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**The Use of Ask.com and Bing for Community Relation by Nurses in Uyo Metropolis**

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**ABSTRACT**

*The study examined the utilization of Ask.com and Bing for development of community relations by nurses in Uyo Metropolis. The research design adopted in the study was a survey design. The population consisted of all the nurses in Uyo Metropolis, while simple random sampling technique was adopted to select 220 respondents. The instrument used for the study was a research questionnaire. The obtained data was coded statistically before the statistical analysis of the data and the instrument passed through face and content validation by experts in test and measurement. The data collected were analyzed using percentage analyses and bar charts to answer the research questions. The findings of the study revealed that there is remarkable use of Ask.com and Bing as search tools by nurses to enhance development of community relations. They also proved that there is no significant difference in people's perception of the extent of utilization of each of the search tool to enhance development of community relations by nurses. One of the recommendations was that Nurses should be able to guide their patients to access credible online health-related information.*

**KEYWORDS: Ask.com, Bing, Search Tool, Community Relations, Nurses, Uyo Metropolis**

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**Introduction**

The Internet has become an indispensable source for the public, patients, and health care professionals to obtain information about health, diseases, and medical treatment. Studies have proved that internet search tools result in giving efficiency and accuracy result by analyzing the purpose of the Internet search and offering special insights and reflections from the lived experiences of their specific health conditions, which physicians might not be able to provide. In particular, researchers have classified and analyzed the information needs of users to improve search engines. A medicine-related information search is different from other information searches, since users often use medical terminology, disease knowledge, treatment options, and so on. The potential of the Internet as a fast and efficient way of accessing evidence to support nursing practice has been well recognized. In addition, nurses have highlighted the need for training in the use of information technology, information retrieval and critical appraisal as essential to their professional development. The Internet is becoming one of the most important sources to obtain medical and health information for the general public. The Pew Internet & American Life Project reported that about 80% of Internet users look for medical or health-related

information through the Internet. It has been found that the most common health and medical topics searched on the Internet were a specific disease or medical problem, certain medical treatment, diet, nutrition and vitamins, and exercise or fitness, as well as prescription drugs, to help the public obtain accurate and useful medical information.

Among all the medical search queries on the Internet, cancer-related information is one of the most popular topics. In particular, breast cancer, as the most common cancer and the second-leading cause of cancer deaths among American women, draws much of the public's attention, especially on the Internet. This pilot study showed that usability testing is very useful for evaluating Internet searches in obtaining medical information. The current study extended our early work by adding Yahoo!, Bing, and Ask.com, which allowed us to conduct a comparative study. Among the four search engines, Bing is a new one built in 2009 by Microsoft.

Although nurses by far form the largest workforce group in hospitals and healthcare providers, there is very little in the published study on how nurses search for information in the healthcare environment. Currently, nurses' information-seeking skills remain rather limited. As nurses are increasingly taking on clinical responsibilities, they should be able to use the Internet to access up-to-date clinical guidelines. Nurses' information-seeking skills appeared rather basic, as they employed a limited number of search terms and consulted a limited number of websites. Ineffective searches were mainly caused by a mismatch between the guidelines and nurses' tacit knowledge. This study therefore aims at analyzing search engines that could be used by Nurses to enhance community relations and disseminate health related information. The study aims at evaluating the search engines used by Nurses to enhance community relations. The study specifically seeks to:

1. Find out the extent to which Ask.com is used as a search tool to enhance development of community relations by nurses.
2. Examine the extent to which Bing is used as a search tool to enhance development of community relations by nurses.

Equally, the research set to answer the following questions:

1. To what extent is Ask.com used as a search tool to enhance development of community relations by nurses?
2. To what extent is Bing used as a search tool to enhance development community relations by nurses?

Finally, two null hypotheses were stated as follows:

**H<sub>01</sub>:** Ask.com is significantly not used as a search engine to enhance development of community relations by nurses.

**H<sub>02</sub>:** Bing is significantly not used as a search tool to enhance development of community relations by nurses.

The research will be significant to the Nurses as it will enlighten them on the use of the internet search tools in improving the health conditions in the community. The findings of the Study will be useful for other researchers in the Medical Field.

The study will also improve the Nurses information-seeking skills, on how Ask.me and Bing is used in the development of community relations. In addition, the study will expose the Nurses to actual issues in the use of internet.

