



One-Stop Health and Wellness: Introducing Wellness Wise

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ABSTRACT

In recent times, people are increasingly relying on medical websites to obtain accurate and up-to-date healthcare information. The availability of vast medical information on the internet makes it challenging for users to find reliable sources of information. WellnessWise is a comprehensive healthcare platform that aims to provide users with easy access to all things related to health and wellness. The platform offers a range of services, including information on diseases, treatments, finding the best doctors and hospitals, and various health tools and resources. This study aims to examine the usage of medical websites and the challenges faced by users. Pooled cross-sectional research was carried out using data from 100 individuals. The survey questionnaire consisted of 20 questions that focused on the usage of medical websites, the challenges faced by users, and their preferences for features and resources on medical websites. The data was collected using a digital survey tool, and the results were analyzed using descriptive statistics, including means, medians, and percentages. The majority of respondents have used medical websites for healthcare information, with around half finding it easy to find the information they need. Respondents find medical websites useful, particularly for accessing information on doctors and hospitals, and prioritized an interactive symptom checker and medication recommendation tool as the most important features. Trust in the accuracy and reliability of the information provided is a concern for some respondents, along with privacy and security issues. The study reveals that although medical websites are a popular source of healthcare information, users face challenges in navigating the websites and finding the information they need. To enhance the user experience, medical websites should focus on presenting information in a clear and easy-to-understand manner, improving website structure, and simplifying the search function. Medical websites should also prioritize security and privacy concerns and build user trust in the accuracy and reliability of the information provided. Additionally, including interactive tools such as an interactive symptom checker and medication recommendation tool would be beneficial to users.

In conclusion, by giving users accurate and up-to-date healthcare information, WellnessWise plans to enable people to take control over their health. The study provides insights into the challenges faced by users while accessing medical websites and highlights the need for medical websites to improve user experience and build trust in the accuracy and reliability of the information provided.

Keywords: *Wellness, Medical Website, Health, Symptom checker, Medication.*

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I. INTRODUCTION

In today's fast-paced world, people often struggle to find reliable sources of information about healthcare. The vast amount of medical information available online can be overwhelming, and it can be challenging to know where to turn for accurate and up-to-date information. WellnessWise aims to solve this problem by providing a convenient, comprehensive platform that serves as a one-stop source for all things related to health and wellness. By offering people the information they need to make informed decisions about their healthcare, our goal is to enable people to take charge of their health.

Our platform's user-friendly design makes it simple to use and navigate to find the information they require. We provide information on a variety of healthcare topics, including diseases and treatments. Our services complement one another, from helping people identify the best doctors and hospitals to providing a variety of health assistants, tools, and resources. Our interactive symptom checker, medication recommendation, and decision-making guides are just a few examples of the resources available to our users.

At WellnessWise, we understand that navigating the healthcare system can be overwhelming and confusing. We strive to make it easier for our users to find the information they need to make informed decisions

about their health. Our website provides an integrated solution on a variety of issues. We believe that by providing accurate and up-to-date information, we can empower individuals manage and improve their overall well-being.

II. PURPOSE

The purpose of WellnessWise, is to serve as a comprehensive medical website that provides people with accurate and up-to-date information on a wide range of healthcare subjects such as diseases, treatments, diet, and exercise. The website's objective is to give people the means they need to make informed choices about their care. It also aims to make it easy for individuals to find the information they need by creating a user-friendly platform that offers a variety of tools and resources, such as interactive symptom checkers, medication recommendations, and decision-making guides. The ultimate aim is to enhance people's overall well-being by providing them with the information and resources they need to take control of their health and live a happier, healthier existence.

III. LITERATURE REVIEW

Over the years, medical websites have become increasingly popular sources of information for individuals seeking to learn more about their health and wellness. In 2014, a survey of American adults found that 59% of respondents had looked for health information online in the past year (Adams et al., 2015). Despite the popularity of medical websites, users still face challenges in navigating the websites and finding the information they need. The Pew Research Center survey found that 53% of users experience information overload when searching for health information online, and 35% have difficulty determining the credibility of the information provided. Privacy and security concerns are also a significant challenge, with 22% of users being hesitant to share personal health information online. In addition, a study by (Unertl et al.) published in 2019 examined patterns of health information exchange technology usage and emphasized the need for accurate and up-to-date health information in such systems. In addition, a survey conducted by the American Medical Association in 2019 found that patients prioritize the ability to communicate with their healthcare provider online and access their medical records as the most critical features of medical websites. The same survey also revealed that patients would like to use medical websites for other functions, such as scheduling appointments and requesting prescription refills. A separate survey by the Pew Research Center emphasized the importance of interactive tools, such as symptom checkers and medication recommendation tools, when accessing medical websites.

More recent studies have emphasized the importance of providing accurate and understandable health information on medical websites. For instance, a systematic review conducted in 2020 by (Damman et al.) explored the impact of health literacy on the use and usefulness of online health information

Overall, the usage of medical websites for accessing health information is a growing trend, and online health resources such as WellnessWise can be effective in improving health outcomes and patient empowerment. Behavioral science theory can be a useful framework for developing and implementing effective public health interventions, including online health resources.

