



The danger of self-diagnosis and searching for symptoms online

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Abstract

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One-third of adults in the United States self-diagnose, and a sizeable portion of people go online for information on medical symptoms they are having. It is unknown how frequently people hunt up information about their symptoms before having a formal medical diagnosis, despite the fact that polls are notoriously unreliable. The main objective of this study was to examine any potential repercussions of using websites for self-diagnosis. For this study, we collected searches made on a general-purpose internet search engine by US residents who self-reported having one of 20 medical illnesses. We focused on diseases with clear symptoms or both that don't receive normal medical care or screening. As a result, they are often discovered following a careful investigation of particular symptoms. We counted the number of these people who looked for indicators of their condition before receiving a formal diagnosis. Through the use of a survey questionnaire, the familiarity of laypeople with the symptoms associated with these disorders was also assessed. Despite the fact that information regarding potential diagnoses and how to treat them has already been made available through books and pamphlets, the development of self-diagnosis websites is unique for a number of reasons. According to our research, a wide range of people research their symptoms online before seeking a formal medical diagnosis. This finding has important repercussions for medical problem screening systems.

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Introduction

Although the internet gives us access to information, some people who are looking for health-related information worry that it may be misconstrued, unreliable, or both. If patients use the internet to self-diagnose instead of seeing a doctor, this is especially concerning. Results from this study can help future research on this phenomena and tell healthcare practitioners about how college instructors, staff, and students feel about using the internet to self-diagnose before

visiting a primary care provider (Semigran et al., 2015). Our society has advanced significantly as a result of the Internet's growth over time. Every time we switch on our computers, we have immediate access to a multitude of information that can be useful in a variety of ways. Now, any inquiry can be answered with a few keystrokes and a button click (Gann, 2012). However, there are drawbacks to this richness of knowledge. People can conduct health research from the comfort of their homes using the Internet,



which is a goldmine of medical knowledge. Unfortunately, not everyone has the skills necessary to independently examine online databases for potential diagnoses (Luger, 2014). The risk of being deceived increases for those who are not proficient in reading and computer technology. They could misdiagnose themselves in addition to attempting to treat themselves. Western medicine is not always as effective or secure, despite having been practised for longer than evidence-based hospital treatment.

Humans have a need to find answers to their problems, or in this case, the illnesses they suffer from. If someone has a sore throat, they can Google it and find a variety of remedies; they may be satisfied or their fear may grow. "For patients, medical diagnosis is the gateway to the sick role that legitimizes suffering and departure from normal social roles as appropriate and blameless" (Jones et al., 2009). Simply put, giving the beast a name makes it more bearable and manageable. People who self-diagnose may contact their doctor later to hear what they may have to say regarding the symptoms they are presenting, according to Copelton and Valle's 2009 research. The goal of future research is to determine whether those who use the internet for self-diagnosis will seek out professional medical care. It's a common misconception that finding a justification for one's suffering alleviates it. Having a diagnosis, whether it is one that the person discovers for themselves or one that is made by a medical professional, can be relieving (Mehrotra et al., 2013).

During the Covid-19 pandemic, the use of virtual health care increased significantly as

more people used remote access to medical professionals. However, given the ease and accessibility of technology, some individuals may decide to forgo traditional medical care in favour of online self-diagnosis and direct consultation with Dr. Google.

Daily access to the Internet is available to the vast majority of people. Computers are present in offices, schools, and homes (Fine et al., 2013). The development of the Internet has produced many noteworthy successes. People might gain some understanding of what their disease might be by typing their symptoms into a symptom checker and receiving a list of possible diagnoses. The use of online databases to find assistance has been thoroughly studied, but little research has been done on what happens following the search. This practise could be viewed as the "desire and talent of people/patients to play an intelligent, independent and informed role, not merely in terms of decision-making but also in the management of those preventive, diagnostic and therapeutic activities which concern them". Resource depletion, increasing pathogen resistance, and substantial health risk such unpleasant reactions and long-lasting discomforts are the main drawbacks of self-medication (Gonzales et al., 2001).

However, using search engines as a reliable screening method necessitates a precise description of how people use search engines for self-diagnosis. To comprehend the type and quantity of persons conducting information searches as well as the most frequent search terms, conditions must also be separately characterized. It is still unknown how frequently people look up their disease online before getting a medical



diagnosis (Orizio et al., 2011). This will be an important indicator of the diseases for which internet-based screening is successful as well as the proportion of people for whom online data screening is appropriate (Donnelly et al., 2015). The goal of this study was to determine the quantity and type of user searches done before a medical diagnosis was made.

