow for an indepth examination of the important factors affecting patient engagement with DHTs including those that help (ease of use, trust) or hinder this process (dissatisfaction, perception regarding quality). There are practical implications for healthcare providers, policymakers and technologists in Kazakhstan as well as in academic studies. The data obtained from this study will be invaluable in defining innovative approaches to drive uptake and effectiveness of digital healthcare, with a focus on improving patient outcomes, as well as helping address the issues in delivering care across the region.

Quantitatively, this study will examine how different demographic dimensions within Kazakhstan understand the utility of digital healthcare technologies by measuring their perceived value to better serve patients. This will provide robust numerical estimates on the scale of digital health uptake in Kazakhstan today and specific examples of mechanisms by which such barriers and facilitators may affect patient engagement. The research has the potential to make a scientific contribution and offer policymakers practical advice on how they can scale up digital healthcare in Kazakhstan so that health technologies are aligned more closely with population needs.

Research Objectives to evaluate how usability and trust levels influence patient perceptions of digital healthcare technologies in Kazakhstan, and to identify key barriers to adoption by examining demographic factors.

Literature Review. The literature review will explore international research regarding adoption of digital healthcare technologies in relation to patient perceptions. It will also look at the case study of Kazakhstan and identify areas in which research needs to be conducted, using specific domains where existing literature is limited as indicators for further investigation on DHT adoption rates within that context. In this review, we attempt to provide a basis for further research into the optimization of digital healthcare according to patients' requirements and expectations in Kazakhstan.

Studies on the acceptance of digital healthcare technologies have been conducted in many different areas; researchers often emphasize the possible advantages these technologies present. By allowing remote consultations and thereby lowering the need for travel, telemedicine has been proven in a review by Kruse C.S et al. to greatly increase access to



healthcare, especially in rural and underdeveloped areas [4]. Comparably, electronic health records (EHRs) have been hailed for their capacity to simplify clinical processes, lower mistakes, and boost patient care standards [5]. Especially in the management of chronic diseases, mobile health applications—which let individuals track their progress, control their health problems, and interact with healthcare providers—have also become rather popular [6]. On the other hand, international studies have also found a variety of obstacles to implementing these DHTs, such as data protection and information security issues; the fact that some patient groups lack digital literacy; or inequalities between urban and rural areas [7]. The trust in digital platforms is a very important factor for patient adoption because patients tend to worry about the security of their personal health information [8]. Poor interface design leads patients to become easily frustrated and cease from using these technologies.

Outcomes of digital healthcare technologies must be measured in terms of patient perceptions and satisfaction. A study conducted by Van Dyk L. found patients' perceptions of the ease and usefulness are key determinants in their acceptance of telemedicine services [9]. The benefits of ease and usefulness were highlighted in the findings of another study where patients perceived digital health tools as useful, easy to use but had even more potential for continuing them if they intended further utilizing it themselves. Patient satisfaction with digital healthcare services correlates highly with levels of patient engagement and treatment plan adherence. For the digital healthcare environment, a study by Seleznev I. et al. in Kazakhstan revealed, for example, a substantial correlation between patient satisfaction with healthcare services and elements like physical comfort and respect of patient choices [10].

What is more, combining digital health with the patient experience can drive better clinical outcomes. Patients who use these digital health tools more actively are also better at sticking to their treatments and have a greater effect on clinical outcomes [11]. But the effectiveness of these technologies depends on whether they can deliver patient-experience standards and address proper-patient need. Therefore, personalized digital health solutions that can comply with the different preferences and needs of individuals are more likely to satisfy them as well for further usage.

One of the initiatives taken by Kazakhstan is to liberalize and modernize its healthcare system, thus digitizing it. Some components of this transformation are the introduction of electronic health record (EHR), telemedicine, and mobile-health application such as in "Damumed" – Bayeshova et al. For example, the Damumed app enables patients to look at their health history, make appointments and get alerts to important health services due. Despite these advances, the digitisation of healthcare technologies in Kazakhstan – as is true for many low- and middle-income countries—has faced challenges: infrastructure deficiencies; substantial digital literacy differences among the population as well as concerns around data privacy and security [12].