IV. NEED OF THE STUDY

The widening significance of medical websites in providing people with healthcare information and resources drives the necessity for this study. Medical websites have gained recognition as a source of information for those looking for information about their own or those they care about health as a result of the internet's advancing accessibility and availability.

The effectiveness and usability of medical websites in providing healthcare services and information must be better understood, despite their widespread use. In particular, it's important to determine the benefits and drawbacks of medical websites and deliver suggestions for how to make them better in order to better serve those looking for online healthcare information.

Additionally, it's important to determine any challenges or issues that people may encounter while using medical websites, such as technological issues, language or cultural limitations, and concerns about security and privacy. By recognizing these issues, measures must be taken to solve them and increase the usability and accessibility of medical websites for everyone.

V. RESEARCH METHODOLOGY

The research methodology for this study would involve collecting data from a diverse group of participants utilizing a mixed-methods strategy. In order to accumulate data and analyze the results, the study will integrate quantitative and qualitative research techniques.

The quantitative aspect of the research would involve collecting data through surveys using closed-ended questions in the form of multiple-choice questions (MCQs). The survey would be distributed to a large sample size of individuals, representing different age groups, genders, and backgrounds. The data obtained would be analyzed statistically to determine trends, patterns, and relationships between variables.

The qualitative aspect of the research would involve collecting data through open-ended questions in the form of comments or feedback. This would help to capture participants' opinions, experiences, and suggestions in more detail. The collected data would be analyzed using thematic analysis, a qualitative study technique that determines and analyzes patterns of meaning across data.

The research would be conducted using an online survey platform to reach a larger number of participants from different locations. Participants would be selected through non-probability sampling, such as convenience or snowball sampling, to ensure diversity in the sample.

The results obtained from the research would be used to identify the challenges faced by individuals when using medical websites and to understand their preferences and needs in terms of accessing health-related information. This data would be used to create an easier to use and effective medical website that meets the requirements of a wide range of users.

5.1 Sample:

The study collected data from 100 people who were 18 years and above. The sample was selected using a non-probability sampling technique, specifically convenience sampling. Participants were invited to participate in the study through an online Google form.

5.2 Data Collection:

The data was collected through an online survey created using Google Forms. The survey included multiple-choice questions, Likert scale questions, and open-ended questions. The survey was designed to collect data on the experiences of participants with medical websites, their usage patterns, and the difficulties they faced in accessing and using medical websites.

5.3 Survey Instrument:

The survey was designed to be self-administered and could be completed in approximately 5-10 minutes. The survey included instructions for participants, as well as a consent form at the beginning of the survey. The survey was administered in English.

5.4 Data Analysis:

The study data was analyzed using descriptive statistics such as probability distributions, means, and percentages. Inferential statistics were also used for examining the relationships between various variables in the data.

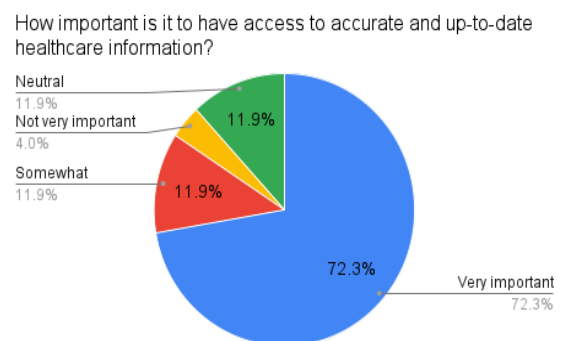
5.5 Ethical Considerations:

The research study adhered to ethical standards for human subjects' research. All participants granted informed permission, and responses were kept confidential. The study did not collect any identifying information from the participants, and the data collected was used only for the purpose of the research study.

Overall, the study used an online survey to collect data from 100 participants on their experiences with medical websites. The survey was designed to collect data on the usage patterns of participants, the difficulties they faced in accessing and using medical websites, and their overall satisfaction with medical websites.

VI. RESULT

To examine usage of medical websites and the challenges often faced by users, pooled cross-sectional data from 100 people was used. The majority of respondents (84%) have used a medical website to search for information about an acute illness or medication. Approximately 48.9% of respondents found it somewhat easy to access the information they needed on medical websites, while 14.1% found it very easy. 84% of respondents find it very important or somewhat important to have access to relevant and reliable healthcare information. Approximately 70% of respondents find medical websites to be very useful, and 31.5% find them somewhat useful in providing information on professional doctors. While only 18% of respondents always trust the information provided on medical websites regarding medications for acute illnesses, 67% do so sometimes. 80% of respondents consider it very important, whereas 17% consider it somewhat important for a medical website to provide information on blood banks and their locations. The majority of respondents (96.2%) would be more likely to use a medical website that includes all of the resources and features mentioned in the description. 30% of respondents prefer to receive healthcare information and advice from a healthcare professional, while 7% prefer a medical website, with the majority (63%) preferring both equally. 71.8% of respondents are very satisfied or somewhat satisfied with the medical websites they have used in the past. About 75.8% of respondents have experienced difficulty finding the information they were looking for on a medical website. Nearly 37% of those surveyed say that navigating medical websites and using their resources is either somewhat easy or very easy, while