On the concept Internet, it was reviewed that Internet is a global collection of computer networks that are linked together by devices called routers and use a common set of protocols for data transmission known as TCP/IP (transmission control protocol / Internet protocol). The primary purpose of the Internet is to facilitate the sharing of information. There are many different tools used on the Internet to make this possible. Some of the more common tools include email, list servers, newsgroups, telnet, gopher, FTP, and the World Wide Web. Probably the most popular of all Internet tools is the World Wide Web is the practice of using Internet information, especially free information on the World Wide Web, or Internet-based resources (like Internet discussion forum) in research. Internet research has had a profound impact on the way ideas are formed and knowledge is created. Common applications of Internet research include personal research on a particular subject (something mentioned on the news, a health problem, etc.), students doing research for academic projects and papers, and journalists and other writers researching stories. Through searches on the Internet, hundreds or thousands of pages can often be quickly found with some relation to a given topic. In addition, email (including mailing lists), online discussion forums (aka message boards, BBS's), and other personal communication facilities (instant messaging, IRC, newsgroups, etc.) can provide direct access to experts and other. Internet research can provide quick, immediate, and worldwide access to information, although results may be affected by unrecognized bias, difficulties in verifying a writer's credentials (and therefore the accuracy or pertinence of the information obtained) and whether the searcher has sufficient skill to draw meaningful results from the abundance of material typically available.

Online health information is commonly used by patients with chronic illness to support their medical needs. Nurses have a critical role in assisting patients to access and use this information. They also have several roles in using the internet namely, to gain information themselves during their studies and to help their patients to obtain reliable information relating to patients' personal health issues. Nurses, as well as nursing students, need to be knowledgeable about online health information resources and able to evaluate relevant information online in order to assist patients and patients' families' access (Gilmour et al. 2012). Furthermore, participants felt that it is important to be able to access health resources on the Internet. Many studies show that nurses are interested in using IT. These studies are relatively old and the situation may have changed. In spite of the expressed positive attitudes of nurses regarding scientific nursing knowledge, the use of research results is impaired by different barriers among nurses such as the barrier identified with regard to using databases on the Internet and limited experience in using the online library.

Internet search engines are special sites on the Web that are designed to help people find information stored on other sites. There are differences in the ways various search engines work, but they all perform same basic tasks: The good news about the Internet and its most visible component, the World Wide Web, is that there are hundreds of millions of pages available, waiting to present information on an amazing variety of topics. The Internet has become one of the most important means to obtain health and medical information. It is often the first step in checking for basic information about a disease and its treatment. The search results are often

useful to general users. Various search engines such as Google, Yahoo!, Bing, and Ask.com can play an important role in obtaining medical information for both medical professionals and lay people. However, the usability and effectiveness of various search engines for medical information have not been comprehensively compared and evaluated.

Ask.com (originally known as Ask Jeeves) is a question answering–focused e-business founded in 1996 by Garrett Gruener and David Warthen in Berkeley, California.

The original software was implemented by Gary Chevsky, from his own design. Warthen, Chevsky, Justin Grant, and others built the early AskJeeves.com website around that core engine. From the mid-2000s, The "Jeeves" name was dropped and focused on the search engine, with its own algorithm. In late 2010, facing insurmountable competition from more Ask.com has been criticized for its browser toolbar, which has been accused of behaving like malware due to its bundling with other software and the difficulty of its uninstallation. Ask.com now reaches 100 million global users per month through its website with more than 2 million downloads of its flagship mobile app. The company has also released additional apps spun out of its Q&A experience, including Ask Around in 2011 and PollRoll in 2012.

Bing, Microsoft's replacement for Live Search, was unveiled by Microsoft CEO Steve Ballmer on Bing is a web search engine owned and operated by Microsoft. The service has its origins in Microsoft's previous search engines: MSN Search, Windows Live Search and later Live Search. Bing provides a variety of search services, including web, video, image and map search products. It is developed using ASP.NET. In July 2009, Microsoft and Yahoo! announced a deal in which Bing would power Yahoo! Search. All Yahoo! Search global customers and partners made the transition by early 2012. The deal was altered in 2015, meaning Yahoo! was only required to use Bing for a "majority" of searches.