Studies by Orazgaliyeva E.B. et al. 4on the usability of the "Damumed" application offer insightful analysis of the patient experience with digital healthcare in Kazakhstan [13]. The survey revealed that although younger users were typically at ease navigating the program, older adults had trouble, which emphasizes the need of better user-friendly designs that fit every age range. This result emphasizes the need to include demographic elements into evaluation of patient opinions of digital healthcare technology in Kazakhstan.

Although there are few studies focusing on patient attitudes to digital healthcare, the literature in Kazakhstan is growing. However, the existing studies show that a positive patient satisfaction with decentralized health care services can be influenced by various factors such



as an easy to use perceived quality of service and trust in security [10]. The evidence base is, however extensive there remains a paucity of research available that provides comprehensive insight into the factors responsible to shape patient perceptions in relation to digital healthcare within Kazakhstan. Previous research on patient satisfaction with health care services in Kazakhstan has concentrated predominantly on traditional healthcare contexts, and less is directed towards digital healthcare [14]. Furthermore, researchers such as Arynova Z., Baiguzhinova L. that suggest the possible advantages of digital healthcare do not address patients' perception towards these technologies or the challenges they encounter in embracing them. The findings in the specific case of Kazakhstan also underscore a gap within the literature and emphasize the necessity for more context-specific inquiry into patient perceptions on digital healthcare technologies taking into account cultural, infrastructural, and technological dimensions [15].

The literature has identified multiple gaps that need further work. On the one hand, this concept revealed to us that there is no research on how representatives of various demographic groups in Kazakhstan perceive digital healthcare technologies as a whole. Studies did not capture factors that may affect patient perceptions and willingness to use a mobile app-like-age, education level or previous experience with technology. Secondly, the authors have identified some elements of usability for digital healthcare applications in Kazakhstan but there is limited research to explore general patient experience – trust and continuity with care provision; satisfaction about medical visits irrespective of technology use. Furthermore, an analysis of the influence of cultural factors in patient perception towards digital health was also required. The specifics of Kazakhstan's cultural context (e.g. its perceived resistant attitudes to technology and healthcare) will shape how patients interact with digital health tools.

Theoretical Framework. In this work, we investigate patient opinions on digital healthcare technologies (DHTs) in Kazakhstan using the Technology Trust Model (TTM) and the Unified Theory of Acceptance and Use of Technology (UTAUT) as the fundamental theoretical frameworks. All of which are vital for evaluating how patients choose to interact with DHTs, UTAUT is chosen for its all-encompassing approach to grasp the main determinants of technology adoption, including performance expectation, effort expectation, social influence, and enabling conditions. TTM is selected meanwhile because of its emphasis on the vital need of trust in the acceptance of technology, especially in situations when data privacy and security are major issues, like in the healthcare sector. Combining these two models will help the study to give a complete knowledge of the psychological and pragmatic aspects influencing patient acceptance and use of digital healthcare technologies in Kazakhstan.

Unified Theory of Acceptance and Use of Technology (UTAUT). Developed by Venkatesh V. et al., Unified Theory of Acceptance and Use of Technology (UTAUT) is a complete model that clarifies user intents to accept a technology and then subsequent usage behavior [14]. According to UTAUT, an individual's intention to utilize and actual usage of technology is much influenced by four main constructions: performance expectation, effort expectation, social influence, and facilitating factors. Performance expectation is the degree to which a person thinks employing the technology will enable them to reach improvements in health outcomes. Within the framework of digital healthcare technologies (DHTs) in Kazakhstan, this construct aids in investigating patient impressions of the advantages of telemedicine, electronic health records (EHRs), and mobile health applications in enhancing their healthcare experience. Effort expectation relates to the ease of use connected with the technology, which is especially important for knowing how readily patients can navigate and utilize DHTs, a component probably impacted by digital literacy and past familiarity with technology. Social influence measures the degree to which people think significant others —



such as friends, relatives, or doctors-should make use of technology. Understanding how social influences or recommendations affect patient choices to adopt DHTs in Kazakhstan requires this construct. Facilitating conditions comprise the degree to which an individual believes that the required infrastructure and support exist to effectively use the technology, so encompassing access to reliable internet, digital devices, and technical support, all of which are essential for the adoption of DHTs in both urban and rural areas of Kazakhstan [16].