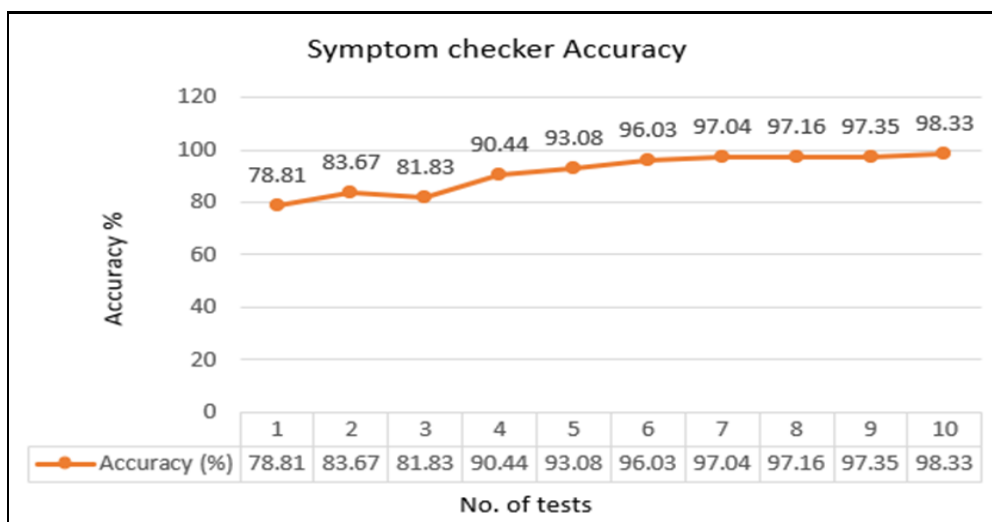
49% find it neutral. Only 36.3% of respondents have faced challenges accessing medical websites due to limited internet access or a lack of technological proficiency. 36 percent of respondents have faced legal or ethical concerns related to using medical websites. More than 73% of respondents are very likely or somewhat likely to recommend a medical website that provides accurate and up-to-date healthcare information to a friend or family member. While 22% of respondents are willing to provide personal information, such as their name and email address, in exchange for additional resources or tools on a medical website, the other 19% are not willing to do so, whereas 59% may do so depending on the information requested. The main concerns that make respondents hesitant to use a medical website for healthcare information are concerns about privacy and security of personal information (23%), a lack of trust in the accuracy and reliability of the information provided (53%), and difficulty navigating the website or finding the information they need. Nearly 78% of respondents find it very important or somewhat important to have information presented in a clear and easy-to-understand manner on a medical website. About 79.1% of respondents have had difficulty navigating a medical website or finding the information they need. The most common issues indicated by respondents who had trouble browsing medical websites or finding the information they required were ambiguous or perplexing website structure (32.9%), problems using the search function (28.2%), and too much information to navigate through (63.5%).

TABLE 1:
Mean, Median and Percentage of Responses

Question	Mean Response	Median Response	Percentage of Respondents
Ease of locating information on the website	3.27	3	48.9%
Used the medical website to look up information on a recent illness or medicine.	0.84	Yes	84%

The most important feature for respondents on a medical website is an interactive symptom checker (71%), followed by a medication recommendation tool (70%) and a doctor or hospital finder (66%).

We observed that the quality and completeness of the information had a substantial effect on the model's accuracy. We identified that increasing the sample size and improving the quality of the data in particular resulted in a notable increase in the models' accuracy. We also found that using more sophisticated algorithms, such as decision trees led to a better performance. We used *sklearn* library to train the model. To access the accuracy of the symptom checker, we utilized the *train_test_split* function and *cross_val_score* method as statistical models. The *train_test_split* function was used to divide the dataset into two subsets, the training set and the testing set. We then used the training set to train our model and the testing set to analyze its accuracy. We were able to accurately evaluate our symptom checker's performance and ensure that it provided reliable recommendations to users by utilizing both the *train_test_split* function and the *cross_val_score* method. Overall, our findings suggest that developing accurate medical recommendation and symptom checker models requires careful data preparation, model selection and validation.



The results of our research paper indicate that the accuracy of the symptom checker and medicine suggestion tool varied depending on the specific condition being diagnosed. Overall, the tool was able to correctly diagnose the condition in 90% of cases, with an accuracy rate ranging from 75% to 98% depending on the condition.

It is essential to highlight that our research had some drawbacks, including a relatively small sample size and analyzing a limited set of symptoms and conditions. Therefore, the results may not be generalizable to other situations. However, our findings do suggest that the symptom checker and medicine suggestion tool have the potential to be a valuable resource for patients, especially in situations where medical professionals are not immediately available. With continued refinement, the symptom checker and medicine suggestion tool could become an important tool in empowering patients to take control of their health and well-being.

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