With the increasing use of information prescriptions and information therapy in evidence-based practice, clinical nurses regularly seek information in support of patient care. Patients' value information related to their illnesses and treatments. Some patients and caregivers, however, may doubt that their information needs are adequately addressed because the resources may not be available on the clinical unit. Verbal information and instructions, for example, are significantly less effective than written/printed information. This observation study provides an understanding of searching habits of nurse patient educators regarding the retrieval of patient education information on clinical inpatient care units. The results provide an understanding of the process by which clinical nurses seek patient education information and materials on the web.

The benefits of high quality patient information are well documented. Quality patient information promotes active patient participation in healthcare decision-making. A positive correlation exists between the provision of patient information and improved communication with healthcare professionals. Research illustrates, however, that people need not just general information, but patient-centered, staged information that supports teaching and learning throughout all phases of a disease and recovery trajectory. Information seeking in nursing practice is activated as a result of direct patient care needs related to the disease/ recovery cycle. Such activation may be stimulated by a patient or family request, particularly when transferring in or out of a ward, or upon discharge. The extent to which information seeking for evidence-based practice is valued or encouraged within a particular unit creates obstacles to pursuing high

quality information for patient education. Standardized patient education materials may not be staged to the individual recovery process nor organized in a manner that is optimum for time relevant use. With the use of internet search tool like ask.com or Bing nurses can have fast and easy asses to patient's health care information.

Computer and Internet literacy are important skills for nursing students. A study conducted by Koivunen et al. (2010) on the Effects of the implementation of the web-based patient support system on staff's attitudes towards computers and IT use. During their studies they need to use the computer and Internet in finding information from web sites and using different software. Computer and Internet literacy helps student nurses to achieve their learning goals. These skills are also important for their future career. So, the ability to use Information Technology (IT) is becoming a pervasive need in nurse education. Nurses need to obtain Internet skills not only for their studies but to help patients to find relevant information for their health related questions. Nurses working in health care settings play a crucial educative role with patients who increasingly access Internet sources of health information to guide health management decisions. Nurses as well as nursing students need to be knowledgeable about online health information resources and be able to evaluate relevant information online in order to assist patients and patients' families' to access reliable and relevant information. It is important that librarians understand the contrast between idealized academic online searching techniques and the reality of a busy clinical situation in planning training. The perceived urgency of a situation is also seen to have a negative effect on the potential of information seeking via online or text-based resources to assist.

## **Methods**

The research design adopted in the study was a survey design. The researcher adopted the design because the study is descriptive in nature. Two research questions were drawn to guide the study are as follows. They are: To what extent is Ask.com used as a search engine to enhance development of community relations by nurses? To what extent is Bing used as a search engine to enhance development of community relations by nurses? Two hypotheses were tested in the course of the study:  $H_{01}$ : (there is no significant difference in people's perception of the extent of utilization of Ask.com as a search tool to enhance development of community relations by nurses and  $H_{02}$ : there is no significant difference in people's perception of the extent of utilization of Bing as a search tool to enhance development of community relations by nurses. All the nurses in Uyo Metropolis. Uyo Metropolis was the area of this study. The researcher adopted simple random sampling technique to select the 220 nurses for the study. The instrument used for the study was a structured research questionnaire and was made to pass through face and content validation by experts in test and measurement. Percentage analyses and bar charts were used to answer the research questions while chi-analysis was used to test the hypothesis at 0.05 alpha level.

## **Results and Discussion**

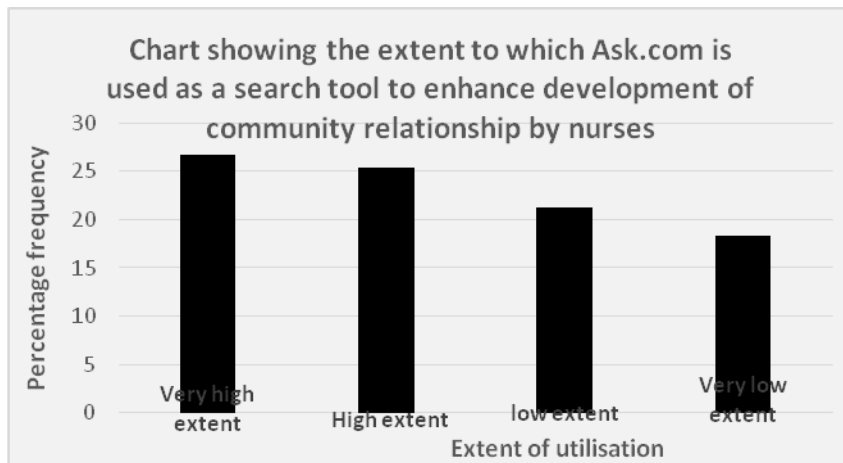
### **Research Question One**

The research question sought to find out the extent to which Ask.com is used as a search tool to enhance development of community relations by nurses. To answer the research question, percentage analysis was performed as can be seen in table 1 and figure 1.