Technology Trust Model (TTM). Particularly in settings where issues concerning data privacy and security are somewhat common, the Technology Trust Model (TTM) stresses the important component of trust in the acceptance of digital healthcare technology. Reflecting the degree of confidence consumers have in the companies offering digital healthcare services, this model depends mostly on trust in the technological provider [17]. In Kazakhstan, this entails knowing how much patients trust technology businesses and healthcare providers – especially with relation to their honesty, competency, and capacity to safeguard patient interests –particularly with regard to Another important component of TTM is perceived security, which is the conviction that the technology will guard personal information from illegal access or leaks. In healthcare, where patients' main focus is on the security of private health information, the degree of perceived security can greatly affect whether patients feel comfortable using digital healthcare technologies, such telemedicine platforms or electronic health records; The last component of TTM, perceived privacy, is the degree to which consumers feel their personal medical data is maintained private and not shared without permission. In a nation like Kazakhstan, where digital literacy varies greatly, perceived privacy could be a major obstacle to acceptance if patients are unsure about how their data is handled and secured [17].

Materials and methods. The survey design was developed using theories such as UTAUT and Trust Theory as its foundation. These frameworks were chosen because, while traditional healthcare perceptions had been explored mainly among Kazakh scholars, there was limited research on digital healthcare technology perceptions across different demographics. Therefore, we built our survey design around trust and satisfaction levels, utilizing a Likert scale method. Additionally, open-ended questions were included to identify obstacles that patients in Kazakhstan perceive or face. The survey consisted of 22 questions in total, and it was administered anonymously with participants' consent obtained through a Google Forms survey. We collected responses from 101 participants representing diverse demographic groups, providing a broader understanding of how different factors, such as age, gender, education, and location, impact their perceptions of digital healthcare technology.

This study extensively investigated how usability and trust levels influence patient perceptions of digital healthcare technologies in Kazakhstan, utilizing a range of SPSS data analysis methods. First of all, we conducted reliability analysis to ensure the collected categories and data are enough for further analysis. Descriptive statistics were used to provide a clear summary of demographic variables such as age, gender, location, and education, alongside key metrics like usability, trust, satisfaction, and digital technology experience. Cross-tabulations helped identify relationships between these categorical variables, while Chisquare tests were conducted to determine whether these relationships were statistically significant. Additionally, factor analysis was employed to identify underlying patterns within the usability and trust variables, and regression analysis was applied to examine how these factors predict overall patient satisfaction and the likelihood of adopting digital healthcare. These methods were selected to ensure both a comprehensive overview and a deeper understanding of how these variables interact, ultimately providing valuable insights to meet the research objective.



Results and discussion. First in the analysis section, we conducted a reliability analysis, as this analysis is crucial for determining whether our chosen data and categories are reliable enough for further investigation. As shown in Table 1, our data included 101 cases (responses were collected), and the reliability score was 82%, which is fairly sufficient for the reliability interval. Next, we provided descriptive statistics for our data to easily grasp what it consists of and what the demographic factors reveal about the dataset.

 Table 1 - Reliability summary

Case Processing Summary						
	N	%				
Cases	Valid	101	100			
	Excluded	0	0			
	Total	101	100			
Reliability Statistics						
Cronbach's Alpha	N of Items					
0.821	10					

First, we conducted descriptives on the age category, which indicates that the youngest participant was 18, spanning up to 56, with the average age of respondents being 30 (as shown in table 2).

Table 2 - Descriptive statistics summary

Descriptive Statistics							
	N	Minimum	Maximum	Mean	Std. Deviation		
Usability_Score	101	1	5	3.1337	0.93779		
Trust_Score	101	1	5	3.0737	0.98071		
Satisfaction_Score	101	1	5	3.1188	0.79942		
Age	101	18	56	30.5545	11.45031		

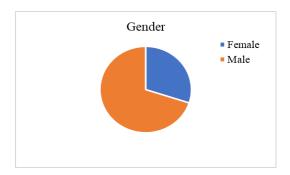
Considering gender, the pie chart (figure 1) below shows that the majority of respondents were female, accounting for over 65%, compared to their male counterparts, who made up less than 35%.

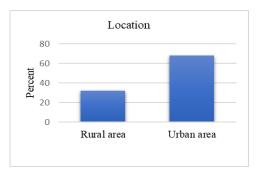
Additionally, most survey participants were from urban areas, with around 32 people, rather than rural areas. An interesting finding in the education category is that the highest proportion of participants were bachelor's degree holders or current students, which we assume is due to the survey being distributed in universities in Kazakhstan, targeting their perspectives as well.