The current study is to ascertain the frequency of Internet-based self-diagnosis among urban residents, compare the nature of this dependence between persons who are medical and those who are not, and evaluate how online self-diagnosis affects the response to the initial medical advice.

Methods

Design

This study is a qualitative survey using a convenience sample of 100 Americans. Online distribution of the survey followed its creation on Survey Monkey. A vast demographic, including but not limited to medical professionals, was reached through email databases and social media in addition to other channels.

Data Collection and Analysis

100 people answered the survey. Following that, a comparison of those who self-diagnosed online and people who saw their primary care physician was made. Using approaches for theme coding, the qualitative data from the surveys was examined. The survey employed a five-point scale, with 1 signifying severe disagreement, 2 signifying disagreement, 3 signifying neutrality, 4 signifying agreement, and 5 signifying strongly agreement.

Table 1: Table 1: Characteristics of sample and respondents distribution of individuals (N=100)

Sl. No.	Variables		Frequency
1	Age (in Years)	25-30	42
2		35-45	29
3		45-55	18
4		55-65	11
1	Gender	Male	77
2		Female	23



Results

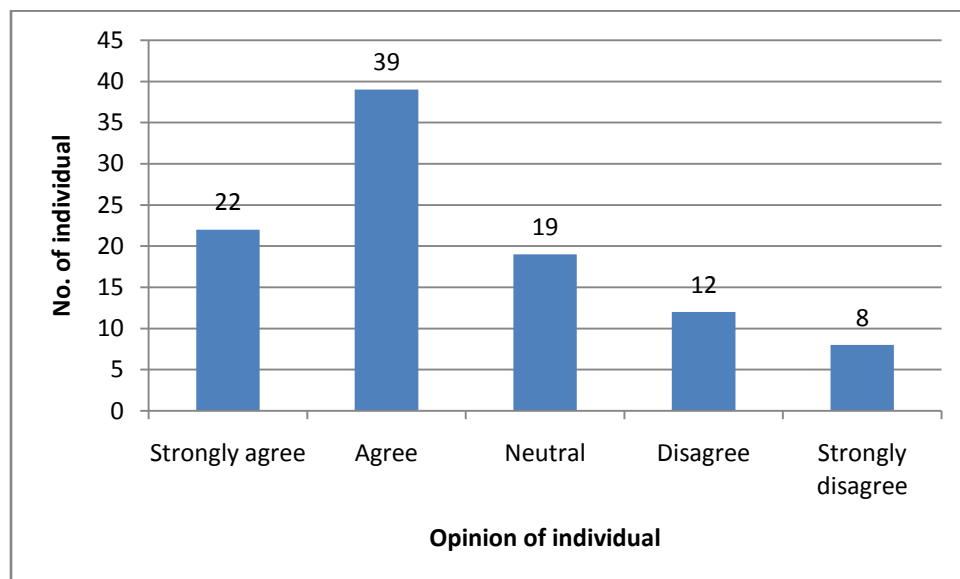


Figure 1: The replies to the question of whether participants exclusively self-diagnosed their health conditions using the internet instead of seeing a healthcare provider are shown in this graph.

The survey's findings are displayed in Figure 1 of the document. Ages were evenly distributed, with the majority being between the ages of 25 and 30. (the age of most college students). Seniors from a medical institute made up 50 of the respondents. Female responses made up 50% of the total. 22 respondents said yes, and 39 said firmly yes when asked if they have utilised the internet for health advice. 19 respondents were neutral and 20 disagreed when asked about the veracity of the health information they found online. Fifty percent of respondents said they had done so, with 19% strongly agreeing, before visiting their primary care physician. When asked if they consult their doctor after receiving online

findings, 20% strongly agreed and 40% agreed. Thirty-two percent of respondents said they did, while thirty-one percent said they didn't tell their doctor about their internet use for health-related purposes. 34 percent of respondents agreed and 28% disagreed when asked if they had ever made a diagnosis solely based on information found online.

The findings indicate that the data was distorted. Additionally, they demonstrated how people who use the internet to research their health believe the material is trustworthy even though the evidence indicates otherwise. It was shown that although most people used the internet to



learn about their medical condition prior to seeing their doctor, most still visited the doctor once they received their results. Data revealed that only half of respondents admitted using the internet prior to seeing their doctor, while the other half did. According to the data, around half of the respondents made diagnoses solely based on online research, and the other half disagreed.