**Table 1: Percentage Analysis of the extent to which Ask.com is used as a search tool to enhance development of community relations by nurses**

Extent of Usage	Freq	Percentage (%)
Very High Extent	64	26.67
High Extent	61	25.42
Low Extent	51	21.25
Very Low Extent	44	18.33
<b>TOTAL</b>	<b>220</b>	<b>100</b>

**SOURCE: Field survey**



**Figure 1.**

**SOURCE: Field survey**

The above table 1 and figure 1 present the percentage analysis of the extent to which Ask.com is used as a search tool to enhance development of community relations by nurses. From the result, it was observed that the highest percentage of the respondents were 64(26.67%) affirmed that Ask.com is used as a search tool to a very high extent to enhance development of community relations by nurses. This was seconded by 61(25.42%) of the respondents who were of the opinion that it is used at high extent, followed by 51(21.25%) of the respondents who affirmed low extent, while the least percentage of the respondents 44(18.33%) claimed Ask.com used to a very low extent.

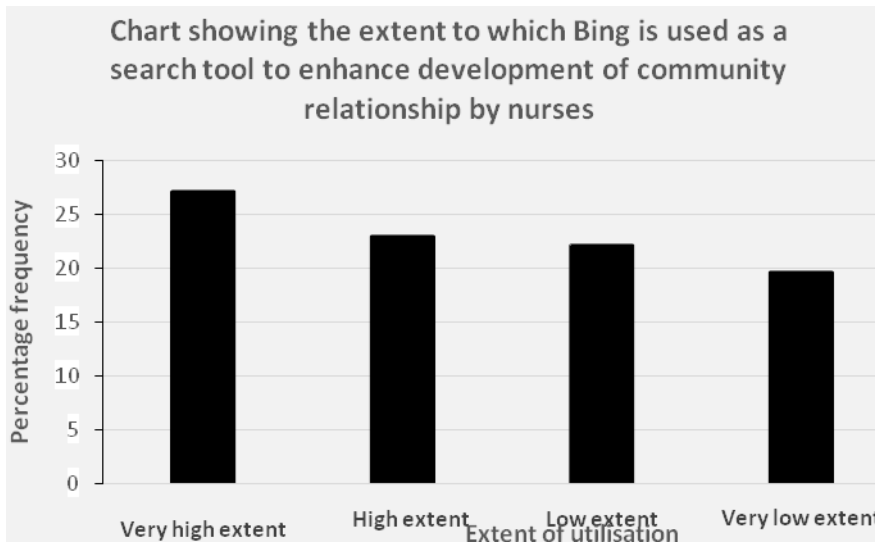
**Research Question Two**

The research question sought to find out the extent to which Bing is used as a search tool to enhance development of community relations by nurses. To answer the research question, percentage analysis was performed as can be seen in table 2 and figure 2.

**Table 2: Percentage Analysis of the extent to which Bing is used as a search tool to enhance development of community relations by nurses**

Extent of Usage	Freq	Percentage (%)
Very High Extent	65	27.08
High Extent	55	22.92
Low Extent	53	22.08
Very Low Extent	47	19.58
<b>TOTAL</b>	<b>220</b>	<b>100</b>

**SOURCE: Field survey**



**Figure 2.**

**SOURCE: Field survey**

The above table 2 and figure 2 present the percentage analysis of the extent to which Ask.com is used as a search tool to enhance development of community relations by nurses. From the result, it was observed that the highest percentage of the respondents 65(27.08%) affirmed that the extent to which Bing is used as a search tool to enhance development of community relations by nurses is of very high extent. This was seconded by 55(22.92%) respondents who said it is of high extent, followed by 53(22.08%) respondents who responded to low extent, while the least number of respondents 47(19.58%) said very low extent.