First, we conducted descriptives on the age category, which indicates that the youngest participant was 18, spanning up to 56, with the average age of respondents being 30 (as shown in table 2). If we look at our descriptive statistics analysis on usability, trust, etc., it showed us some interesting key insights. The usability score and trust score means were both



slightly variable in user experience (table 2). When it comes to the satisfaction score, the mean was moderately higher than the previous two, and a bit more consistent.





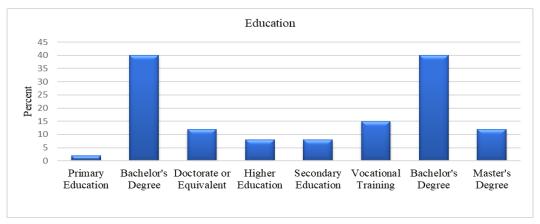


Figure 1 - Descriptives summary for demographics

Considering gender, the pie chart (figure 1) below shows that the majority of respondents were female, accounting for over 65%, compared to their male counterparts, who made up less than 35%. Additionally, most survey participants were from urban areas, with around 32 people, rather than rural areas. An interesting finding in the education category is that the highest proportion of participants were bachelor's degree holders or current students, which we assume is due to the survey being distributed in universities in Kazakhstan, targeting their perspectives as well.

The factor analysis (see table 3) results highlight that the three variables –usability, trust, and satisfaction – are closely related, with a single component explaining 64.29% of the total variance. We used Principal Component Analysis (PCA) as the extraction method to reduce the data complexity and identify how these variables interact together. The purpose of this analysis was to check if these three variables can be simplified into one factor, which would help us understand the core dimension influencing patient perceptions. Among these, satisfaction shows the strongest impact, with the highest loading of 0.864, followed by trust at 0.797 and usability at 0.74. However the fact that satisfaction is a better determinant of whether patients will trust and use Health services indicates that improving patient's satisfaction may lead to improved usability as well. The results support the idea that in developing strategies to promote greater use of digital healthcare, attention should focus on improving patient satisfaction as this is a major determinant of overall user experience. Regression analysis was performed to examine the effect of usability and trust on patient satisfaction with digital healthcare technology. As two of the top drivers influencing



perception, it was crucial to ascertain their effect on overall satisfaction. The analysis identifies how these variables interact and that usability significantly impacts patient satisfaction. The R-squared value of 40.9% indicates that almost half the variance in satisfaction is explained by a combination based on usability and trust.

Table 3 - Factor analysis summary

Total Variance Explained							Component Matrixa	
	Initial Eigenvalues	Extraction Sums of Squared Loadings						Compone nt
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulati ve %		1
Usability	1.929	64.294	64.294	1.929	64.294	64.294	Usability Score	0.74
Trust	0.664	22.148	86.442				Trust_ Score	0.797
Satisfaction	0.407	13.558	100				Satisfaction Score	0.864
Note: extraction method, principal component analysis								

This shows that high levels of patient satisfaction are linked to the technology being user-friendly and reliable. Meanwhile, the F-value of 33.932 with a p <0.001 confirmed that model was statistically significant and these two factors have importance as well. That means, it is not enough for digital health providers to work on usability but quality and trust as well. Addressing these two dimensions can potentially enhance the adoption and effectiveness of digital healthcare technologies among DHTs (see table 4).

Finally, to investigate further in-depth demographic factors we performed crosstab analysis on the perceived barriers of digital healthcare technologies adoption according to gender and location (rural/urban). We chose to look into this breakdown analysis among many reasons to illuminate unique struggles across demographics as well as how the different components intertwine.

Table 4 -Regression analysis summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate				
1	.640a	0.409	0.397	0.62073				
a. Predictors: (Constant), Trust_Score, Usability_Score								
ANOVA								
Model	Sum of Squares	df	Mean Square	F	Sig.			
1	Regression	26.148	2	13.074	33.932	<.001b		
	Residual	37.759	98	0.385				
	Total	63.908	100					
Notes: a. dep	Notes: a. dependent variable: satisfaction score; b. predictors: (constant), trust score, usability score							



We focused specifically on the items of gender and location as well, discovering whether all these difficulties are influenced by complexity in technological terms or if women are otherwise disadvantaged due to issues with privacy and security, trust levels, or access (internet) (figure 2). We did this to get better insight into which kinds of men and women are under what type of barrier pressure in different contexts. The most common barrier against using digital health technologies was privacy and security concerns followed by no barriers, as reported for women in rural areas.