Discussion

From this research, health workers can learn the importance of comprehending the behaviour. A significant portion of the population uses the internet to self-diagnose, according to data from both the current study and other studies that were evaluated. It's critical to assess patients' methods for engaging in this behaviour and whether they are behaving healthily. Medical experts (such doctors and nurses) can advise patients on how to behave online in a healthy way that benefits them rather than harms them.

Health practitioners might also learn from the research that their patients might have queries that they are not giving enough time to address. Assuring patients to ask questions is one method that nurses, doctors, and therapists may promote healthy living in their patients. The medical terminology used to describe a patient's illness may be confusing to them, so rather than asking their doctor what it means, they may look it up online (that may or may not be correct).

Discussions about health care and financial standing took place throughout the research procedure. The lack of a primary care physician, insurance, inability to pay the copay, or lack of insurance may all be reasons why patients avoid coming to the doctor. When this is taken into account,

online self-diagnosis makes sense because it provides a result without requiring further financial outlay. In subsequent research, it would be intriguing to determine whether any internet users who are looking for health information are doing so because they are limited in their other options.

Promoting the use of medical professionals could cut down on online self-diagnosis. Patients may believe that going to their primary care physician or a nurse would upset them or that they do not comprehend what they are saying. To support the optimal way of life, patients should be urged to have honest, constructive relationships.

The size of the sample played a crucial role in this survey's conduct. Students, instructors, and staff were selected as a sample (N=100) from the general population. According to the findings, women and senior citizens made up the majority. Nearly all of the participants had a primary care doctor. It is obvious that the data was distorted when taking into account both of these facts. There weren't as many males, older adults, or people without access to primary care in it.

It is critical knowledge for primary healthcare professionals to know that half of those having a primary provider check the internet rather than their doctor. Patients may be misled or exhibit unhealthy behaviour if they use the internet for their medical needs. Health providers must understand this behaviour in order to help their patients receive better health information and health literacy. By taking the time to respond to their inquiries or point them in the direction of reliable online health resources, they can achieve this.



Conclusions

100 questionnaires were filled out in various American towns. Despite the larger proportion of female senior students in the study population, it was found through the survey that students, staff, and professors frequently use the internet for self-diagnosis. Similar survey studies should be conducted in the future so that results from diverse research may be compared, especially if a different demographic was researched. A primary care physician was consulted after utilising the internet for self-diagnosis, according to the survey's questions, which were designed to determine whether this happened. We can draw the conclusion that further research in this area is necessary. As the internet becomes more widely accessible to us, this behaviour will only increase. It is important to comprehend how it is employed in relation to self-diagnosis, encourage positive behaviour, and counteract negative behaviour.

References

Donnelly, L. (2015). A&E Crisis cause by NHS 111 phonenumber, senior medic suggests. *The Telegraph*, 14.

Fine, A. M., Nizet, V., & Mandl, K. D. (2013). Participatory medicine: a home score for streptococcal pharyngitis enabled by real-time biosurveillance: a cohort study. *Annals of internal medicine*, 159(9), 577-583.

Gann, B. (2012). Giving patients choice and control: health informatics on the patient

journey. *Yearbook of medical informatics*, 21(01), 70-73.

Gonzales, R., Malone, D. C., Maselli, J. H., & Sande, M. A. (2001). Excessive antibiotic use for acute respiratory infections in the United States. *Clinical infectious diseases*, 33(6), 757-762.

Jones, I. R., Ahmed, N., Catty, J., McLaren, S., Rose, D., Wykes, T., & Burns, T. (2009). Illness careers and continuity of care in mental health services: a qualitative study of service users and carers. *Social science & medicine*, 69(4), 632-639.

Luger, T. M., Houston, T. K., & Suls, J. (2014). Older adult experience of online diagnosis: results from a scenario-based think-aloud protocol. *Journal of medical Internet research*, 16(1), e2924.

Mehrotra, A., Paone, S., Martich, G. D., Albert, S. M., & Shevchik, G. J. (2013). A comparison of care at e-visits and physician office visits for sinusitis and urinary tract infection. *JAMA internal medicine*, 173(1), 72-74.

Orizio, G., Merla, A., Schulz, P. J., & Gelatti, U. (2011). Quality of online pharmacies and websites selling prescription drugs: a systematic review. *Journal of medical Internet research*, 13(3), e1795.

Semigran, H. L., Linder, J. A., Gidengil, C., & Mehrotra, A. (2015). Evaluation of symptom checkers for self diagnosis and triage: audit study. *bmj*, 351.