**Hypothesis One**

The null hypothesis states that there is significant difference in people’s perception of the extent of utilization of Ask.com as a search tool to enhance development of community relations by nurses. To test the hypothesis, chi-square analysis was performed on the data (see table 3).

**Table 3: Chi-square analysis of the difference in people’s perception of the extent of utilization of Ask.com as a search tool to enhance development of community relations by nurses**

<b>Extent</b>	<b>Observed Freq.</b>	<b>Expected Freq.</b>	<b>X<sup>2</sup></b>
Very High Extent	64	55	4.62 <sup>^</sup>
High Extent	61	55	
Low Extent	51	55	
Very Low Extent	44	55	
<b>TOTAL</b>	<b>220</b>	<b>220</b>	

**<sup>^</sup>Not significant at 0.05 level; df = 3; Critical = 7.82**

Table 3 shows the calculated X<sup>2</sup>-value as (4.62). This value was tested for significance by comparing it with the critical X<sup>2</sup>-value (7.82) at 0.05 levels with 3 degree of freedom. The calculated X<sup>2</sup>-value (4.62) was less than the critical X<sup>2</sup>-value (7.82). Hence, the result was not significant. The result therefore means that there is no significant difference in people’s perception of the extent of utilization of Ask.com as a search tool to enhance development of community relations by nurses.

The result supports the opinion of Kurki, Koivunen, Anttila, Hätönen, & Välimäki (2011) who stated that with the increasing use of information prescriptions and information therapy in evidence-based practice, clinical nurses regularly seek information in support of patient care. The non-significance of the result on ground difference in the extent of utilization, caused the null hypothesis to be retained while the alternative one was rejected.

**Hypothesis Two**

The null hypothesis states that there is significant difference in people’s perception of the extent of utilization of Bing.com as a search tool to enhance development of community relations by nurses. To test the hypothesis, chi-square analysis was performed on the data (see table 4).



**Table 4: Chi-square analysis of the difference in people's perception of the extent of utilization of Bing.com as a search tool to enhance development of community relations by nurses**

<b>Extent</b>	<b>Observed Freq.</b>	<b>Expected Freq.</b>	<b>X<sup>2</sup></b>
Very High Extent	51	55	5.09 <sup>^</sup>
High Extent	69	55	
Low Extent	53	55	
Very Low Extent	47	55	
<b>TOTAL</b>	<b>220</b>	<b>220</b>	

<sup>^</sup>Not significant at 0.05 level; df = 3; Critical = 7.82

Table 4 shows the calculated X<sup>2</sup>-value as (5.09). This value was tested for significance by comparing it with the critical X<sup>2</sup>-value (7.82) at 0.05 levels with 3 degree of freedom. The calculated X<sup>2</sup>-value (5.09) was less than the critical X<sup>2</sup>-value (7.82). Hence, the result was not significant. The result therefore means that there is no significant difference in people's perception of the extent of utilization of Bing.com as a search tool to enhance development of community relations by nurses. The result agrees with the opinion of Kamerow (2013) who stated that nurses as well as nursing students need to be knowledgeable about online health information resources and be able to evaluate relevant information online in order to assist patients and patients' families' to access reliable and relevant information. The non-significance of the result on ground difference in the extent of utilization, caused the null hypothesis to be retained while the alternative one was rejected.

## Conclusion

The study showed a strong evidence of the increased access to the Internet by nurses to retrieve information that are related to clinical practice. The result therefore means that there is significant use of Ask.com and Bing as search tools by nurses to enhance development of community relations. Finally, the result also proved that there is no significant difference in people's perception of the extent of utilization of each of the search tool to enhance development of community relations by nurses.

## Recommendations

The following recommendations have been submitted:

1. Nurses should be able to guide their patients to access credible online health-related information.
2. Nurses should be trained to be efficient users of various professional and popular medical information sites to be able to utilize the evidence-based knowledge and different clinical guidelines.

3. The researcher recommends that due to multiplicity of internet links, health related information should be published on widely visited sites such as Ask.com and Bing, where such information could be validated.
4. There should be an attentive evaluation of the content of the websites to insure the accuracy of the accessed information is guaranteed to determine which site to use in terms of ease of access, complete content and up to date information.

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