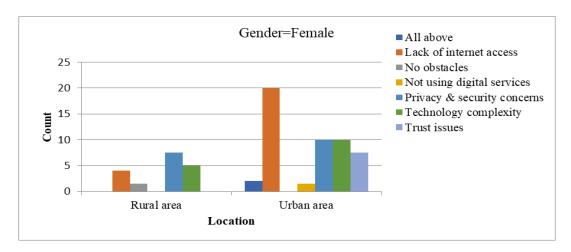


Figure 2 - Crosstab: female, location, and obstacles summary

Which implies that privacy is indeed an important issue also for women in the countryside but not a huge obstacle on average. In cities on the other hand, landscape changes. Among females from urban areas technology complexity was the single most-significant barrier listed, by more than one-third of participants. This implies that although digital services tend to be more ubiquitous, the sophistication around these technologies is a big challenge for urban women. Some urban participants raised trust issues and privacy concerns relevant to their environment, highlighting areas that also require attention if adoption levels are going to increase.

For rural-dwelling men, the overwhelming challenge was access to the internet as 41% mentioned related problems. This indicates a clear problem around infrastructure in these places that is excluding many men from the use of digital health services. Likewise, technology complexity (and privacy concerns) had a presence in the rural setting as well but occurred less frequently compared with access issues (figure 3). The largest obstacle for urban males was technology complexity followed by privacy concerns and trust issues. But fewer males reported having no obstacles in cities, compared to rural areas – a situation that points to reduced issues with internet availability but ongoing barriers related to trust and the complexity of digital tools.



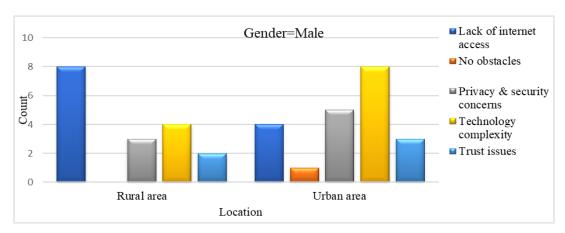


Figure 3 - Crosstab: Male, Location, and Obstacles Summary

These insights highlight that strategies to improve the adoption of digital healthcare technologies need to be targeted. For rural males, efforts should focus on improving internet infrastructure, while for urban females, simplifying the technology and addressing privacy and trust concerns should be the priority.

The results of the study were largely consistent with previous international research on digital healthcare adoption. For example, the literature emphasizes that usability and trust are significant factors in patient satisfaction with digital healthcare technologies, which our regression analysis supported.

The R-squared value of 40.9% confirmed that a significant portion of satisfaction variance could be explained by usability and trust, aligning with research by Venkatesh V. et al. on technology adoption and McKnight D. H. et al. on the importance of trust in digital platforms [14, 15].

However, the study also uncovered Kazakhstan-specific insights, such as significant differences in the obstacles faced by different demographic groups. For example, urban females struggled more with technology complexity, while rural males reported lack of internet access as the primary obstacle, a finding that was not extensively addressed in existing literature but highlights the importance of localized factors in digital healthcare adoption. These insights contribute to filling the research gap on demographic-specific challenges in Kazakhstan, as previous studies primarily focused on traditional healthcare settings without emphasizing digital health.

Conclusion. The given research was initiated with the objective of understanding how patient perceptions in Kazakhstan, specifically regarding trust and usability, influence the adoption of digital healthcare technology (DHT). A review of the majority of existing research revealed that while healthcare in Kazakhstan is a significant topic for policymakers, business leaders, and academics, there is a lack of studies exploring the impact of deep demographic factors in this developing country. Through our quantitative research, we found that trust and usability are the key factors influencing DHT adoption. Younger generations, particularly those with bachelor's degrees, showed a higher willingness to adopt the technology, while older generations were less inclined but still expressed interest. Our findings also highlighted that urban areas struggled with the complexity of technology, whereas rural areas faced issues with accessing new features and dealing with poor internet connections. The research was supported by the theories of McKnight and Venkatesh, which focus on technology adoption. Our study confirmed that trust and usability significantly affect patient satisfaction in Kazakhstan.



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ИННОВАЦИЯЛЫҚ ЭКОНОМИКА ЖАҒДАЙЫНДА ҚАЗАҚСТАННЫҢ ДЕНСАУЛЫҚ САҚТАУ СФЕРАСЫНДА ЦИФРЛЫҚ ТЕХНОЛОГИЯЛАРДЫ ҚОЛДАНУШЫЛАРДЫҢ ҚАБЫЛДАУ ӘСЕРІН ТАЛДАУ

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Түйін. Бұл зерттеудің мақсаты тұрғындардың сенім мен ыңғайлылықты қабылдауының Қазақстанда цифрлық денсаулық сақтау технологияларын (DHT) қабылдау ниетіне әсерін зерттеу. DHT-тердің медициналық көмек көрсетуді жақсарту әлеуеті болғанымен, Қазақстан сияқты дамушы елдерде демографиялық факторлардың әсері туралы зерттеулер аз. 22 сұрақтан тұратын сапаны жақсарту сауалнамасы әртүрлі демографиялық топтардан тұратын 101 респонденттен қолайлы таңдау әдісі негізінде жүргізілді. Сауалнама сенімділікті, сәйкестікті (қанағаттануды) және тұрғындардың DHT қолдану кезінде кездесетін кедергілерді зерттеуге бағытталған. Сандық талдау жас және неғұрлым білімді ұрпақтардың DHT қабылдауы ықтимал екенін көрсетті, ал ауылдық жерлердегі егде жастағы адамдар техникалық күрделілікке және интернетке қол жеткізу проблемаларына байланысты қиынырақ болатынын жеткізді. Тұрғындардың сенімі жаңа технологияларға сенуі және оның жұмысымен қанағаттануы өте маңызды рөл атқарады, бұл МакНайт теориясымен, сондай-ақ АКТ қолданудың Венкатеш үлгісімен расталады. Медициналық қызмет көрсетүшілер, денсаулық сақтау саласын басқару сферасы және технологтар бұл зерттеуді Қазақстан сияқты дамушы елдерде іске асыруға жәрдемдесетін мақсатты стратегиялардың маңыздылығын ескере отырып, денсаулық сақтау саласындағы саясатты әзірлеуді ақпараттандыру үшін пайдалана алады.

Түйінді сөздер: цифрлық технологиялар, денсаулық сақтау сферасы, Қазақстан, демографиялық факторлар, пайдаланушы сенімі, қолданушылардың қанағаттануы.

АНАЛИЗ ВЛИЯНИЯ ВОСПРИЯТИЯ ПОЛЬЗОВАТЕЛЯМИ ЦИФРОВЫХ ТЕХНОЛОГИЙ В СФЕРЕ ЗДРАВОХРАНЕНИЯ КАЗАХСТАНА В УСЛОВИЯХ ИННОВАЦИОННОЙ ЭКОНОМИКИ

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Резюме. Цель данного исследования заключается в изучении влияния восприятия населения, таких как доверие и удобство использования, на намерение внедрения цифровых технологий здравоохранения (DHT) в Казахстане. Несмотря на то, что DHT имеют потенциал для улучшения оказания медицинской помощи, очень немногие исследования рассматривали влияние таких факторов, как демографические переменные, на уровень внедрения в развивающихся странах, таких как Казахстан. Опрос для улучшения качества, состоящий из 22 вопросов, был проведен методом выборки по удобству (convenience sample) из 101 респондента, представляющих различные демографические группы. Опрос был направлен на исследование доверия, соответствия (удовлетворенности) и препятствий, с которыми сталкиваются жители при использовании DHT. Количественный анализ показал, что молодые и более образованные поколения наиболее склонны к внедрению DHT, в то время как пожилым людям в сельских районах это дается сложнее из-за технической сложности и проблем с доступом к интернету. Доверие пациентов играет важную роль в принятии новых технологий и высокой удовлетворенности, что подтверждается теорией McKnight, а также моделью использования ИКТ Venkatesh. Провайдеры здравоохранения, сфера управления здравоохранением и технологи могут использовать это исследование для разработки здравоохранительной политики, учитывая важность таких целевых стратегий, направленных на продвижение внедрения в развивающихся странах, таких как Казахстан.

Ключевые слова: цифровые технологии, сфера здравохранения, Казахстан, демографические переменные, удобство использования, удовлетворенность пользователей.



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